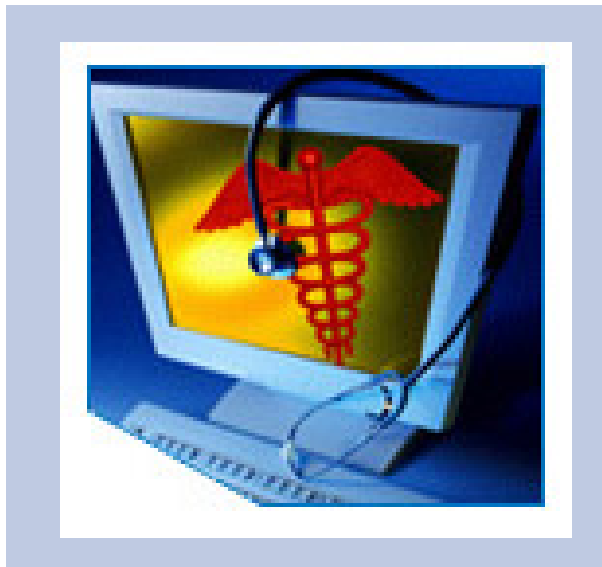


HITSP Interoperability Specification: Patient ID Cross-Referencing Transaction

HITSP/IST-22



Submitted to:

Healthcare Information Technology Standards Panel

Submitted by:

**Biosurveillance Technical Committee
Consumer Empowerment Technical Committee
Electronic Health Records Technical Committee**



DOCUMENT CHANGE HISTORY

Version Number	Description of Change	Name of Author	Date Published
1.0	Final draft	Electronic Health Records Technical Committee Biosurveillance Technical Committee Consumer Empowerment Technical Committee	18 August 2006



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1.0 FOREWORD

Healthcare Information Technology Standards Panel (HITSP) is a multi-stakeholder coordinating body designed to provide the process within which affected parties can identify, select, and harmonize standards for communicating healthcare information throughout the healthcare spectrum. HITSP functions as a partnership of the public and private sectors and operates with a neutral and inclusive governance model administered by the American National Standards Institute. The goal of the Panel is to:

- Facilitate the development of harmonized interoperability specifications and information policies, including SDO work products (e.g. standards, technical reports). These policies, profiles and work products are essential for establishing privacy, security and interoperability among healthcare software applications.
- Coordinate, as appropriate, with other national, regional and international groups addressing healthcare informatics to ensure that the resulting standards are globally relevant.
- Be use-case driven, utilize information from stakeholders and base its decisions on industry needs.

The HITSP shall serve the public good by working to ensure that the combined work of various healthcare information standards organizations supports interoperability, accurate use, access, privacy and security of shared health information.

In order to advance the goal of expanding harmonized interoperability specifications and information policies, HITSP was tasked with developing interoperability specifications for three main use case “breakthroughs areas” in which specific, near term value to the health care consumer could be realized. The harmonized use case areas are:

1. Biosurveillance	Transmit essential ambulatory care and emergency department visit, utilization, and lab result data from electronically enabled health care delivery and public health systems in standardized and anonymized format to authorized Public Health Agencies with less than one day lag time.
2. Consumer Empowerment	Allow consumers to establish and manage permissions, access rights and informed consent for authorized and secure exchange, viewing, and querying of their linked patient registration summaries and medication histories between designated caregivers and other health professionals.
3. Electronic Health Record	Allow ordering clinicians to electronically access laboratory results, and allow non-ordering authorized clinicians to electronically access historical and other laboratory results for clinical care.

Table 2.0-1. Harmonized Use Case Areas

The interoperability specification provides a detailed mapping of existing standards and specifications such as implementation guides, integration profiles to actions and actors that satisfy the requirements imposed by the relevant use cases. It identifies and constrains standards where necessary, and creates groupings of specific actions and actors to further describe the relevant contexts. Where gaps and



overlaps are identified, the interoperability specification provides recommendations and a roadmap for corrections to be made.

60

2.0 INTRODUCTION

These Patient ID Cross-Referencing (PIX) and Patient Identity Feed Transactions are portions of Interoperability Specifications that deal with identifying and cross-referencing different patient attributes for the same patient. The relationship of these transactions to other related transactions is illustrated in the following chart.

65

Type	Number	<u>Specification</u>
		Title
Transaction	HITSP/IST – 23	Patient Demographics Query (PDQ) Transaction
Transaction	HITSP/IST – 22	Patient ID Cross-Referencing (PIX) and Patient Identity Feed Transactions
Component	HITSP/ISC – 38	Admission, Discharge, Transfer (ADT) Component [unpublished writing-support component only]

The PIX transaction is intended to provide an identify patient query / patient(s) identified response message pair for use wherever such needs exist.

The Patient Identity Feed transaction is intended to allow sending of patient identification information from one system to another.

70 The PIX and Patient Identity Feed transactions, as described in this document, do not include messages for other purposes; e.g., patient enrollment / identification, patient visit / encounter, obtain detailed patient demographics. Messages for such other purposes are provided by other specifications in the suite.

2.1 OVERVIEW

75 The Patient ID Cross-Referencing (PIX) Transaction portion of this document extracts the Health Level Seven (HL7) version 2.5 Query and Response data mapping. The underlying basis for this extraction can be found in the Integrating Healthcare Enterprise IT Infrastructure Technical Framework, Volume 2 (ITI TF-2), Revision 2.0, dated August 15, 2005, §3.9: "PIX Query".

80 The Patient Identity Feed Transaction portion of this document extracts the Health Level Seven (HL7) version 2.5 ADT data mapping. The underlying basis for this extraction can be found in the Integrating the Healthcare Enterprise IT Infrastructure Technical Framework, Volume 2 (ITI TF-2), Revision 2.0, dated August 15, 2005, §3.8: "Patient Identity Feed".

The HL7 version 2.5 standard is available from Health Level Seven, Inc.:



85 3300 Washtenaw Avenue, Suite 227
Ann Arbor, Michigan 48104-4261
Phone: 734-677-7777 FAX: 734-677-6622
www.HL7.org HQ@HL7.org

The Integrating the Healthcare Enterprise IT Infrastructure Technical Framework is available at
90 www.ihe.net or from any of the following organizations.

American College of Cardiology (ACC)
9111 Old Georgetown Road
Bethesda, Maryland 20814-1699
Phone: 800-253-4636 FAX: 301-897-9745
95 www.ACC.org IHE@ACC.org

Healthcare Information and Management Systems Society (HIMSS)
230 East Ohio Street, Suite 500
Chicago, Illinois 60611-3270
Phone: 312-664-4467 FAX: 312- 664-6143
100 www.HIMSS.org IHE@HIMSS.org

Radiological Society of North America, Inc. (RSNA)
820 Jorie Blvd
105 Oak Brook, Illinois 60523-1860
Phone: 630-571-2670
www.RSNA.org IHE@RSNA.org

110 **2.2 AUDIENCE**

In general, this Interoperability Specification is designed to be used by analysts who need to understand the interoperability requirements for the described use case, and by implementers working to develop interoperable applications. Understanding and using the relevant interoperability set of specifications is a key requirement for establishing interoperability compliance.

115 In particular, this document is primarily intended for ADT, patient matching, master person index, and other related subject matter specialists within healthcare enterprises.

This document is also intended for information technology staff focused on programming inter-computer message transmissions and receipts, and/or building message translators. Knowledge of structures and contents of messages from a communications perspective is most essential. Understanding of the
120 business use of data contained within the messages is definitely useful.

Familiarity with Health Level Seven (HL7) version 2 is required. Familiarity with HL7 version 2.5 is preferred.



2.3 TERMS AND DEFINITIONS

125 For purposes of this document, the terms and definitions contained in Health Level Seven (HL7) version 2.5 will apply; particularly those in Chapter 5, "Query", and Chapter 3, "Patient Information". Also applicable are terms and definitions in Chapter 2, "Control".

Refer also to the glossary cited in the appendix.

130 2.4 CONVENTIONS

This specification uses the following to convey the full descriptions and usage of standards:

UML sequence and activity diagrams

135 In these diagrams, the actors and transactions are highlighted within the framework of the specific scenario or context. The actors involved in the specified use-scenario or context are mapped out, and the interactions between each action and actor for a particular context, and the flow of data are provided through the use of arrows. Diagrams are named according to the section in which they reside, and will use the following naming convention:

Figure <section number>-<consecutive number for the diagram, e.g. 1, 2, 3, etc.>. <Short name/description of diagram>. For example, a diagram residing in section 3.1.3 showing the Actor Interactions for the Send Lab Results transaction package is named:

Figure 3.1.3-1. Send Lab Results Transaction Package

Tables

145 Tables are used to indicate standards categorizations, as well as dependencies and constraints between constructs. Tables are named according to the section in which they reside, and will use the following naming convention:

Table <section number>-<consecutive number for the table, e.g. 1, 2, 3, etc.>. <Short name/description of table>. For example, a table residing in section 2.7.1 showing the Dependencies between the transactions for the Send Lab Results transaction package is named:

150 Table 2.7.1-1. Send Lab Results Transaction Package dependencies

References

155 When references are made to another section within an Interoperability Specification a section number is used by itself. When references are made to other constructs that are related to the Interoperability Specification, such as Transaction Packages, Components or Composite Standards, the HITSP document short name and section number are displayed as follows:

<HITSP Document short name or Composite Standard Short Name>-<Volume Number>: <section number>



where:

- 160 <HITSP document short name> is a short designator for the construct (e.g. HITSP/ISTP-013)
- <Composite Standard Short Name> is a short designator for the composite standard (e.g. IHE-ITI TF)
- <Volume Number> is the applicable volume within the given composite standard (e.g. 1)
- <section number> is the applicable section number (e.g. 3.1)

For example: HITSP/ISTP-013: 3.1 refers to Section 3.1 in the Interoperability Specification for a
165 Transaction Package, IHE-ITI TF-2: 4.33 refers to Section 4.33 in volume 2 of the IHE IT Infrastructure
Technical Framework.

Reproductions

Where large sections of composite standards or base standards are reproduced within a HITSP
specification, the reproduced sections are cited with introductory text containing the reference information
170 for the composite or base standard. In addition, the beginning and ending of the reproduced text are
respectively shown using a beginning statement:

The text for the <composite or base standard name> specification begins here:

And an ending statement:

The text for the <composite or base standard name> ends here.

175 This document uses two additional conventions:

- (a) HL7 message, segment and field layouts as defined and illustrated in HL7 version 2.5. Segments
and fields used are shown in normal text. Unused segments and fields are indicated by a lighter
colored gray text. All unused segments that follow the last segment used in a message are not
shown. Similarly, all unused fields that follow the last field used in a segment are not shown.
- 180 (b) Explanations of each field used are organized according to the following table:

Identifier		
Description		
Source – where created		
Rationale – where used		
Data Type		
Conformance		
Repetitions		
Code Domain		



2.5 COMMENTS

To submit comments for this interoperability specification, please download the Comment Submission sheet from the HITSP site at www.hitsp.org and provide all relevant information, and then email the completed document to hitspcomments@ansi.org. Comments are consolidated periodically and sent to the Technical Committees for review.

2.6 COPYRIGHT PERMISSIONS

COPYRIGHT NOTICE

© [_____] (Note: Name of copyright holder is currently under review by Government) This material may be copied without permission from ____ only if and to the extent that the text is not altered in any fashion and ____'s copyright is clearly noted.

HL7 materials used in this document have been extracted from relevant copyrighted materials with permission of Health Level 7 (HL7). Copies of this standard may be purchased from the Health Level 7 website at www.hl7.org.

IHE materials used in this document have been extracted from relevant copyrighted materials with permission of Integrating the Healthcare Enterprise (IHE). Copies of this standard may be retrieved from the IHE website at www.ihe.net.

2.7 LIST OF COMPOSITE STANDARDS

Composite Standard	Description
Health Level Seven (HL7) version 2.5	ANSI approved standard for information interchange
Integrating Healthcare Enterprise IT Infrastructure Technical Framework, Volume 2 (ITI TF-2), Revision 2.0, August 15, 2005	Documentation of specifications employed to stimulate the integration of information systems that support modern healthcare institutions

Table 2.7-1. List of Composite Standards

2.8 LIST OF COMPONENTS

There are no Components used by this Transaction; although it liberally incorporates data elements from the Patient Identification (PID) segment of the ADT Component specification: HITSP/ISC-38.

3.0 TRANSACTIONS

The Patient ID Cross-Referencing (PIX) transaction is a request – *i.e.*, query – by a patient identifier cross-reference consumer actor for a list of patient identifiers that correspond to a patient identifier known by the consumer. The query is received by a patient identifier cross-reference manager. The patient



identifier cross reference manager immediately processes the request and returns a response in the form of a list of corresponding patient identifiers, if any.

- 215 The Patient Identity Feed transaction communicates patient information, including corroborating demographic data, after a patient's identity is established, modified or merged or after the key corroborating demographic data has been modified.

3.1 CONTEXT OVERVIEW

- 220 The PIX and Patient Identity Feed transactions are intended for use wherever Health Level Seven (HL7) messages are suitable to identify patients from a list of potentials and/or patient demographic data needs to be communicated.

3.1.1 CONTEXTUAL CONSTRAINTS

- 225 The PIX and Patient Identity Feed transactions may be used by any system capable of performing real-time HL7 query and response and/or unsolicited patient demographic feed transactions.

The patient identifier cross-reference consumer actor must store and be able to communicate the data fields necessary for the patient identifier cross-reference manager to be able to process the received query and return a list of matching patient identifiers.

- 230 The patient identifier cross-reference manager actor must be able to create a, possibly empty, list of matching patient identifiers solely based on the data fields received in the query message from the patient identifier cross-reference consumer. Additionally, the patient identifier cross-reference manager must be able to receive patient demographic data from the patient identity source actor to maintain its data base of patient information.

- 235 The patient identity source actor must be able to send patient demographic data to the patient identifier cross-reference manager when new or changed information is captured.

3.1.2 TECHNICAL ACTORS

The technical actors in the PIX transaction are shown in the following list:

Actor	Description
Patient Identifier Cross-Reference Consumer	Queries the Patient Identifier Cross-Reference Manager for a list of corresponding patient identifiers, if any. Receives a list of corresponding patient identifiers from the Patient Identifier Cross-Reference Manager.



Actor	Description
Patient Identifier Cross-Reference Manager	<p>Receives the query for a list of corresponding patient identifiers from the Patient Identifier Cross-Reference Consumer.</p> <p>Sends a list of corresponding patient identifiers to the Patient Identifier Cross-Reference Consumer.</p>

Table 3.1.2-1. Technical Actors in the PIX Transaction

240 The technical actors in the Patient Identity Feed transaction are shown in the following list:

Actor	Description
Patient Identity Source	Sends patient demographic information to the Patient Identifier Cross-Reference Manager
Patient Identifier Cross-Reference Manager	Receives patient demographic information from the Patient Identity Source

Table 3.1.2-2. Technical Actors in the Patient Identity Feed Transaction

3.1.3 ACTOR INTERACTIONS

Actor interactions in the PIX Query transaction are shown below.

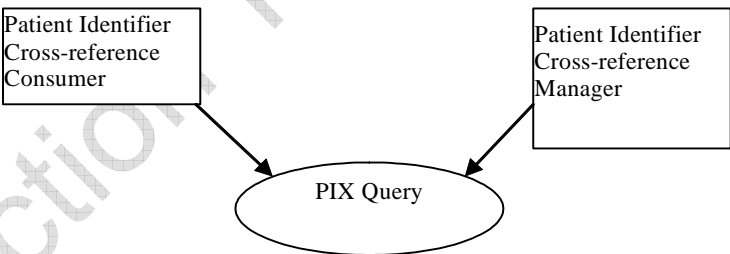


Figure 3.1.3-1. Actor Interactions in the PIX Query Transaction

Actor interactions in the Patient Identity Feed transaction are as shown below. Note that for the transactions described in this document, the Document Registry described in the IHE Technical Framework is not applicable.

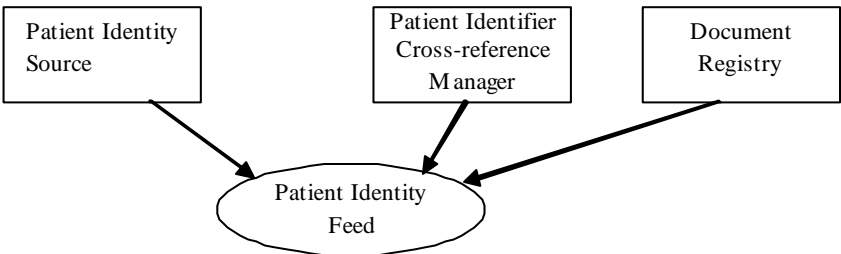


Figure 3.1.3-2. Actor interactions in the Patient Identity Feed transaction



3.2 PROCESS FLOWS

The PIX transaction involves a request by a Patient Identifier Cross-Reference Consumer for a list of patient identifiers that correspond to a patient identifier known by the Consumer. The request is sent as a Get Corresponding Identifiers query and received by a Patient Identifier Cross-Reference Manager. The Patient Identifier Cross-Reference Manager immediately processes the query and sends a Return Corresponding Identifiers response to the Patient Identifier Cross-Reference Consumer that originated the query. This response contains a list of corresponding patient identifiers if any were found.

The process flows in the PIX transaction are shown in the diagram.

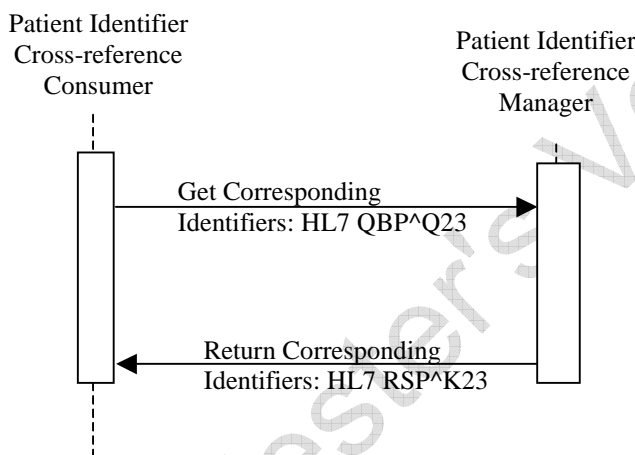


Figure 3.2-1. Process Flows in the PIX Transaction

The Patient Identity Feed transaction sends patient identity and other demographic information from an Patient Identity Source to a Patient Identifier Cross-Reference Manager whenever relevant patient data is created or updated.

The process flows in the Patient Identity Feed transaction are shown in the diagram.

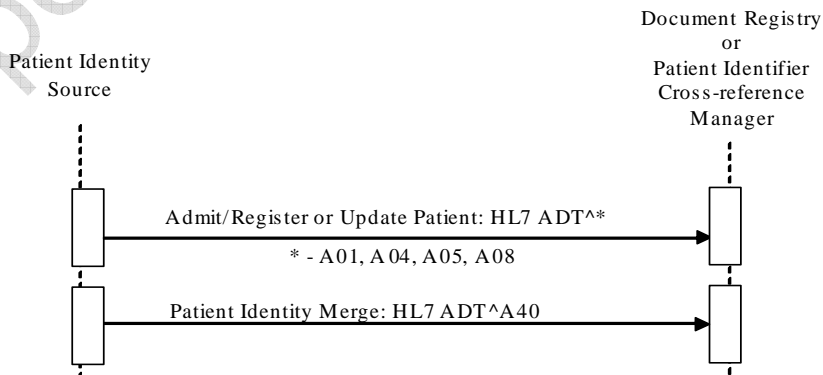


Figure 3.2-2. Process Flows in the Patient Identity Feed Transaction



Note that for the transactions described in this document, the Document Registry described in the IHE Technical Framework is not applicable.

270

3.2.1 PROCESS PRE-CONDITIONS

Patient Identifier Cross-Reference Consumer: contains patient identification numbers based on at least one patient identification domain / assigning authority known to the Patient Identifier Cross-Reference Manager.

275

Patient Identifier Cross-Reference Manager: maintains a list of patient identification numbers from and correlated with that sent by Patient Identifier Cross-Reference Consumers and additional domains / assigning authorities.

Patient Identity Source: maintains patient demographic information for at least one patient identification domain / assigning authority known to the Patient Identifier Cross-Reference Manager.

280

3.2.1.1 PROCESS TRIGGERS

Patient Identifier Cross-Reference Consumer: a need to obtain one or more patient identification numbers from domains / assigning authorities beyond those for which patient identification numbers are already available.

285

Patient Identifier Cross-Reference Manager: receipt of a Get Corresponding Identifiers query from a Patient Identifier Cross-Reference Consumer.

Patient Identity Source: creation or modification of relevant demographic information about a patient whose information already is or needs to be stored at the Patient Identifier Cross-Reference Manager.

290

3.2.2 PROCESS POST-CONDITIONS

Patient Identifier Cross-Reference Consumer: a list, where found by the Patient Identifier Cross-Reference Manager, of one or more patient identification numbers from domains / assigning authorities beyond those for which patient identification numbers were previously available.

295

Patient Identifier Cross-Reference Manager: creation or updating of patient identification information received.

Patient Identity Source: none beyond providing outputs related to this Transaction.

3.2.2.1 PROCESS OUTPUTS

Patient Identifier Cross-Reference Consumer: none specifically related to this Transaction.

300

Patient Identifier Cross-Reference Manager: a Return Corresponding Identifiers message containing, where applicable, a list of one or more patient identification numbers from domains / assigning authorities



beyond those for which patient identification numbers were requested; where no list of applicable patient identification numbers is possible, indicators in the message as to the reason no list was provided.

Patient Identity Source: none beyond sending a Patient Identity Feed message.

305

3.3 DATA FLOWS

Consistent with the process flows discussed above, there are two data flows for the PIX transaction:

- Query to Get Corresponding Identifiers from Patient Identifier Cross-Reference Consumer to Patient Identifier Cross-Reference Manager, and
- Response to a query to Return Corresponding Identifiers from Patient Identifier Cross-Reference Manager to Patient Identifier Cross-Reference Consumer.

310

Details of these two data flows are contained in the following two subsections.

Only one data flow, sending demographic data from the Patient Identity Source to the Patient Identifier Cross-Reference Manager, exists for the Patient Identity Feed transaction; although there are two variants depending on whether patient merging is performed or not. Details of this data flow and its variants are contained in subsection 3.3.3.

315

3.3.1 QUERY – CONSUMER TO CROSS-REFERENCE MANAGER

The Get Corresponding Identifiers query portion of the Patient ID Cross-Referencing Transaction uses one HL7 message consisting of three segments: MSH, QPD, and RCP.

320

The following section contains several tables from the HL7 v2.5 Message standard.

HL7 message, segment and field layouts are displayed as defined and illustrated in HL7 version 2.5. Segments and fields used are shown in normal text. Unused segments and fields are indicated by a lighter colored gray text. All unused segments that follow the last segment used in a message are not shown. Similarly, all unused fields that follow the last field used in a segment are not shown.

325

QBP^Q23^QBP_Q23

MSH

[[SFT]]

QPD

RCP

Query By Parameter

Message Header

Software Segment

Query Parameter Definition

Response Control Parameter



HL7 Segment - MSH - Message Header

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	1	ST	R			00001	Field Separator
2	4	ST	R			00002	Encoding Characters
3	227	HD	O			00003	Sending Application
4	227	HD	O			00004	Sending Facility
5	227	HD	O			00005	Receiving Application
6	227	HD	O			00006	Receiving Facility
7	26	TS	R			00007	Date/Time Of Message
8	40	ST	O			00008	Security
9	15	MSG	R			00009	Message Type
10	20	ST	R			00010	Message Control ID
11	3	PT	R			00011	Processing ID
12	60	VID	R			00012	Version ID
13	15	NM	O			00013	Sequence Number

Identifier	MSH-1 Field Separator	
Description	Field Separator	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Indicates the character that will separate fields in all segments contained in this message	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	HL7	Only HL7 default value shall be used

Identifier	MSH-2 Encoding Characters	
Description	Encoding Characters used in this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Contains four characters that indicate, in order: Character that separates components of fields Character that indicates repetitions of data Character that identifies a following escape character Character that separates subcomponents of components	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)

330



Repetitions	N	Does not repeat
Code Domain	HL7	Only HL7 default values shall be used

Identifier	MSH-3 Sending Application	
Description	Identification of Sending Application for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Contains information that identifies the software system that is sending the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-4 Sending Facility	
Description	Identification of Sending Facility for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Contains information that identifies the facility or organization that is sending the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-5 Receiving Application	
Description	Identification of Receiving Application for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Contains information that identifies the software system that is receiving the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text



Identifier	MSH-6 Receiving Facility	
Description	Identification of Receiving Facility for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Contains information that identifies the facility or organization that is receiving the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-7 Date / Time of Message	
Description	Date/Time of this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	TS	Time Stamp
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text

Identifier	MSH-9.1 Message Type: Message Code	
Description	Message Code for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from pre-determined domain list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value QBP may be used



Identifier	MSH-9.2 Message Type: Trigger Event	
Description	Trigger Event for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from pre-determined domain list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value Q23 may be used

Identifier	MSH-9.3 Message Type: Message Structure	
Description	Message Structure for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from pre-determined domain list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value QBP_Q23 may be used

Identifier	MSH-10 Message Control ID	
Description	Message Control ID for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses when responding to this message	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text



Identifier	MSH-12 Version ID	
Description	Version ID used by this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	VID	Version Identifier
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value 2.5 may be used

Identifier	MSH-13 Sequence Number	
Description	Sequence Number of this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	NM	Numeric
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	n/a	Incrementing value used as message sequence number



SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	250	CE	R		0471	01375	Message Query Name
2	32	ST	C			00696	Query Tag
3	256	CX	C			00696	Person Identifier
4	256	CX				01435	Search Domains

Identifier	QPD-1 Message Query Name	
Description	Name of Query for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	free text	Only the value GET CORRESPONDING IDENTIFIERS may be used

Identifier	QPD-2 Message Query Tag	
Description	Tag of Query for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses when responding to this message	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	free text	Unique value that identifies each specific query message; an incrementing number may be used if desired



350

Identifier	QPD-3.1 Person Identifier: ID Number	
Description	Full Identification Number of Patient, including all check digits and other qualifiers	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	QPD-3.4.2 Person Identifier: Assigning Authority's Universal ID	
Description	A value identifying the organization or facility that assigned the patient ID Number	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	See QPD-3.4.3	Free text



Identifier	QPD-3.4.3 Person Identifier: Assigning Authority's Universal ID Type	
Description	A value identifying the source of the value used for Assigning Authority's Universal ID	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	"NPI" "ISO"	One or the other of: HIPAA National Provider ID Object Identifier (OID)

Identifier	QPD-4.4.2 Search Domains: Assigning Authority's Universal ID	
Description	A value identifying the organizations or facilities to be searched and/or which are to have patient identifiers included in the response to this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	O	Value may be included at the discretion of the sending system within the Patient Identifier Cross-Reference Consumer. If not present, all domains will be processed by the Patient Identifier Cross-Reference Manager system.
Repetitions	Y	No occurrences required, but may repeat, along with other components of QPD-4, for each search domain the Patient Identifier Cross-Reference Consumer wishes to convey, at its discretion, to the Patient Identifier Cross-Reference Manager.
Code Domain	See QPD-4.4.3	Free text



Identifier	QPD-4.4.3 Search Domains: Assigning Authority's Universal ID Type	
Description	A value identifying the source of the value used in QPD-4.4.2	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	C	Value must be supplied (no nulls) whenever QPD-4.4.2 is present in message
Repetitions	Y	No occurrences required, but may repeat, along with other components of QPD-4, for each search domain the Patient Identifier Cross-Reference Consumer wishes to convey at its discretion
Code Domain	"NPI" "ISO"	One or the other of: HIPAA National Provider ID Object Identifier (OID)

HL7 Segment – RCP – Response Control Parameter

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	1	ID	O		0091	00027	Query Priority

Identifier	RCP-1 Query Priority	
Description	Query Priority for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from pre-determined domain list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value I (Immediate) may be used

3.3.2



RESPONSE – CROSS-REFERENCE MANAGER TO CONSUMER

The Return Corresponding Identifiers response portion of the Patient ID Cross-Referencing Transaction uses one HL7 message consisting of up to six segments: MSH, MSA, ERR, QAK, QPD, and PID.

365 The following section contains several tables from the HL7 standard, V2.5 Messaging.

HL7 message, segment and field layouts are displayed as defined and illustrated in HL7 version 2.5. Segments and fields used are shown in normal text. Unused segments and fields are indicated by a lighter colored gray text. All unused segments that follow the last segment used in a message are not shown. Similarly, all unused fields that follow the last field used in a segment are not shown.

<u>RSP^K23^RSP_K23</u>	<u>Segment Pattern Response</u>
MSH	Message Header
[[SFT]]	Software Segment
MSA	Message Acknowledgement
[ERR]	Error Segment
QAK	Query Acknowledgement
QPD	Query Parameter Definition
[PID]	Patient Identification

370 As a consequence of all patient matching processes completed within the Patient Identifier Cross-Reference Manager, six status cases may occur. These six cases are summarized in the following chart, along with the values that shall be contained in the first field of the MSA segment (MSA-1) and the second field of the QAK segment (QAK-2).

<u>Patient Matching Results Status</u>			
Case #	Case Description / Resulting Cross Reference Manager Action	MSA-1 value	QAK-2 value
1	The Patient Identifier Cross-Reference Manager recognizes the specified Patient Identification Domain and Patient ID sent by the Patient Identifier Cross-Reference Consumer in QPD-3, and corresponding identifiers exist for the specified patient in at least one of the domains requested in QPD-4 (one identifier per domain). (See Case 6 below for the required behavior if there are multiple identifiers recognized within a given Identifier Domain by the Patient Identifier Cross-Reference Manager.) A single PID segment is returned in which one repetition of PID-3, Patient Identifier List, is populated for each of the domains, if any, that the Patient Identifier Cross-Reference Manager did recognize in which a single identifier exists for the requested patient, not including the queried-for patient identifier that is returned in QPD-3.	AA	OK
2	The Patient Identifier Cross-Reference Manager recognizes the Patient Identification Domain and Patient ID sent in QPD-3, but no identifier exists for that patient in any of the domains sent in QPD-4. No PID segment is returned.	AA	NF



Patient Matching Results Status													
Case #	Case Description / Resulting Cross Reference Manager Action	MSA-1 value	OAK-2 value										
3	<p>The Patient Identifier Cross-Reference Manager recognizes the specified Patient Identification Domain sent in the fourth component of QPD-3, but does not recognize the Patient ID sent in the first component of QPD-3.</p> <p>An ERR segment is returned in which the components of ERR-2, Error Location, are valued as follows:</p> <table><tr><td>ERR-2.1, Segment ID</td><td>QPD</td></tr><tr><td>ERR-2.2, Sequence</td><td>1</td></tr><tr><td>ERR-2.3, Field Position</td><td>3</td></tr><tr><td>ERR-2.4, Field Repetition</td><td>1</td></tr><tr><td>ERR-2.5, Component Number</td><td>1</td></tr></table> <p>Additionally, ERR-3, HL7 Error Code, is populated with the value 204 (unknown key identifier). Together with the values in ERR-2, this signifies that the Patient Identifier Cross-Reference Manager did not recognize the value in the first component of QPD-3.</p> <p>A PID segment is returned in accordance with Case 1 or Case 6 where applicable.</p>	ERR-2.1, Segment ID	QPD	ERR-2.2, Sequence	1	ERR-2.3, Field Position	3	ERR-2.4, Field Repetition	1	ERR-2.5, Component Number	1	AE	AE
ERR-2.1, Segment ID	QPD												
ERR-2.2, Sequence	1												
ERR-2.3, Field Position	3												
ERR-2.4, Field Repetition	1												
ERR-2.5, Component Number	1												
4	<p>The Patient Identifier Cross-Reference Manager does not recognize the Patient Identification Domain of the identifier sent in QPD-3.</p> <p>An ERR segment is returned in which the components of ERR-2, Error Location, are valued as follows:</p> <table><tr><td>ERR-2.1, Segment ID</td><td>QPD</td></tr><tr><td>ERR-2.2, Sequence</td><td>1</td></tr><tr><td>ERR-2.3, Field Position</td><td>3</td></tr><tr><td>ERR-2.4, Field Repetition</td><td>1</td></tr><tr><td>ERR-2.5, Component Number</td><td>4</td></tr></table> <p>Additionally, ERR-3, HL7 Error Code, is populated with the value 204 (unknown key identifier). Together with the values in ERR-2, this signifies that the Patient Identifier Cross-Reference Manager did not recognize the value in the fourth component of QPD-3.</p> <p>A PID segment is returned in accordance with Case 1 or Case 6 where applicable.</p>	ERR-2.1, Segment ID	QPD	ERR-2.2, Sequence	1	ERR-2.3, Field Position	3	ERR-2.4, Field Repetition	1	ERR-2.5, Component Number	4	AE	AE
ERR-2.1, Segment ID	QPD												
ERR-2.2, Sequence	1												
ERR-2.3, Field Position	3												
ERR-2.4, Field Repetition	1												
ERR-2.5, Component Number	4												
5	<p>The Patient Identifier Cross-Reference Manager does not recognize one or more of the Patient Identification Domains for which an identifier has been requested.</p> <p>An ERR segment is returned in which the components of ERR-2, Error Location, are valued as follows:</p> <table><tr><td>ERR-2.1, Segment ID</td><td>QPD</td></tr><tr><td>ERR-2.2, Sequence</td><td>1</td></tr><tr><td>ERR-2.3, Field Position</td><td>4</td></tr><tr><td>ERR-2.4, Field Repetition</td><td>occurrence number from QPD-4</td></tr></table> <p>Additionally, ERR-3, HL7 Error Code, is populated with the value 204 (unknown key identifier). Together with the values in ERR-2, this signifies that the Patient Identifier Cross-Reference Manager did not recognize the value in QPD-4.</p> <p>The ERR segment may repeat as many times as necessary to identify each QPD-4 domain that is not recognized.</p> <p>A PID segment is returned in accordance with Case 1 or Case 6 where applicable.</p>	ERR-2.1, Segment ID	QPD	ERR-2.2, Sequence	1	ERR-2.3, Field Position	4	ERR-2.4, Field Repetition	occurrence number from QPD-4	AE	AE		
ERR-2.1, Segment ID	QPD												
ERR-2.2, Sequence	1												
ERR-2.3, Field Position	4												
ERR-2.4, Field Repetition	occurrence number from QPD-4												



Patient Matching Results Status			
Case #	Case Description / Resulting Cross Reference Manager Action	MSA-1 value	OAK-2 value
6	<p>The Patient Identifier Cross-Reference Manager recognizes the specified Patient Identification Domain and Patient ID sent by the Patient Identifier Cross-Reference Consumer in QPD-3, and corresponding identifiers exist for the specified patient in at least one of the domains requested in QPD-4, and there are multiple identifiers within at least one of the requested domains.</p> <p>A single PID segment is returned in which one repetition of PID-3, Patient Identifier List, is populated for each of the identifiers, not including the queried-for patient identifier that is returned in QPD-3. If the Patient Identifier Cross-reference Manager chooses to return multiple identifiers associated with the same domain, it shall return these identifiers grouped in successive repetitions within the PID-3, Patient Identifier List.</p>	AA	OK

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HL7 Segment - MSH - Message Header

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	1	ST	R			00001	Field Separator
2	4	ST	R			00002	Encoding Characters
3	227	HD	O			00003	Sending Application
4	227	HD	O			00004	Sending Facility
5	227	HD	O			00005	Receiving Application
6	227	HD	O			00006	Receiving Facility
7	26	TS	R			00007	Date/Time Of Message
8	40	ST	O			00008	Security
9	15	MSG	R			00009	Message Type
10	20	ST	R			00010	Message Control ID
11	3	PT	R			00011	Processing ID
12	60	VID	R			00012	Version ID
13	15	NM	O			00013	Sequence Number

Identifier	MSH-1 Field Separator	
Description	Field Separator	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Indicates the character that will separate fields in all segments contained in this message	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	HL7	Only HL7 default value shall be used



Identifier	MSH-2 Encoding Characters	
Description	Encoding Characters used in this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Contains four characters that indicate, in order: Character that separates components of fields Character that indicates repetitions of data Character that identifies a following escape character Character that separates subcomponents of components	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	HL7	Only HL7 default values shall be used

Identifier	MSH-3 Sending Application	
Description	Identification of Sending Application for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Contains information that identifies the software system that is sending the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-4 Sending Facility	
Description	Identification of Sending Facility for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Contains information that identifies the facility or organization that is sending the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

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Identifier	MSH-5 Receiving Application	
Description	Identification of Receiving Application for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Contains information that identifies the software system that is receiving the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-6 Receiving Facility	
Description	Identification of Receiving Facility for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Contains information that identifies the facility or organization that is receiving the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-7 Date / Time of Message	
Description	Date/Time of this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	TS	Time Stamp
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text



Identifier	MSH-9.1 Message Type: Message Code	
Description	Message Code for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from pre-determined domain list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value RSP may be used

Identifier	MSH-9.2 Message Type: Trigger Event	
Description	Trigger Event for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from pre-determined domain list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value K23 may be used

Identifier	MSH-9.3 Message Type: Message Structure	
Description	Message Structure for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from pre-determined domain list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value RSP_K23 may be used



Identifier	MSH-10 Message Control ID	
Description	Message Control ID for this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses when responding to this message	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text

Identifier	MSH-12 Version ID	
Description	Version ID used by this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	VID	Version Identifier
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value 2.5 may be used

Identifier	MSH-13 Sequence Number	
Description	Sequence Number of this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	NM	Numeric
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	n/a	Incrementing value used as message sequence number



HL7 Segment - MSA - Message Acknowledgment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	2	ID	R		0008	00018	Acknowledgment Code
2	20	ST	R			00010	Message Control ID

395

Identifier	MSA-1 Acknowledgement Code	
Description	Acknowledgement Code for the Get Corresponding Identifiers query message being acknowledged Values for this field shall be provided as specified in the Patient Matching Results Status chart shown above.	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from predetermined list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	Patient Matching Results Chart	HL7 Acknowledgement Codes

Identifier	MSA-2 Message Control ID	
Description	Message Control ID of the Get Corresponding Identifiers query message being responded to	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Consumer	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text



HL7 Segment - ERR -Error

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	493	ELD	B	Y		00024	Error Code and Location
2	18	ERL	O	Y		01812	Error Location
3	705	CWE	R		0357	01813	HL7 Error Code
4	2	ID	R		0516	01814	Severity
5	705	CWE	O		0533	01815	Application Error Code
6	80	ST	O	Y/10		01816	Application Error Parameter
7	2048	TX	O			01817	Diagnostic Information
8	250	TX	O			01818	User Message
9	20	IS	O	Y	0517	01819	Inform Person Indicator
10	705	CWE	O		0518	01820	Override Type
11	705	CWE	O	Y	0519	01821	Override Reason Code
12	652	XTN	O	Y		01822	Help Desk Contact Point

400

Segment Usage Note: The ERR Segment and its fields shall only be included in a Cross Reference Manager to Cross Reference Consumer Return Corresponding Identifiers Response message when required by a Case in the Patient Matching Results Status chart shown above.

Identifier	ERR-2 Error Location	
Description	<p>Location of error(s) as a consequence of processing by the Patient Identifier Cross-Reference Manager of the Get Corresponding Identifiers query message received from the Patient Identifier Cross-Reference Consumer</p> <p>Values for each component of this field shall be provided as specified in the Patient Matching Results Status chart shown above.</p>	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ERL	Error Location
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	May contain an unlimited number of repetitions
Code Domain	Patient Matching Results Chart	Formatted text

405

410



Identifier	ERR-3 HL7 Error Code	
Description	Code for Type of Error in processing the Get Corresponding Identifiers query message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	CWE	Coded With Exceptions
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value 204 (unknown key identifier) may be used

Identifier	ERR-4 Severity	
Description	Severity of error in processing the Get Corresponding Identifiers query message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from predetermined list
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	Table 0516	Error Severity



HL7 Table 0516 – Error Severity

Value	Description	Comment
W	Warning	Transaction successful, but there may issues
I	Information	Transaction was successful but includes information e.g., inform patient
E	Error	Transaction was unsuccessful

Identifier	ERR-7 Diagnostic Information	
Description	Information that may be useful to help desk or other support personnel in diagnosing the error in the Get Corresponding Identifiers query message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	TX	Text Data
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	ASCII	Free text

Identifier	ERR-8 User Message	
Description	Text to be displayed to user of system that sent Get Corresponding Identifiers query regarding error in processing	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Human user of Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	TX	Text Data
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	ASCII	Free text



Identifier	ERR-9 Inform Person Indicator	
Description	Codes indicating who should be informed of error in processing the Get Corresponding Identifiers query message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Human user of receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	IS	Coded value from open-ended list
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat sufficient times to include all appropriate code values
Code Domain	Table 0517	Inform Person Code

User-Defined Table 0517 – Inform Person Code

Value	Description
PAT	Inform patient
NPAT	Do NOT inform patient
USR	Inform User
HD	Inform help desk

Identifier	ERR-10 Override Type	
Description	Codes indicating what type of override may be performed by the at the Patient Identifier Cross-Reference Consumer system sending the Get Corresponding Identifiers query message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Human user of receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	CWE	Coded With Exceptions
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	Table 0518	Override Type



User-Defined Table 0518 – Override Type

Value	Description	Comment
EXTN	Extension Override	Identifies an override where a service is being performed for longer than the ordered period of time.
INLV	Interval Override	Identifies an override where a repetition of service is being performed sooner than the ordered frequency.
EQV	Equivalence Override	Identifies an override where a service is being performed against an order that the system does not recognize as equivalent to the ordered service.

Identifier	ERR-11 Override Reason Code	
Description	Codes indicating the reason(s) for overriding the message being acknowledged	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Human user of receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	CWE	Coded With Exceptions
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat sufficient times to include all necessary code values
Code Domain	Table 0519	Override Reasons Note: HL7 version 2.5 has no suggested values for User-Defined Table 0519. As a consequence, Table 0519 is not shown for this Transaction.

Identifier	ERR-12 Help Desk Contact Point	
Description	Telephone, e-mail, facsimile, and other relevant contact numbers for personnel at the Patient Identifier Cross-Reference Manager who can assist in resolving any errors	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Human user of Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	XTN	Extended Telecommunications Number
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat to include all applicable contact points
Code Domain	n/a	Free text



HL7 Segment – QAK – Query Acknowledgment

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	32	ST	C			00696	Query Tag
2	2	ID	O		0208	00708	Query Response Status
3	250	CE	O		0471	01375	Message Query Name
4	10	NM	O			01434	Hit Count
5	10	NM	O			01622	This payload

425

Identifier	QAK-2 Query Response Status	
Description	<p>Status of processing by the Patient Identifier Cross-Reference Manager of the Get Corresponding Identifiers query message received from the Patient Identifier Cross-Reference Consumer</p> <p>Values for this field shall be provided as specified in the Patient Matching Results Status chart shown above.</p>	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	Patient Matching Results Chart	String



Identifier	QAK-3 Message Query Name	
Description	Name of Query that caused this response message to be sent	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager as received from the Patient Identifier Cross-Reference Consumer's query message	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ST	String
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	free text	Only the value GET CORRESPONDING IDENTIFIERS may be used; see field QPD-1

Identifier	QAK-4 Hit Count Total	
Description	Total number of patient identifier matches found by the Patient Identifier Cross-Reference Manager when processing the query	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	NM	Numeric
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	free text	Numeric value



430

Identifier	QAK-5 This Payload	
Description	Total number of patient identifier matches sent to the Patient Cross-Reference Consumer by the Patient Identifier Cross-Reference Manager in this message; <i>i.e.</i> , the number of repetitions of PID-3 fields included in this message	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	NM	Numeric
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	free text	Numeric value

HL7 Segment – QPD – Query Parameter Definition

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
Sending Software Application within the Patient Identifier Cross-Reference Manager shall send an unaltered replica of the QPD segment received from the Patient Identifier Cross-Reference Consumer as part of the query message back to the Sending Software Application within the Patient Identifier Cross-Reference Consumer							

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HL7 Segment - PID - Patient Identification

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	R			00104	Set ID - PID
2	20	CX	X			00105	Patient ID
3	250	CX	R	Y		00106	Patient Identifier List
4	20	CX	X	Y		00107	Alternate Patient ID - PID
5	250	XP	R	Y		00108	Patient Name

Segment Usage Note: The PID Segment and its fields shall only be included in a Cross Reference Manager to Cross Reference Consumer Return Corresponding Identifiers Response message when required by a Case in the Patient Matching Results Status chart shown above.

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Identifier	PID-1 Set ID	
Description	Sequence number of patients being identified. Only one patient per message is permitted by this specification.	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	SI	Sequence Identifier
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the number 1 may be used

Identifier	PID-3.1 Patient Identifier List: ID Number	
Description	Full Identification Number of Patient, including all check digits and other qualifiers	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-3, for each ID Number the Patient Identifier Cross-Reference Manager conveys as specified in the Patient Matching Results Status chart shown above
Code Domain	n/a	Free text



Identifier	PID-3.4.2 Patient Identifier List: Assigning Authority's Universal ID	
Description	A value identifying the organization or facility that assigned the patient ID Number	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-3, for each ID Number the Patient Identifier Cross-Reference Manager conveys as specified in the Patient Matching Results Status chart shown above
Code Domain	See PID-3.4.3	Free text

Identifier	PID-3.4.3 Patient Identifier List: Assigning Authority's Universal ID Type	
Description	A value identifying the source of the value used for Assigning Authority's Universal ID	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-3, for each ID Number the Patient Identifier Cross-Reference Manager conveys as specified in the Patient Matching Results Status chart shown above
Code Domain	"NPI" "ISO"	One or the other of: HIPAA National Provider ID Object Identifier (OID)



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PID-5 Usage Note: To eliminate the issue of conflicting name values between Patient Identifier Domains, only two occurrences of PID-5, Patient Name, shall be present. The Patient Identifier Cross-Reference Manager shall return an empty (not present) value in the first repetition of field PID-5 and shall return a second repetition of field PID-5 in which the only populated component is PID-5.7 (Name Type Code).

Identifier	PID-5 Patient Name: entire field Occurrence 1	
Description	Completely empty field; <i>i.e.</i> , not present	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	XPN	Expanded person name
Conformance	R	Value must be empty
Repetitions	N	No repetitions for this first occurrence
Code Domain	n/a	No value shall be present

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Identifier	PID-5.7 Patient Name: Name Type Code Occurrence 2	
Description	Type of patient name being identified.	
Source – where created	Sending Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Receiving system within the Patient Identifier Cross-Reference Consumer uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	No repetitions for this second occurrence
Code Domain	Fixed value	Only the value S (coded pseudo-name to assure anonymity) may be used

End of the inclusion of HL7.

3.3.3 FEED – SOURCE TO CROSS-REFERENCE MANAGER

460

The merge patient identity – event code ADT^A40 – variant of the Patient Identity Feed uses one HL7 message consisting of four segments: MSH, EVN, PID, and MRG.



<u>ADT^40^ADT_A40</u>	<u>ADT Message</u>
MSH	Message Header
{{ SFT }}	Software Segment
EVN	Event Type
PID	Patient Identification
[PD1]	Additional Demographics
{{ ROL }}	Role
{{ NK1 }}	Next of Kin / Associated Parties
MGR	Merge Information

For the other HL7 trigger / event code variants of the Patient Identity Feed,

- 465
- A01 – Admission of an in-patient into a facility
 - A04 – Registration of an outpatient for a visit of the facility
 - A05 – Pre-admission of an in-patient
 - A08 – Update Patient Information,

One HL7 message is used with three segments: MSH, EVN, and PID.

<u>ADT^varies^ADT_varies</u>	<u>ADT Message</u>
MSH	Message Header
{{ SFT }}	Software Segment
EVN	Event Type
PID	Patient Identification

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HL7 Segment - MSH - Message Header

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM #	ELEMENT NAME
1	1	ST	R			00001	Field Separator
2	4	ST	R			00002	Encoding Characters
3	227	HD	O			00003	Sending Application
4	227	HD	O			00004	Sending Facility
5	227	HD	O			00005	Receiving Application
6	227	HD	O			00006	Receiving Facility
7	26	TS	R			00007	Date/Time Of Message
8	40	ST	O			00008	Security
9	15	MSG	R			00009	Message Type
10	20	ST	R			00010	Message Control ID
11	3	PT	R			00011	Processing ID
12	60	VID	R			00012	Version ID
13	15	NM	O			00013	Sequence Number

Identifier	MSH-1 Field Separator	
Description	Field Separator for ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Indicates the character that will separate fields in all segments contained in Acknowledgement Component messages	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	HL7	Only HL7 default value shall be used



Identifier	MSH-2 Encoding Characters	
Description	Encoding Characters for ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Contains four characters that indicate, in order: Character that separates components of fields Character that indicates repetitions of data Character that identifies a following escape character Character that separates subcomponents of components	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	HL7	Only HL7 default values shall be used

Identifier	MSH-3 Sending Application	
Description	Identification Sending Application for ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Contains information that identifies the software system that is sending the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text



Identifier	MSH-4 Sending Facility	
Description	Identification of Sending Facility for ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Contains information that identifies the facility or organization that is sending the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-5 Receiving Application	
Description	Identification of Receiving Application for ADT Message	
Source – where created	Receiving Software Application within the Patient Identifier Cross- Reference Manager	
Rationale – where used	Contains information that identifies the software system that is receiving the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

Identifier	MSH-6 Receiving Facility	
Description	Identification of Receiving Facility for ADT Message	
Source – where created	Receiving Software Application within the Patient Identifier Cross-Reference Manager	
Rationale – where used	Contains information that identifies the facility or organization that is receiving the message	
Data Type	HD	Hierarchic Designator
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Free text



Identifier	MSH-7 Date / Time of Message	
Description	Date/Time of ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	TS	Time Stamp
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text

Identifier	MSH-9 Message Type	
Description	Message Type for ADT Message. This value will be derived from one of those from the descriptions above.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	MSG	Message Type
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Varies based on the actual ADT or other message event being communicated

Identifier	MSH-10 Message Control ID	
Description	Message Control ID of the ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text



Identifier	MSH-12 Version ID	
Description	Version ID used by the ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	VID	Version Identifier
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the value 2.5 may be used for Acknowledgement Messages

Identifier	MSH-13 Sequence Number	
Description	Sequence Number of the ADT Message	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	NM	Numeric
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	n/a	Incrementing value used as message sequence number



HL7 Segment - EVN – Event Type

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	3	ID	B		0003	00099	Event Type Code
2	26	TS	R			00100	Recorded Date/Time
3	26	TS	O			00101	Date/Time Planned Event
4	3	IS	O		0062	00102	Event Reason Code
5	250	XCN	O	Y	0188	00103	Operator ID
6	26	TS	O			01278	Event Occurred
7	241	HD	O			01534	Event Facility

Identifier	EVN-2 Event Recorded Date / Time	
Description	Date/Time event was recorded if distinction from the date/time contained in MSH-7 is needed	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	TS	Time Stamp
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text

Identifier	EVN-6 Event Occurred Date / Time	
Description	Date/Time event occurred if distinction from the date/time contained in MSH-7 or EVN-2 is needed	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	TS	Time Stamp
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	n/a	Formatted text



Identifier	EVN-7 Event Facility	
Description	Facility where event described in this message occurred. If a value is not present, event is presumed to have occurred at the sending facility contained in MSH-4	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	HD	Hierarchic Designator
Conformance	O	Value may be included at sender's discretion
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

HL7 Segment - PID - Patient Identification

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	4	SI	R			00104	Set ID - PID
2	20	CX	X			00105	Patient ID
3	250	CX	R	Y		00106	Patient Identifier List
4	20	CX	X	Y		00107	Alternate Patient ID - PID
5	250	XP	R	Y		00108	Patient Name
6	250	XP	RE	Y		00109	Mother's Maiden Name
7	26	TS	RE			00110	Date/Time of Birth
8	1	IS	RE		0001	00111	Administrative Sex
9	250	XP	X	Y		00112	Patient Alias
10	250	CE	RE	Y	0005	00113	Race
11	250	XAD	O	Y		00114	Patient Address
12	4	IS	X		0289	00115	County Code
13	250	XTN	O	Y		00116	Phone Number - Home
14	250	XTN	X	Y		00117	Phone Number - Business
15	250	CE	X		0296	00118	Primary Language
16	250	CE	X		0002	00119	Marital Status
17	250	CE	X		0006	00120	Religion
18	250	CX	RE			00121	Patient Account Number
19	16	ST	X			00122	SSN Number - Patient
20	25	DLN	X			00123	Driver's License Number - Patient
21	250	CX	X	Y		00124	Mother's Identifier
22	250	CE	O	Y	0189	00125	Ethnic Group



Identifier	PID-1 Set ID	
Description	Sequence number of patients being identified. Only one patient per message is permitted by this specification.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	SI	Sequence Identifier
Conformance	R	Value must always be supplied (no nulls)
Repetitions	N	Does not repeat
Code Domain	fixed value	Only the number 1 may be used

Identifier	PID-3.1 Patient Identifier List: ID Number	
Description	Full Identification Number of Patient, including all check digits and other qualifiers	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-3, for each ID Number the Source wishes to convey at its discretion
Code Domain	n/a	Free text



Identifier	PID-3.4.2 Patient Identifier List: Assigning Authority's Universal ID	
Description	A value identifying the organization or facility that assigned the patient ID Number	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-3, for each ID Number the Source wishes to convey at its discretion
Code Domain	See PID-3.4.3	Free text

Identifier	PID-3.4.3 Patient Identifier List: Assigning Authority's Universal ID Type	
Description	A value identifying the source of the value used for Assigning Authority's Universal ID	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-3, for each ID Number the Source wishes to convey at its discretion
Code Domain	"NPI" "ISO"	One or the other of: HIPAA National Provider ID Object Identifier (OID)



Identifier	PID-5.1 Patient Name: Family Name Surname / Last Name Surname	
Description	Family / last name surname of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	FN	Family Name
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-5, for each Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text

Identifier	PID-5.2 Patient Name: Given Name / First Name	
Description	Given / first name of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value must be supplied when data is available
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-5, for each Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text



Identifier	PID-5.3 Patient Name: Middle Names	
Description	Middle names of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value(s) must be supplied when data is available. If more than one middle name is available, all available middle names shall be repeated within this data element
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-5, for each Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text

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Identifier	PID-5.4 Patient Name: Name Suffix	
Description	Name suffix of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value(s) must be supplied when data is available. If more than one suffix is available, all available suffixes shall be repeated within this data element
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-5, for each Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text



Identifier	PID-5.5 Patient Name: Name Prefix / Title	
Description	Name prefix / title of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value(s) must be supplied when data is available. If more than one prefix / title is available, all available prefixes and titles shall be repeated within this data element
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-5, for each Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text

Identifier	PID-5.7 Patient Name: Name Type Code	
Description	Type of patient name being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of PID-5, for each Patient Name the Source wishes to convey at its discretion
Code Domain	Table 0200	Name Type



HL7 Table 0200 - Name Type

Value	Description
A	Alias Name
B	Name at Birth
C	Adopted Name
D	Display Name
I	Licensing Name
L	Legal Name
M	Maiden Name
N	Nickname /"Call me" Name/Street Name
S	Coded Pseudo-Name to ensure anonymity
T	Indigenous/Tribal/Community Name
U	Unspecified

Identifier	PID-6.1 Mother's Maiden Name: Family Name / Last Name Surname	
Description	Mother's Maiden Family Name Surname / Mother's Maiden Last Name Surname of patient being identified. Only one mother's maiden name per message is permitted by this specification.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	FN	Family Name
Conformance	RE	Value must be supplied when data is available
Repetitions	N	Does not repeat. If more than one name per patient is desired, then a separate message for each patient name shall be used.
Code Domain	n/a	Free text



Identifier	PID-7 Date/Time of Birth	
Description	Date and time patient was born.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	TS	Time Stamp
Conformance	RE	Value must be supplied when data is available
Repetitions	N	Does not repeat.
Code Domain	n/a	Free text

Identifier	PID-8 Administrative Sex	
Description	Patient's gender as commonly used	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	IS	Coded value from open-ended list
Conformance	RE	Value must be supplied when data is available
Repetitions	N	Does not repeat.
Code Domain	Table 0001	Administrative Sex

User-Defined Table 0001 - Administrative Sex

Value	Description
F	Female
M	Male
O	Other
U	Unknown
A	Ambiguous
N	Not applicable



Identifier	PID-10 Race	
Description	Race of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	CE	Coded element: first triplet shall be populated from table shown below, second triplet from listed alternate source
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat sufficient times to include all appropriate code values
Code Domains	Table 0005 alternate source	Race U. S. Government Race and Ethnicity Codes: available from Health Information and Surveillance Systems Board Centers for Disease Control and Prevention Mailstop C08 1600 Clifton Road, NE Atlanta, Georgia 30333

User-Defined Table 0005 - Race

Value	Description
1002-5	American Indian or Alaska Native
2028-9	Asian
2054-5	Black or African American
2076-8	Native Hawaiian or Other Pacific Islander
2106-3	White
2131-1	Other Race



Identifier	PID-11.1 Patient Address: Street Address Line 1	
Description	Patient's Postal Service Street Address, first line	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	SAD	Street Address
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat, along with other components of PID-11, for each Patient Address the Source wishes to convey at its discretion
Code Domain	n/a	Free text that shall contain structure number and street where structure is located as listed in the United States, Canada, or other country's standardized address listings

Identifier	PID-11.2 Patient Address: Other Designation	
Description	Patient's Postal Service Street Address, second line	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat, along with other components of PID-11, for each Patient Address the Source wishes to convey at its discretion
Code Domain	n/a	Free text that shall contain additional structure address information as listed in the United States, Canada, or other country's standardized address listings



Identifier	PID-11.3 Patient Address: City	
Description	Patient's Postal Service City Name	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat, along with other components of PID-11, for each Patient Address the Source wishes to convey at its discretion
Code Domain	n/a	Free text that shall contain city name as listed in the United States, Canada, or other country's standardized address listings

Identifier	PID-11.4 Patient Address: State / Province	
Description	Patient's Postal Service State / Province Name	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat, along with other components of PID-11, for each Patient Address the Source wishes to convey at its discretion
Code Domain	n/a	Free text that shall contain state / province name as listed in the United States, Canada, or other country's standardized address listings



Identifier	PID-11.5 Patient Address: ZIP / Postal Code	
Description	Patient's Postal Service ZIP / Postal Code	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat, along with other components of PID-11, for each Patient Address the Source wishes to convey at its discretion
Code Domain	n/a	Free text that shall contain ZIP / postal code as listed in the United States, Canada, or other country's standardized address listings

Identifier	PID-11.6 Patient Address: Country	
Description	Patient's Postal Service Country Name	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat, along with other components of PID-11, for each Patient Address the Source wishes to convey at its discretion
Code Domain	ISO-3166	International Standards Organization Codes for Representation of Names and Countries: available from American National Standards Institute 11 West 42 nd Street, 13 th Floor New York, NY 10036



Identifier	PID-11.7 Patient Address: Address Type	
Description	Type of Address	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat, along with other components of PID-11, for each Patient Address the Source wishes to convey at its discretion
Code Domain	Table 0190	Address Type

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HL7 Table 0190 - Address type

Value	Description
BA	Bad address
N	Birth (nee) (birth address, not otherwise specified)
BDL	Birth delivery location (address where birth occurred)
F	Country Of Origin
C	Current Or Temporary
B	Firm/Business
H	Home
L	Legal Address
M	Mailing
O	Office
P	Permanent
RH	Registry home. Refers to the information system, typically managed by a public health agency, that stores patient information such as immunization histories or cancer data, regardless of where the patient obtains services.
BR	Residence at birth (home address at time of birth)



Identifier	PID-13 Phone Number – Home	
Description	Patient's Home Telephone Number	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	XTN	Extended Telecommunications Number
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat sufficient times to include all appropriate telephone numbers. If repetition occurs, then first occurrence shall be the primary telephone number used for patient contact.
Code Domain	n/a	Free text

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Identifier	PID-18.1 Patient Account Number: ID Number	
Description	Full Account Number of Patient, including all check digits and other qualifiers	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value must be supplied when data is available
Repetitions	N	Does not repeat
Code Domain	n/a	Free text



Identifier	PID-18.4.2 Patient Account Number: Assigning Authority's Universal ID	
Description	A value identifying the organization or facility that assigned the patient Account Number	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	C	Value (no nulls) must be supplied when Account Number is included in message
Repetitions	N	Does not repeat
Code Domain	See PID-18.4.3	Free text

Identifier	PID-18.4.3 Patient Account Number: Assigning Authority's Universal ID Type	
Description	A value identifying the source of the value used for Assigning Authority's Universal ID	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	C	Value (no nulls) must be supplied when Account Number is included in message
Repetitions	N	Does not repeat
Code Domain	"NPI" "ISO"	One or the other of: HIPAA National Provider ID Object Identifier (OID)



Identifier	PID-19 SSN Number – Patient	
Description	Patient's Social Security Number	
Source – where created	Sending Software Application	
Rationale – where used	Receiving system uses as needed	
Data Type	ST	String
Conformance	RE	Value must be supplied when data is available
Repetitions	N	Does not repeat
Code Domain	United States Social Security Admin.	Free text

Identifier	PID-22 Ethnic Group	
Description	Ancestry of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	CE	Coded element: first triplet shall be populated from table shown below, second triplet from listed alternate source
Conformance	O	Value may be included at sender's discretion
Repetitions	Y	May repeat sufficient times to include all appropriate code values
Code Domains	Table 0189 alternate source	Ethnic Group U. S. Government Race and Ethnicity Codes: available from Health Information and Surveillance Systems Board Centers for Disease Control and Prevention Mailstop C08 1600 Clifton Road, NE Atlanta, Georgia 30333



User-Defined Table 0189 - Ethnic Group

Value	Description
H	Hispanic or Latino
N	Not Hispanic or Latino
U	Unknown

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HL7 Segment - MRG - Merge Patient Information

SEQ	LEN	DT	OPT	RP/#	TBL#	ITEM#	ELEMENT NAME
1	250	CX	R	Y		00211	Prior Patient Identifier List
2	250	CX	B	Y		00212	Prior Alternate Patient ID
3	250	CX	O			00213	Prior Patient Account Number
4	250	CX	B			00214	Prior Patient ID
5	250	CX	O			01279	Prior Visit Number
6	250	CX	O			01280	Prior Alternate Visit ID
7	250	XPN	O	Y		01281	Prior Patient Name

Identifier	MRG-1.1 Prior Patient Identifier List: ID Number	
Description	Full Identification Number of Prior Patient, including all check digits and other qualifiers	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-1, for each Prior ID Number the Source wishes to convey at its discretion
Code Domain	n/a	Free text

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Identifier	MRG-1.4.2 Prior Patient Identifier List: Assigning Authority's Universal ID	
Description	A value identifying the organization or facility that assigned the prior patient ID Number	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-1, for each prior ID Number the Source wishes to convey at its discretion
Code Domain	See MRG-1.4.3	Free text

Identifier	MRG-1.4.3 Prior Patient Identifier List: Assigning Authority's Universal ID Type	
Description	A value identifying the source of the value used for Assigning Authority's Universal ID	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-1, for each prior ID Number the Source wishes to convey at its discretion
Code Domain	"NPI" "ISO"	One or the other of: HIPAA National Provider ID Object Identifier (OID)



Identifier	MRG-4.1 Prior Patient ID: ID Number	
Description	Full Identification Number of Prior Patient, including all check digits and other qualifiers	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value must be supplied when data is available
Repetitions	N	Does not repeat
Code Domain	n/a	Free text

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Identifier	MRG-4.4.2 Prior Patient ID Number: Assigning Authority's Universal ID	
Description	A value identifying the organization or facility that assigned the prior patient Identification Number	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	C	Value (no nulls) must be supplied when Account Number is included in message
Repetitions	N	Does not repeat
Code Domain	See MRG-4.4.3	Free text



Identifier	MRG-4.4.3 Prior Patient ID Number: Assigning Authority's Universal ID Type	
Description	A value identifying the source of the value used for Assigning Authority's Universal ID	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	C	Value (no nulls) must be supplied when Account Number is included in message
Repetitions	N	Does not repeat
Code Domain	"NPI" "ISO"	One or the other of: HIPAA National Provider ID Object Identifier (OID)

Identifier	MRG-7.1 Prior Patient Name: Family Name Surname / Last Name Surname	
Description	Prior Family / last name surname of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	FN	Family Name
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-7, for each Prior Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text



Identifier	MRG-7.2 Prior Patient Name: Given Name / First Name	
Description	Prior Given / first name of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value must be supplied when data is available
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-7, for each Prior Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text

Identifier	MRG-7.3 Prior Patient Name: Middle Names	
Description	Prior Middle names of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value(s) must be supplied when data is available. If more than one prior middle name is available, all available prior middle names shall be repeated within this data element
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-7, for each Prior Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text



Identifier	MRG-7.4 Prior Patient Name: Name Suffix	
Description	Prior Name suffix of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value(s) must be supplied when data is available. If more than one prior suffix is available, all available prior suffixes shall be repeated within this data element
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-7, for each Prior Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text

Identifier	MRG-7.5 Prior Patient Name: Name Prefix / Title	
Description	Prior Name prefix / title of patient being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ST	String
Conformance	RE	Value(s) must be supplied when data is available. If more than one prior prefix / title is available, all available prior prefixes and titles shall be repeated within this data element
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-7, for each Patient Name the Source wishes to convey at its discretion
Code Domain	n/a	Free text

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Identifier	MRG-7.7 Prior Patient Name: Name Type Code	
Description	Type of prior patient name being identified.	
Source – where created	Sending Software Application within the Patient Identity Source	
Rationale – where used	Patient Identifier Cross-Reference Manager uses as needed	
Data Type	ID	Coded value from code domain list below
Conformance	R	Value must always be supplied (no nulls)
Repetitions	Y	Must be at least one occurrence, but may repeat, along with other components of MRG-7, for each Prior Patient Name the Source wishes to convey at its discretion
Code Domain	Table 0200	Name Type

HL7 Table 0200 - Name Type

Value	Description
A	Alias Name
B	Name at Birth
C	Adopted Name
D	Display Name
I	Licensing Name
L	Legal Name
M	Maiden Name
N	Nickname /"Call me" Name/Street Name
S	Coded Pseudo-Name to ensure anonymity
T	Indigenous/Tribal/Community Name
U	Unspecified

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4.0 CONSTRAINTS FOR REUSE

There are no constraints regarding use or reuse of the Patient ID Cross-Referencing (PIX) or Patient Identity Feed transactions. They are intended for use and reuse wherever Health Level Seven (HL7) messages are suitable to identify patients from a list of potentials.

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5.0 APPENDIX

5.1 GLOSSARY

The HITSP glossary that spans all the interoperability specifications can be found in the following folder on the HITSP site:

<http://publicaa.ansi.org/sites/apdl/Documents/Forms/AllItems.aspx?RootFolder=http%3a%2f%2fpublicaa%2eansi%2eorg%2fsites%2fapdl%2fDocuments%2fStandards%20Activities%2fHealthcare%20Informatics%20Technology%20Standards%20Panel>

