

AGFA HEALTHCARE

HL7 Conformance Statement

IMPAX Data Center 3.1.1

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1 INTRODUCTION

1.1 Revision Record

Revision Number	Date	Reason for Change
1.0	July 7, 2016	Initial version
1.1	July 7, 2016	Update Livelink NodeID
1.2	July 20, 2016	Update Document No., and address review comments.

1.2 Purpose and Intended Audience of this Document

This document is a HL7 Conformance Statement for the HL7 Services associated with Agfa HealthCare IMPAX Data Center 3.1.1, further referred to as IDC 3.1.1.

The user of this document is involved with system integration and/or software design. We assume that the reader is familiar with the terminology and concepts that are used in HL7 2.3.1 and HL7 2.5 standard and the IHE Technical Framework.

Readers not familiar with HL7 terminology should first read the appropriate parts of the HL7 standard itself, prior to reading this conformance statement.

Although the use of this conformance statement in conjunction with the HL7 standard is intended to facilitate communication with IDC 3.1.1, it is not sufficient to guarantee, by itself, the inter-operation of the connection between IDC 3.1.1 and the 3rd party HL7-based system.

The integration of any device into a system of interconnected devices goes beyond the scope of the HL7 standard and this conformance statement when interoperability is desired. The responsibility for analyzing the applications requirements and developing a solution that integrates the Agfa equipment with other vendors' systems is the user's responsibility and should not be underestimated.

1.3 Version Overview

IDC 3.1.1 has HL7 connectivity integrated within the product. Therefore there is no version compatibility matrix.

1.4 Acronyms and Abbreviations

Definitions, terms and abbreviations used in this document are defined within the HL7 standard. Abbreviations and terms are as follows:

ADT	Admission, Discharge, and Transfer message
AL1	Patient Allergy Information segment
EVN	Event Type segment
HL7	Health Level 7

IHE	Integrating the Healthcare Enterprise
MDM	Medical Document Management
MFN	Master Files Change Notification
MRG	Merge Patient Information segment
MSH	Message Header segment
NTE	Notes and comments segment
OBR	Observation Request segment
OBX	Observation/Result segment
ORC	Common Order segment
ORM	Order Request message
ORU	Observation Results - Unsolicited message
PID	Patient ID segment
PV1	Patient Visit segment
QRD	Query Definition segment
RIS	Radiology Information System

1.5 Related Documents

- HL7 Standard v2.3.1 and v2.5
- IHE Radiology Technical Framework Revision 12.0 – Final Text
- IHE IT Infrastructure Technical Framework Revision 10.0 – Final Text
- IHE Cardiology Supplement Displayable Report (DRPT)

2 INBOUND MESSAGES

2.1 Supported Trigger Events

2.1.1 Supported ADT Events

Inbound support for ADT triggers is implemented by a lookup table. This table may be edited to meet a site's needs.

Table 1 Supported ADT Events

Func Area	Event Code	ADT Trigger Event	Inbound Supported
ADT	A01	Admit a patient	Y
ADT	A02	Transfer a patient	
ADT	A03	Discharge a patient	
ADT	A04	Register a patient	Y
ADT	A05	Preadmit a patient	Y
ADT	A06	Transfer an outpatient to inpatient	
ADT	A07	Transfer an inpatient to outpatient	
ADT	A08	Update patient information	Y
ADT	A09	Patient departing	
ADT	A10	Patient arriving	Y
ADT	A11	Cancel admit	
ADT	A12	Cancel transfer	
ADT	A13	Cancel discharge	
ADT	A14	Pending admit	
ADT	A15	Pending transfer	
ADT	A16	Pending discharge	
ADT	A17	Swap patients	
ADT	A18	Merge patient information	
QRY	A19	Patient query	
ADT	A20	Nursing/Census application updates	
ADT	A21	Leave of absence – out (leaving)	
ADT	A22	Leave of absence – in (returning)	
ADT	A23	Delete a patient record	Y
ADT	A24	Link patient information	
ADT	A25	Cancel pending discharge	
ADT	A26	Cancel pending transfer	
ADT	A27	Cancel pending admit	

Func Area	Event Code	ADT Trigger Event	Inbound Supported
ADT	A28	Add person information	Y
ADT	A29	Delete person information	
ADT	A30	Merge person information	
ADT	A31	Update person information	Y
ADT	A32	Cancel patient arriving	
ADT	A33	Cancel patient departing	
ADT	A34	Merge patient information – patient ID only	Y
ADT	A35	Merge patient information – account number only	
ADT	A36	Merge patient information – patient ID and account	
ADT	A37	Unlink patient information	
ADT	A38	Cancel pre-admit	
ADT	A39	Merge person – external ID	
ADT	A40	Merge patient – internal ID	Y
ADT	A41	Merge account – patient account number	
ADT	A42	Merge visit – visit number	
ADT	A43	Move patient information – internal ID	
ADT	A44	Move account information – patient account number	
ADT	A45	Move visit information – visit number	
ADT	A46	Change external ID	
ADT	A47	Change internal ID	Y
ADT	A48	Change alternate patient ID	
ADT	A49	Change patient account number	
ADT	A50	Change visit number	
ADT	A51	Change alternate visit ID	

2.1.1.1 ADT Segments Processed

The following segments are processed when IDC 3.1.1 receives an ADT message:

MSH
[EVN]
PID
PV1
[MRG]

2.1.2 Supported ORM Events

The ORM^O01 is the only code supported for order messages.

Table 2 Supported ORM Events

Func Area	Event Code	ORM Trigger Event	Inbound Supported
ORM	O01	General order message	Y

2.1.2.1 ORM Messages: Supported Control Codes and Order Statuses

For ORM messages the processing performed is determined by a combination of ORC(1,1) and ORC(5,1). If ORC(1,1) is set to "SC" for "Status Changed", then ORC(5,1) is used as the key to determine both the order status. Otherwise ORC(1,1) is used as the key. The following tables indicate what order control codes and order statuses are supported by default from ORC(1,1) and ORC(5,1). The set of supported control codes and the corresponding handling behaviour can be changed by configuration.

Table 3 Default Order Control Codes supported from ORC 1,1

Control Code (ORC-1) Value
NW
XO
CA
OC
DC
OD
SC

Table 4 Default Order Status Codes supported from ORC 5,1

Order Status (ORC-5) Value
DC
CM
IP
CA

2.1.2.2 ORM Segments Processed

The following segments are processed when IDC 3.1.1 receives an ORM message:

```
MSH
PID
[ PV1 ]
{
  ORC
  [ OBR ]
  [
    { OBX }
  ]
}
ZDS
```

2.2 Supported HL7 Attributes

The following sections indicate the default mapping of HL7 attributes to internal IDC 3.1.1 data attributes.

2.2.1 MSH Segment Mappings

Table 5 MSH Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Field Separator	Yes	No	Usually " "
2	Encoding Characters	Yes	No	Usually "^~\&"
3	Sending Application	Yes	No	
4	Sending Facility	Yes	No	
5	Receiving Application	Yes	No	
6	Receiving Facility	Yes	No	
7	Date/time of Message	No	No	Date portion only (YYYYMMDD)
8	Security	No	No	
9	Message Type	Yes	No	Extract the message type and event type components
10	Message Control ID	Yes	No	Generated by sending application
11	Processing ID	Yes	No	
12	Version ID	Yes	No	"2.1", "2.2", "2.3", "2.3.1", "2.5"
13	Sequence Number	No	No	
14	Continuation Pointer	No	No	
15	Accept Acknowledgement Type	No	No	
16	Application Acknowledgement Type	No	No	
17	Country Code	No	No	
18	Character Set	Yes	No	If missing, then set to ISO_IR 100
19	Principal Language of Message	No	No	

2.2.2 PID Segment Mappings

Table 6 PID Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Set ID – Patient ID	No	No	
2	Patient ID (External ID)	No	No	
3	Patient ID (Internal ID)	Yes	Yes	Important to include Assigning Authority in PID(3,4)
4	Alternate Patient ID	No	No	
5	Patient Name	Yes	Yes	Maps to DICOM Patient Name (0010,0010)
6	Mother's Maiden Name	No	Yes	Maps to DICOM Patient's Mother's Birth Name (0010,1060)
7	Date of Birth	No	Yes	Maps to DICOM Patient's Birth Date (0010,0030)
8	Sex	No	Yes	M (Male), F (Female), O (Other), U (Unknown)
9	Patient Alias	No	Yes	Only support one patient alias.
10	Race	No	No	
11	Patient Address	No	No	
12	Country Code	No	No	
13	Phone Number – Home	No	No	
14	Phone Number – Business	No	No	
15	Primary Language	No	No	
16	Marital Status	No	No	
17	Religion	No	No	
18	Patient Account Number	No	No	
19	SSN Number – Patient	No	Yes	Included as other patient ID
20	Driver's Lic Num – Patient	No	No	
21	Mother's Identifier	No	No	
22	Ethnic Group	No	No	
23	Birth Place	No	No	
24	Multiple Birth Indicator	No	No	
25	Birth Order	No	No	
26	Citizenship	No	No	
27	Veterans Military Status	No	No	
28	Nationality	No	No	
29	Patient Death Date/Time	No	No	
30	Patient Death Indicator	No	No	

2.2.3 PV1 Segment Mappings

Table 7 PV1 Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Set ID - Patient Visit	No	No	
2	Patient Class	No	No	
3	Assigned Patient Location	No	No	
4	Admission Type	No	No	
5	Pre-admit Number	No	No	
6	Prior Patient Location	No	No	
7	Attending Doctor	No	No	
8	Referring Doctor	No	Yes	Maps to DICOM Referring Physician's Name (0008,0090) on ORM messages
9	Consulting Doctor	No	No	
10	Hospital Service	No	No	
11	Temporary Location	No	No	
12	Pre-admit Test Indicator	No	No	
13	Readmission Indicator	No	No	
14	Admit Source	No	No	
15	Ambulatory Status	No	Yes	Maps to DICOM Pregnancy Status (0010,21C0) on ORM messages. If the Ambulatory Status is set to B6, then the Pregnancy status is set to 3.
16	VIP Indicator	No	No	
17	Admitting Doctor	No	No	
18	Patient Type	No	No	
19	Visit Number	No	Yes	Maps to DICOM Admission ID (0038,0010) and Issuer of Admission ID (0038,0011)
20	Financial Class Eff. Date	No	No	
21	Charge Price Indicator	No	No	
22	Courtesy Code	No	No	
23	Credit Rating	No	No	
24	Contract Code	No	No	
25	Contract Effective Date	No	No	
26	Contract Amount	No	No	
27	Contract Period	No	No	
28	Interest Code	No	No	
29	Transfer to Bad Debt Code	No	No	
30	Transfer to Bad Debt Date	No	No	
31	Bad Debt Agency Code	No	No	

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
32	Bad Debt Transfer Amount	No	No	
33	Bad Debt Recovery Amt	No	No	
34	Delete Account Indicator	No	No	
35	Delete Account Date	No	No	
36	Discharge Disposition	No	No	
37	Discharged to Location	No	No	
38	Diet Type	No	No	
39	Servicing Facility	No	No	
40	Bed Status	No	No	
41	Account Status	No	No	
42	Pending Location	No	No	
43	Prior Temporary Location	No	No	
44	Admit Date/Time	No	No	
45	Discharge Date/Time	No	No	
46	Current Patient Balance	No	No	
47	Total Charges	No	No	
48	Total Adjustments	No	No	
49	Total Payments	No	No	
50	Alternate Visit ID	No	No	
51	Visit Indicator	No	No	
52	Other Healthcare Provider	No	No	

2.2.4 MRG Segment Mappings

This segment is only used in ADT Merge messages (A40, A47).

Table 8 MRG Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Prior Patient ID - Internal	Yes	Yes	
2	Prior Alternate Patient ID	No	No	
3	Prior Patient Acct Number	No	No	
4	Prior Patient ID - External	No	No	
5	Prior Visit Number	No	No	
6	Prior Alternate Visit ID	No	No	
7	Prior Patient Name	No	Yes	

2.2.5 ORC Segment Mappings

Table 9 ORC Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Order Control	Yes	No	Refer to Table 3
2	Placer Order #	No	Yes	Important to include ORC 2,2 as the assigning authority
3	Filler Order #	No	Yes	Important to include ORC 3,2 as the assigning authority
4	Placer Group #	No	No	
5	Order Status	No	No	
6	Response Flag	No	No	
7	Quantity/Timing	No	Yes	ORC 7,4 maps to Scheduled Procedure Step Start Date and Time (0040,0002) and (0040,0003) ORC 7,6 maps to DICOM Requested Procedure Priority (0040,1003). The mapping is S – STAT A P C – HIGH R – ROUTINE T - MEDIUM
8	Parent	No	No	
9	Date/Time of Transaction	No	No	
10	Entered By	No	No	
11	Verified By	No	No	
12	Ordering Provider	No	No	
13	Enterer's Location	No	No	
14	Call Back Phone Number	No	No	
15	Order Effective Date/Time	No	No	
16	Order Control Reason	No	No	
17	Entering Organization	No	No	
18	Entering Device	No	No	ORC 18,1 maps to an internal attribute Original Source Identity. This value can be mapped from (but not limited to): OBR 34,5 Technician's Room ORC 17,1 Entering Organization ORC 12,1 Ordering Provider ORC 13,1 Enterer's Location
19	Action By	No	No	

2.2.6 OBR Segment Mappings

Table 10 OBR Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Set ID - Observation Request	No	No	Set to 1,2,3...
2	Placer Order #	No	No	
3	Filler Order #	No	No	
4	Universal Service ID	No	Yes	OBR 4,4-6 maps to DICOM Scheduled Protocol Code Sequence (0040,0008) OBR 4,5 maps to DICOM Scheduled Procedure Step Description (0040,0007)
5	Priority	No	No	
6	Requested Date/Time	No	No	
7	Observation Date/Time	No	No	
8	Observation End Date/Time	No	No	
9	Collection Volume	No	No	
10	Collector Identifier	No	No	
11	Specimen Action Code	No	No	
12	Danger Code	No	Yes	Maps to DICOM Patient State (0038,0500)
13	Relevant Clinical Inf.	No	Yes	Maps to DICOM Medical Alert (0010,2000)
14	Specimen Rec'd Date/Time	No	No	
15	Specimen Source	No	No	
16	Ordering Provider family	No	Yes	Maps to DICOM Requesting Physician (0032,1032)
17	Order Callback Phone No.	No	No	
18	Placer Field 1	No	Yes	Maps to DICOM Accession Number (0008,0050)
19	Placer Field 2	No	Yes	Maps to DICOM Requested Procedure ID (0040,1001)
20	Filler Field 1	No	Yes	Maps to DICOM Scheduled Procedure Step ID (0040,0009)
21	Filler Field 2	No	No	
22	Result Rpt/Status Change - Date/Time	No	No	
23	Charge To Practice	No	No	
24	Diagnostic Serv Sect Id	No	Yes	Maps to DICOM Modality (0008,0060)
25	Result Status	No	No	
26	Parent Result	No	No	
27	Quantity/Timing	No	No	
28	Result Copies To	No	No	
29	Parent Number	No	No	

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
30	Transportation Mode	No	Yes	Maps to DICOM Patient Transport Arrangement (0040,1004)
31	Reason For Study	No	No	
32	Principal Result Interpreter	No	No	
33	Assistant Result Interpreter	No	No	
34	Technician	No	Yes	Maps to DICOM Scheduled Performing Physician Name (0040,0006)
35	Transcriptionist	No	No	
36	Scheduled Date/Time	No	No	
37	Number of Sample Containers	No	No	
38	Transport Logistics of Collected Sample	No	No	
39	Collector's Comment	No	No	
40	Transport Arrangement Responsibility	No	No	
41	Transport Arranged	No	No	
42	Escort Required	No	No	
43	Planned Patient Transport Comment	No	No	
44	Procedure Code	No	Yes	OBR 44,1-3 maps to DICOM Requested Procedure Code Sequence (0032,1064) . OBR 44,2 maps to Requested Procedure Description (0032,1060)

2.2.7 ZDS Segment Mappings

IDC 3.1.1 supports the IHE custom segment ZDS that conveys the study instance uid.

Table 11 ZDS Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Study Instance UID	No	Yes	ZDS 1,1 is the Study Instance UID

2.3 Acknowledgements

If the HL7 message is processed successfully, then an ACK is returned with the Acknowledgement Code set to "AA".

If the incoming message cannot be processed, the HL7 mapping returns a **NAK**. If the reason is the one of the required fields or segments in the message is missing, the Acknowledgment Code is set to "**AR**". Any other parsing error returns an Acknowledgment Code of "**AE**".

3 OUTBOUND MESSAGES

3.1 Forwarding of HL7 Messages

IDC 3.1.1 can be configured to forward any received HL7 messages to one or more destination. By default, the message will be forwarded 'as is', including retaining the Sending Application and Facility and Receiving Application and Facility in MSH segment. Optionally, a mapping can be applied when forwarding a message.

3.2 Outbound HL7 Notifications

IDC 3.1.1 can be configured to trigger HL7 notifications to one or more destinations. The HL7 notifications are generated based on a configurable mapping.

3.2.1 Study Available HL7 Notification

The following segments are generated when IDC 3.1.1 sends a study available HL7 notification or study unavailable HL7 notification:

MSH
PID
ORC
OBR
OBX
ZDS

The following sections define the default mapping of the HL7 notification.

3.2.1.1 MSH Segment Mappings

Table 12 MSH Attribute Generated by IDC 3.1.1

Seq	HL7 Field Name	Comments
1	Field Separator	" "
2	Encoding Characters	"^~\&"
3	Sending Application	Configurable Sending Application
4	Sending Facility	Configurable Sending Facility
5	Receiving Application	Receiving Application
6	Receiving Facility	Receiving Facility
7	Date/time of Message	Date/Time of generated message. It has the format of YYYYMMDDHHmmSS.nnn
8	Security	
9	Message Type	"ORM^O01"
10	Message Control ID	Generated by IDC

Seq	HL7 Field Name	Comments
11	Processing ID	"P"
12	Version ID	"2.5"
13	Sequence Number	
14	Continuation Pointer	
15	Accept Acknowledgement Type	
16	Application Acknowledgement Type	
17	Country Code	
18	Character Set	"8859/1"
19	Principal Language of Message	

3.2.1.2 PID Segment Mappings

Table 13 PID Attribute Generated by IDC 3.1.1

Seq	HL7 Field Name	Comments
1	Set ID – Patient ID	
2	Patient ID (External ID)	EMPI if known in Other Patient IDs Sequence (0010,1002)
3	Patient ID (Internal ID)	PID(3,1) = Patient ID (0010,0020) PID(3,4) = Issuer of Patient ID (0010,0021)
4	Alternate Patient ID	
5	Patient Name	Maps from DICOM Patient Name (0010,0010)
6	Mother's Maiden Name	
7	Date of Birth	Maps from DICOM Patient's Birth Date (0010,0030)
8	Sex	Maps from DICOM Patient's Sex (0010,0040)
9	Patient Alias	
10	Race	
11	Patient Address	
12	Country Code	
13	Phone Number – Home	
14	Phone Number – Business	
15	Primary Language	
16	Marital Status	
17	Religion	
18	Patient Account Number	
19	SSN Number – Patient	
20	Driver's Lic Num – Patient	
21	Mother's Identifier	
22	Ethnic Group	

Seq	HL7 Field Name	Comments
23	Birth Place	
24	Multiple Birth Indicator	
25	Birth Order	
26	Citizenship	
27	Veterans Military Status	
28	Nationality	
29	Patient Death Date/Time	
30	Patient Death Indicator	

3.2.1.3 ORC Segment Mappings

Table 14 ORC Attribute Generated by IDC 3.1.1

Seq	HL7 Field Name	Comments
1	Order Control	"SC"
2	Placer Order #	
3	Filler Order #	Maps from DICOM Accession Number (0008,0050)
4	Placer Group #	
5	Order Status	"IO" - if the message is Study Available "IA" - if the message is Study Unavailable

3.2.1.4 OBR Segment Mappings

Table 15 OBR Attribute Generated by IDC 3.1.1

Seq	HL7 Field Name	Comments
1	Set ID - Observation Request	"1"
2	Placer Order #	
3	Filler Order #	Maps from DICOM Accession Number (0008,0050)
4	Universal Service ID	Maps from DICOM Accession Number (0008,0050)
5	Priority	
6	Requested Date/Time	
7	Observation Date/Time	Concatenation of DICOM Study Date (0008,0020) and Study Time (0008,0030)
8	Observation End Date/Time	
9	Collection Volume	
10	Collector Identifier	

Seq	HL7 Field Name	Comments
11	Specimen Action Code	
12	Danger Code	
13	Relevant Clinical Inf.	
14	Specimen Rec'd Date/Time	
15	Specimen Source	
16	Ordering Provider family	
17	Order Callback Phone No.	
18	Placer Field 1	Number of Study Related Series – Only available if the message is Study Available
19	Placer Field 2	Number of Study Related Instances – Only available if the message is Study Available
20	Filler Field 1	
21	Filler Field 2	
22	Result Rpt/Status Change - Date/Time	
23	Charge To Practice	
24	Diagnostic Serv Sect Id	Modalities in Study – Only available if the message is Study Available
25	Result Status	"F"

3.2.1.5 OBX Segment Mappings

Table 16 OBX Attribute Generated by IDC 3.1.1

Seq	HL7 Field Name	Comments
1	Set ID – OBX	
2	Value Type	"CE"
3	Observation Identifier	"IMG"
4	Observation Sub-ID	
5	Observation Value	OBX(5,1): - "Online" If the message is Study Available - "Archived" if the message is Study Unavailable OBX(5,2) specifies a URL that can view the study from IDC
6	Units	
7	References Range	
8	Abnormal Flags	
9	Probability	
10	Nature of Abnormal Test	
11	Observe Result Status	"A" – if the message is Study Available "D" – If the message is Study Unavailable

3.2.1.6 ZDS Segment Mappings

IDC 3.1.1 supports the ZDS segment as defined by IHE Radiology Technical Framework Rev 11.0.

Table 17 ZDS Attribute Generated by IDC 3.1.1

Seq	HL7 Field Name	Comments
1	Study Instance UID	
1.1	Reference Pointer	Maps from DICOM Study Instance UID (0020,000D)
1.2	Application ID	
1.3	Type of Data	"Application"
1.4	Subtype	"Dicom"

4 QUERIES

4.1 Query

IDC 3.1.1 can issue a query to fetch linked patients using HL7 QBP^Q23 message.

4.1.1 Query–MSH Segment

IDC 3.1.1 creates the MSH segment as follows:

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
1	Field Separator	Yes	No	" "
2	Encoding Characters	Yes	No	"^~\&"
3	Sending Application	Yes	No	
4	Sending Facility	Yes	No	
5	Receiving Application	Yes	No	Configured PIX Manager Application
6	Receiving Facility	Yes	No	Configured PIX Manager Facility
7	Date/time of Message	No	No	Current timestamp
8	Security	No	No	
9	Message Type	Yes	No	QBP^Q23
10	Message Control ID	Yes	No	Q23
11	Processing ID	Yes	No	
12	Version ID	Yes	No	"2.5"
13	Sequence Number	No	No	
14	Continuation Pointer	No	No	
15	Accept Acknowledgement Type	No	No	
16	Application Acknowledgement Type	No	No	
17	Country Code	No	No	
18	Character Set	Yes	No	ISO_IR 100
19	Principal Language of Message	No	No	

4.1.2 Query–QPD Segment

The following table describes how IDC 3.1.1 creates the QPD segment of the query message.

Table 18 QPD Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping from IDC Attribute(s) (Yes/No)	Comments
1	Message Query Name	Yes	Yes	IHE PIX Query
2	Query Tag	Yes	No	Set to 1,2,3,...
3	User Parameters	Yes	No	PatientID^^^IssuerOfPatientID
4	User Parameters	No	No	^^^Domain1[~^^^Domain2]* i.e. a number of domain filters

4.1.3 Query–RCP Segment

The following table describes how IDC 3.1.1 creates the QPD segment of the query message.

Table 19 QPD Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping from IDC Attribute(s) (Yes/No)	Comments
1	Query Priority	Yes	No	The value 'I' for immediate response
2	Quantity Limited Request	No	No	
3	Response Modality	No	No	
4	Execution and Delivery Time	No	No	
5	Modify Indicator	No	No	
6	Sort-by Field	No	No	
7	Segment group inclusion	No	No	

4.2 Response to Query

IDC 3.1.1 maps the query results into internal attributes as described in the following tables. Fields that are not used have been omitted.

4.2.1 Response to Query—MSH Segment

Table 20 Response to Query--MSH Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
9	Message Type	Yes	No	RSP^K23

4.2.2 Response to Query—PID Segment

Table 21 Response to Query--PID Attribute Support in IDC 3.1.1

Seq	HL7 Field Name	Value Required	Default Mapping to IDC Attribute(s) (Yes/No)	Comments
3	Patient ID (Internal ID)	Yes	No	List of linked patient IDs. It may contain multiple values.