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# Integrating the Healthcare Enterprise (IHE) Pre-Connectation Testing

Patient Identity Cross Reference (PIX) and Patient Discovery Query (PDQ)
Test Tool User's Guide Supplement

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### 1.0 OVERVIEW

This is a supplement to the NIST PIX/PDQ Pre-Connectation Test Tool. This document contains test messages and the validation context files. The validation context files contain the list of assestions not captured the general conformance testing mechanisms.

## 2.0 SUPPORT FILES

# 2.1 HL7 V2 Messages

### 2.1.1 TEST CASE 10501: PIX QUERY CASE 1 AND CASE 2

Message Type	Message
Acknowledge	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST 20090810140837
Patient Add:	ACK^A04^ACK NIST-090810140837273 P 2.3.1
Number 1	MSA AA Flame-990001
Acknowledge	MSH ^-\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST 20090810140842
Patient Add:	ACK^A04^ACK NIST-090810140842899 P 2.3.1
Number 2	MSA AA NIST-090810140838539
Acknowledge	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST 20090810140848
Patient Add:	ACK^A04^ACK NIST-090810140848555 P 2.3.1
Number 3	MSA AA NIST-090810140844164
Acknowledge Validation Content: All	<pre> </pre> <pre> <pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre></pre>
	<value><plaintext>P</plaintext></value> >

Message Type	Message
	<pre>MSA.1&gt;</pre>
Patient Add: Number 1	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST 2009081 0141748  ADT^A04^ADT_A01 Flame-990001 P 2.3.1 EVN A04 20090810 PID   PIX10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  ALPHA^AL AN Barnes 19781208 M   820 JORIE BLVD^^New York City^NY^10503  (112)555-1234 (112)555-6789     153-12-5432 PV1  V
Patient Add: Number 2	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST 2009081 0141755  ADT^A04^ADT_A01 NIST-090810141751293 1 2.3.1 EVN A04 20090810 PID   XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO^PI  ALPHA^ALA N Barnes 19781208 M   820 JORIE BLVD^^New York City^NY^10503  (112)555-1234 (112)555-6789    153-12-5432 PV1  V
Patient Add: Number 3	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST 2009081 0141800  ADT^A04^ADT_A01 NIST-090810141756903 1 2.3.1 EVN A04 20090810 PID   ABC10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  SIMPSON^ CARL AMSTRONG 19781209 M   820 OREL BLVD^^CHICAGO^IL^60523  (312)555- 1234 (312)555-6789     163-12-5432 PV1  V
PIX Query: Number 1	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIST 20090 730114101  QBP^Q23^QBP_Q21 NIST-090730114100989 D 2.5 QPD IHE PIX QUERY QRY1248968460880 PIX10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1 &ISO XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO RCP I
PIX Query: Number 2	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIST 20090 526133934  QBP^Q23^QBP_Q21 NIST-090526133933407 D 2.5 QPD IHE PIX QUERY QRY1243359573282 ABC10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1 &ISO^PI text^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO RCP I
PIX Query Response: Number	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIST 20090728151928  RSP^K23^RSP_K23 NIST-

Message Type	 Message
1	090728151927498 P 2.5       124.3.11.62382.03 MSA AA NIST-090728151926716 QAK QRY1248808766638 OK QPD IHE PIX QUERY QRY1248808766638 PIX10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1 &ISO XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO PID   XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO^PI  ~^^^^^S
PIX Query Response: Number 2	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIST 20090 526133935  RSP^K23^RSP_K23 NIST- 090526133935407 P 2.5        124.3.11.62382.03  MSA AA NIST-090526133933407 QAK QRY1243359573282 NF QPD IHE PIX QUERY QRY1243359573282 ABC10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1 &ISO^PI text^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO
PIX Query Response Validation Context: Number 1	<pre><?xml version="1.0" encoding="UTF-8" ?> _ <n1:hl7v2messagevalidationcontextdefinition xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/message"></n1:hl7v2messagevalidationcontextdefinition></pre>
	<pre>- <failureinterpretation></failureinterpretation></pre>

Message Type Message

```
- < DataValueLocationItem >
- <Location>
- <Segment Name="MSH">
- <Field Position="9">
 <Component Position="3" />
 </Field>
 </Segment>
  </Location>
- <Value>
 <PlainText>RSP_K23</PlainText>
 </Value>
 </DataValueLocationItem>
- <!--
PID 3.1
 -->
- < DataValueLocationItem >
- <Location>
- <Segment Name="PID">
- <Field Position="3">
 <Component Position="1" />
 </Field>
 </Segment>
  </Location>
- <Value>
 <PlainText>XYZ10501</PlainText>
 </Value>
 </DataValueLocationItem>
- <!--
PID 3.4.1
 -->
- < DataValueLocationItem>
- <Location>
- <Segment Name="PID">
_ <Field Position="3">
- <Component Position="4">
  <SubComponent Position="1" />
 </Component>
 </Field>
  </Segment>
  </Location>
- <Value>
 <PlainText>XREF2005</PlainText>
  </Value>
 </DataValueLocationItem>
- <!--
PID 3.4.2
- < DataValueLocationItem>
```

```
Message Type
                                                  Message
                - <Location>
                - <Segment Name="PID">
                - <Field Position="3">
                - < Component Position="4">
                  <SubComponent Position="2" />
                  </Component>
                  </Field>
                  </Segment>
                  </Location>
                - <Value>
                  <PlainText>1.3.6.1.4.1.21367.2005.1.2</PlainText>
                  </Value>
                  </DataValueLocationItem>
                - <!--
                PID 3.4.3
                  -->
                - < DataValueLocationItem >
                - <Location>
                - <Segment Name="PID">
                - <Field Position="3">
                - < Component Position="4">
                  <SubComponent Position="3" />
                  </Component>
                  </Field>
                  </Segment>
                  </Location>
                - <Value>
                  <PlainText>ISO</PlainText>
                  </Value>
                  </DataValueLocationItem>
                - <!--
                PID 5.7
                - < DataValueLocationItem>
                - <Location>
                - <Segment Name="PID">
                - <Field Position="5">
                  <Component Position="7" />
                  </Field>
                  </Segment>
                  </Location>
                - < Value>
                  <PlainText>$</PlainText>
                  </Value>
                  </DataValueLocationItem>
                - <!--
                MSA 1
                - < DataValueLocationItem>
```

```
Message Type
                                                   Message
                 - <Location>
                 - <Segment Name="MSA">
                   <Field Position="1" />
                   </Segment>
                   </Location>
                 - < Value>
                   <PlainText>AA</PlainText>
                   </Value>
                   </DataValueLocationItem>
                 - <!--
                  QAK 2
                   -->
                 - < DataValueLocationItem>
                 - <Location>
                 - <Segment Name="QAK">
                   <Field Position="2" />
                   </Segment>
                   </Location>
                 - < Value>
                   <PlainText>OK</PlainText>
                   </Value>
                   </DataValueLocationItem>
                   </MessageInstanceSpecificValues>
                   </n1:HL7V2MessageValidationContextDefinition>
PIX Query
                 <?xml version="1.0" encoding="UTF-8" ?>
Response
                 - <n1:HL7V2MessageValidationContextDefinition</p>
Validation Context:
                 xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/message"
Number 2
                 - <FailureInterpretation>
                   <MessageFailure Type="VERSION" Level="ERROR" />
                   <MessageFailure Type="LENGTH" Level="IGNORE" />
                   <MessageFailure Type="DATATYPE" Level="ERROR" />
                   <MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
                   <MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
                   <MessageFailure Type="DATA" Level="ERROR" />
                   <MessageFailure Type="MESSAGE_VALIDATION_CONTEXT" Level="USER"</p>
                   </FailureInterpretation>
                 - <MessageInstanceSpecificValues>
                 - <!--
                  PIX Manager RSP K23
                   -->
                  - <!--
                  MSH 9.1
                   -->
                 - < DataValueLocationItem>
                 - <Location>
                 - <Segment Name="MSH">
                 - <Field Position="9">
```

```
Message Type
                                                  Message
                  <Component Position="1" />
                  </Field>
                  </Segment>
                  </Location>
                - < Value>
                  <PlainText>RSP</PlainText>
                  </Value>
                  </DataValueLocationItem>
                - <!--
                MSH 9.2
                 -->
                - < DataValueLocationItem>
                - <Location>
                - <Segment Name="MSH">
                - <Field Position="9">
                  <Component Position="2" />
                  </Field>
                  </Segment>
                  </Location>
                - < Value>
                  <PlainText>K23</PlainText>
                  </Value>
                  </DataValueLocationItem>
                - <!--
                MSH 9.3
                  -->
                - < DataValueLocationItem>
                - <Location>
                - <Segment Name="MSH">
                - <Field Position="9">
                  <Component Position="3" />
                  </Field>
                  </Segment>
                  </Location>
                - <Value>
                  <PlainText>RSP_K23</PlainText>
                  </Value>
                  </DataValueLocationItem>
                - <!--
                MSA 1
                - < DataValueLocationItem>
                - <Location>
                - <Segment Name="MSA">
                  <Field Position="1" />
                  </Segment>
                  </Location>
                - < Value>
                  <PlainText>AA</PlainText>
```

Message Type	Message
	- </th
	QAK 2
	>
	- < DataValueLocationItem>
	<u>-</u> <location></location>
	<pre>- <segment name="QAK"></segment></pre>
	<field position="2"></field>
	<u>-</u> <value></value>
	<plaintext>NF</plaintext>

### 2.1.2 Test Case 10502: PIX Query Case 3

Message Type	Message
Acknowledge Patient Add: Number 1	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  200942731650  ACK^A04^ACK 12434334316500 P 2.3.1          MSA AA NIST-090527101025712
Acknowledge Patient Add: Number 2	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  200942736416  ACK^A04^ACK 12434334364161 P 2.3.1           MSA AA NIST-090527101031978
Acknowledge Validation Content:	:?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition
All	xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
	_essage">
	FailureInterpretation>
	MessageFailure Type="VERSION" Level="ERROR" />
	MessageFailure Type="LENGTH" Level="IGNORE" />
	MessageFailure Type="DATATYPE" Level="ERROR" />
	MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
	MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
	MessageFailure Type="DATA" Level="ERROR" />
	MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
	Level=" <b>USER</b> " />
	MessageInstanceSpecificValues>
	</td
	MSH.11.1
	>
	</td

Message Type	Message
	<pre><datavaluelocationitem> <location></location></datavaluelocationitem></pre>
	<pre>&gt; <!-- MSA.1--> DataValueLocationItem&gt; Location&gt; Segment Name="MSA"&gt;</pre>
	Field Position="1" />
Patient Add: Number 1	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527101029  ADT^A04^ADT_A01 NIST-090527101025712 1 2.3.1 EVN A04 20090527 PID   PIX10502^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  B ETA^BETTY BRAYAN 19781208 F   820 JORIE BLVD^^CHICAGO^IL^60523  (312)555-1234 (312)555-6789     163-12-5432 PV1  V
Patient Add: Number 2	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527101035  ADT^A04^ADT_A01 NIST-090527101031978 1 2.3.1 EVN A04 20090527 PID   XYZ10502^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  C ROSS^KEN SMITH 19781209 M   820 OREL BLVD^^CHICAGO^IL^60523  (312)555-1234 (312)555-6789    163-12-5432 PV1  V
PIX Query	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIST 20090527102956  QBP^Q23^QBP_Q21 NIST-090527102956719 D 2.5 QPD IHE PIX QUERY QRY1243434596641 XX10502^^^HIMSS2005&1.3.6.1.4.1.21367.20 05.1.1&ISO RCP I
	101 1

```
Message Type
                                              Message
                T|20090527102958||RSP^K23^RSP_K23|NIST-
Response
                090527102958219|P|2.5|||||||124.3.11.62382.03
                MSA | AE | NIST-090527102956719 | Invalid patient
                ERR | QPD^1^3 | QPD^1^3^1^1 | 204 | W
                QAK | QRY1243434596641 | AE
                QPD | IHE PIX
                QUERY | QRY1243434596641 | XX10502^^^HIMSS2005&1.3.6.1.4.1.21367.20
                05.1.1&ISO
PIX Query
              :?xml version="1.0" encoding="UTF-8" ?>
Response
               n1: HL7V2MessageValidationContextDefinition
Validation Context
                xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
                essage">
               FailureInterpretation>
               MessageFailure Type="VERSION" Level="ERROR" />
               MessageFailure Type="LENGTH" Level="IGNORE" />
               MessageFailure Type="DATATYPE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
               MessageFailure Type="DATA" Level="ERROR" />
               MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
               MessageInstanceSpecificValues>
               <!--
               PIX Manager RSP K23
               -->
               <!--
               MSH 9.1
               -->
               DataValueLocationItem>
               Location>
               Segment Name="MSH">
               Field Position="9">
               Component Position="1" />
               </Field>
               </Segment>
               </Location>
               Value>
               PlainText>RSP</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
               MSH 9.2
               -->
              DataValueLocationItem>
               Location>
               Segment Name="MSH">
               Field Position="9">
```

```
Message Type
                                             Message
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>RSP_K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSA 1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSA">
             Field Position="1" />
              </Segment>
              </Location>
             Value>
             PlainText>AE</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QAK 2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="QAK">
             Field Position="2" />
              </Segment>
              </Location>
             Value>
             PlainText>AE</PlainText>
```

```
Message Type
                                             Message
              </Value>
              </DataValueLocationItem>
              <!--
             ERR.1.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="1">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>QPD</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR.1.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="1">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR.1.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="1">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>3</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
```

```
Message Type
                                             Message
             ERR 2.1
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>QPD</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>3</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.4
              -->
             DataValueLocationItem>
```

```
Message Type
                                             Message
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="4" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.5
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="5" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 3.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="3">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>204</PlainText>
              </Value>
              </DataValueLocationItem>
              </MessageInstanceSpecificValues>
              </n1:HL7V2MessageValidationContextDefinition>
```

#### 2.1.3 Test Case 10503: PIX Query Case 4

Message Type	Message
PIX Query Case	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIS T 20090527111441  QBP^Q23^QBP_Q21 NIST-090527111440914 D 2.5 QPD IHE PIX QUERY QRY1243437280836 ABC10503^^^XXXXX&1.3.6.1.4.1.21367.2005.3 .3333&ISO RCP I
PIX Query Response	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIS T 20090527111442  RSP^K23^RSP_K23 NIST- 090527111442320 P 2.5        124.3.11.62382.03 MSA AE NIST-090527111440914 Invalid assigning authority ERR QPD^1^3 QPD^1^3^1^4 204 W QAK QRY1243437280836 AE QPD IHE PIX QUERY QRY1243437280836 ABC10503^^XXXXX&1.3.6.1.4.1.21367.2005.3 .3333&ISO
PIX Query Response Validation Context	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m essage"&gt; FailureInterpretation&gt; MessageFailure Type="VERSION" Level="ERROR" /&gt; MessageFailure Type="LENGTH" Level="IGNORE" /&gt; MessageFailure Type="DATATYPE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_VALIDATION_CONTEXT" Level="USER" /&gt;  MessageInstanceSpecificValues&gt; <!-- PIX Manager RSP K23--> <!-- MSH 9.1--> DataValueLocationItem&gt; Location&gt; Segment Name="MSH"&gt; Field Position="9"&gt; Component Position="1" /&gt;    Value&gt; PlainText&gt;RSP </pre>

```
Message Type
                                             Message
              </DataValueLocationItem>
              <!--
             MSH 9.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>RSP_K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QPD 3.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="QPD">
             Field Position="3">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>ABC10503</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QPD 3.4.1
```

```
Message Type
                                             Message
             DataValueLocationItem>
             Location>
             Segment Name="QPD">
             Field Position="3">
             Component Position="4">
             SubComponent Position="1" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>XXXX</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QPD 3.4.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="QPD">
             Field Position="3">
             Component Position="4">
             SubComponent Position="2" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1.3.6.1.4.1.21367.2005.3.3333</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QPD 3.4.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="QPD">
             Field Position="3">
             Component Position="4">
             SubComponent Position="3" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>ISO</PlainText>
```

```
Message Type
                                             Message
              </Value>
              </DataValueLocationItem>
              <!--
             MSA 1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSA">
             Field Position="1" />
              </Segment>
              </Location>
             Value>
             PlainText>AE</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QAK 2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="QAK">
             Field Position="2" />
              </Segment>
              </Location>
             Value>
             PlainText>AE</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>QPD</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.2
             DataValueLocationItem>
             Location>
```

```
Message Type
                                             Message
             Segment Name="ERR">
             Field Position="2">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>3</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.4
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
             Component Position="4" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 2.5
              -->
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="2">
```

```
Message Type
                                             Message
             Component Position="5" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>4</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             ERR 3.1
             DataValueLocationItem>
             Location>
             Segment Name="ERR">
             Field Position="3">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>204</PlainText>
              </Value>
              </DataValueLocationItem>
              </MessageInstanceSpecificValues>
              </n1: HL7V2MessageValidationContextDefinition>
```

#### 2.1.4 Test Case 10506: PIX Query, Patient Update

Message Type	Message
Acknowledge Patient Add: Number 1	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  200942737167  ACK^A04^ACK 12434381771670 P 2.3.1           MSA AA NIST-090527112931073
Acknowledge Patient Add: Number 2	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  20094274258  ACK^A04^ACK 12434381820581 P 2.3.1           MSA AA NIST-090527112937401
Acknowledge Patient Update	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  200942723273  ACK^A08^ACK 12434466232732 P 2.3.1           MSA AA NIST-090527135016929
Acknowledge Patient Update: All	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition   xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m   essage"&gt; FailureInterpretation&gt; MessageFailure Type="VERSION" Level="ERROR" /&gt; MessageFailure Type="LENGTH" Level="IGNORE" /&gt; MessageFailure Type="DATATYPE" Level="ERROR" /&gt;</pre>

```
Message Type
                                             Message
              MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
               <!--
              MSH.11.1
               -->
               <!--
                       <DataValueLocationItem>
                       <Location>
                               <Segment Name="MSH">
                               <Field Position="11">
                               <Component Position="1">
                               </Component>
                               </Field>
                               </Segment>
                       </Location>
                       <Value><PlainText>P</PlainText></Value>
                       </DataValueLocationItem>
               -->
               <!--
              MSA.1
               -->
              DataValueLocationItem>
              Location>
              Segment Name="MSA">
              Field Position="1" />
               </Segment>
               </Location>
              Value>
              PlainText>AA</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1: HL7V2MessageValidationContextDefinition>
               <?xml version="1.0" encoding="UTF-8" ?>
Acknowledge
Validation Content:
              n1: HL7V2MessageValidationContextDefinition
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
               essage">
              FailureInterpretation>
              MessageFailure Type="VERSION" Level="ERROR" />
              MessageFailure Type="LENGTH" Level="IGNORE" />
              MessageFailure Type="DATATYPE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
              MessageFailure Type="DATA" Level="ERROR" />
```

```
Message Type
                                              Message
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
               <!--
              MSH.11.1
               -->
               <!--
                        <DataValueLocationItem>
                        <Location>
                                <Segment Name="MSH">
                                <Field Position="11">
                                <Component Position="1">
                                </Component>
                                </Field>
                                </Segment>
                        </Location>
                        <Value><PlainText>P</PlainText></Value>
                        </DataValueLocationItem>
               -->
               <!--
              MSA.1
               -->
              DataValueLocationItem>
              Location>
              Segment Name="MSA">
              Field Position="1" />
               </Segment>
               </Location>
              Value>
              PlainText>AA</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1:HL7V2MessageValidationContextDefinition>
               MSH|^~\&|NIST_Flame_PIX_Source|NIST|NIST_Swan_PIX_Manager|NIST|
Patient Add:
               20090527112934 | ADT^A04^ADT_A01 | NIST-090527112931073 | 1 | 2.3.1
Number 1
               EVN | A04 | 20090527
               PID|||PIX10506^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI||T
               AU^TERI|BEVERE|06041555|M|||202 KEN HABOR^^NEW YORK
               CITY^NY^61000||(213)555-1234|(213)500-1234||||361-21-2345
               PV1 | V
               MSH|^~\&|NIST Flame PIX Source|NIST|NIST Swan PIX Manager|NIST|
Patient Add:
               20090527112941||ADT^A04^ADT_A01|NIST-090527112937401|1|2.3.1
Number 2
               EVN | A04 | 20090527
               PID|||ABC10506^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO^PI||TO
               W^T|BEVERE|19781555|M||022 HELEN
               GAD^^CHICAGO^IL^11000||(213)555-1234|(213)005-1234|||||113-005-
               5678
               PV1 | V
```

Message Type	Message
Patient Update	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527135020  ADT^A08^ADT_A01 NIST-090527135016929 1 2.3.1 EVN A08 20090527 PID   ABC10506^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO^PI  TA U^TERI BEVERE 06041555 M   202 KEN HABOR^^NEW YORK CITY^NY^61000  (213)555-1234 (213)500-1234    361-21-2345 PV1  I
PIX Query: Number 1	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIS T 20090527113947  QBP^Q23^QBP_Q21 NIST-090527113946959 D 2.5 QPD IHE PIX QUERY QRY1243438786881 PIX10506^^^HIMSS2005&1.3.6.1.4.1.21367.2 005.1.1&ISO^PI ABC10506^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&I SO RCP I
PIX Query: Number 2	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIST 20090527135721  QBP^Q23^QBP_Q21 NIST-090527135721677 D 2.5QPD IHE PIXQUERY QRY1243447041583 PIX10506^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI ABC10506^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISORP I
PIX Query Response: Number 1	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIS T 20090527113948  RSP^K23^RSP_K23 NIST- 090527113948444 P 2.5        124.3.11.62382.03 MSA AA NIST-090527113946959 QAK QRY1243438786881 NF QPD IHE PIX QUERY QRY1243438786881 PIX10506^^^HIMSS2005&1.3.6.1.4.1.21367.2 005.1.1&ISO^PI ABC10506^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&I SO
PIX Query Response: Number 2	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIS T 20090527135723  RSP^K23^RSP_K23 NIST- 090527135723286 P 2.5        124.3.11.62382.03 MSA AA NIST-090527135721677 QAK QRY1243447041583 OK QPD IHE PIX QUERY QRY1243447041583 PIX10506^^^HIMSS2005&1.3.6.1.4.1.21367.2 005.1.1&ISO^PI ABC10506^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&I SO PID   ABC10506^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO^PI  ~^
PIX Query Response Validation Context: Number 1	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition   xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m   essage"&gt; FailureInterpretation&gt; MessageFailure Type="VERSION" Level="ERROR" /&gt; MessageFailure Type="LENGTH" Level="IGNORE" /&gt; MessageFailure Type="DATATYPE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" /&gt;</pre>

```
Message Type
                                             Message
             MessageFailure Type="DATA" Level="ERROR" />
             MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
              Level="USER" />
              </FailureInterpretation>
             MessageInstanceSpecificValues>
              <!--
             PIX Manager RSP K23
              -->
              <!--
             MSH 9.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>RSP</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="3" />
              </Field>
              </Segment>
```

```
Message Type
                                              Message
               </Location>
               Value>
               PlainText>RSP_K23</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
               MSA 1
               -->
               DataValueLocationItem>
               Location>
               Segment Name="MSA">
               Field Position="1" />
               </Segment>
               </Location>
               Value>
               PlainText>AA</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
               QAK 2
               -->
               DataValueLocationItem>
               Location>
               Segment Name="QAK">
               Field Position="2" />
               </Segment>
               </Location>
               Value>
               PlainText>NF</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1: HL7V2MessageValidationContextDefinition>
PIX Query
               <?xml version="1.0" encoding="UTF-8" ?>
Response
               n1: HL7V2MessageValidationContextDefinition
Validation Context:
                xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
Number 2
                essage">
               FailureInterpretation>
               MessageFailure Type="VERSION" Level="ERROR" />
               MessageFailure Type="LENGTH" Level="IGNORE" />
               MessageFailure Type="DATATYPE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
               MessageFailure Type="DATA" Level="ERROR" />
               MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
```

</Value>

**Message Type** Message MessageInstanceSpecificValues> <!--PIX Manager RSP K23 --> <!--MSH 9.1 --> DataValueLocationItem> Location> Segment Name="MSH"> Field Position="9"> Component Position="1" /> </Field> </Segment> </Location> Value> PlainText>RSP</PlainText> </Value> </DataValueLocationItem> <!--MSH 9.2 --> DataValueLocationItem> Location> Segment Name="MSH"> Field Position="9"> Component Position="2" /> </Field> </Segment> </Location> Value> PlainText>K23</PlainText> </Value> </DataValueLocationItem> <!--MSH 9.3 --> DataValueLocationItem> Location> Segment Name="MSH"> Field Position="9"> Component Position="3" /> </Field> </Segment> </Location> Value> PlainText>RSP\_K23</PlainText>

```
Message Type
                                             Message
              </DataValueLocationItem>
              <!--
             MSA 1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSA">
             Field Position="1" />
              </Segment>
              </Location>
             Value>
             PlainText>AA</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QAK 2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="QAK">
             Field Position="2" />
              </Segment>
              </Location>
             Value>
             PlainText>OK</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>ABC10506</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
```

```
Message Type
                                             Message
             Field Position="3">
             Component Position="4">
             SubComponent Position="1" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>XREF2005</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="4">
             SubComponent Position="2" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1.3.6.1.4.1.21367.2005.1.2</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="4">
             SubComponent Position="3" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>ISO</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.5
```

Message Type	Message
	>
	DataValueLocationItem>
	Location>
	Segment Name="PID">
	Field Position="3">
	Component Position="5" />
	Value>
	PlainText>PI

### 2.1.5 TEST CASE 10511: PIX PATIENT FEED: A01

Manager Town	Manager
Message Type	Message Message
Acknowledge Patient Add: Number 1	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  20094275105  ACK^A01^ACK 12434482251050 P 2.3.1           MSA AA Flame-990001
Acknowledge Patient Add: Number 2	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  20094279652  ACK^A01^ACK 12434482296521 P 2.3.1           MSA AA NIST-090527141705324
Acknowledge Patient Add: Number 3	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  200942714996  ACK^A01^ACK 12434482349962 P 2.3.1           MSA AA NIST-090527141710715
Acknowledge Validation Content: All	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition    xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m    essage"&gt; FailureInterpretation&gt; MessageFailure Type="VERSION" Level="ERROR" /&gt; MessageFailure Type="LENGTH" Level="IGNORE" /&gt; MessageFailure Type="DATATYPE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" /&gt; MessageFailure Type="DATA" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"    Level="USER" /&gt;  MessageInstanceSpecificValues&gt;    <!--     MSH.11.1   --></pre>

Message Type	Message
	<pre><!--</td--></pre>
	DataValueLocationItem> Location> Segment Name="MSA"> Field Position="1" />
Patient Add: Number 1	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527141702  ADT^A01^ADT_A01 Flame-990001 P 2.3.1 EVN A01 20090527 PID   PIX10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  A LPHA^ALAN Barnes 19781208 M   820 JORIE BLVD^^New York City^NY^10503  (112)555-1234 (112)555-6789     153-12-5432 PV1  V
Patient Add: Number 2	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527141708  ADT^A01^ADT_A01 NIST-090527141705324 A 2.3.1 EVN A01 20090527 PID   XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO^PI  AL PHA^ALAN Barnes 19781208 M   820 JORIE BLVD^^New York City^NY^10503  (112)555-1234 (112)555-6789    153-12-5432 PV1  V
Patient Add: Number 3	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527141714  ADT^A01^ADT_A01 NIST-090527141710715 A 2.3.1 EVN A01 20090527 PID   ABC10501^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  S IMPSON^CARL AMSTRONG 19781209 M   820 OREL BLVD^^CHICAGO^IL^60523  (312)555-1234 (312)555-6789    163-12-5432 PV1  V

Message Type	Message
PIX Query: Number 1	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIST 20090527142638  QBP^Q23^QBP_Q21 NIST-090527142637983 D 2.5 QPD IHE PIX QUERY QRY1243448797905 PIX10501^^^HIMSS2005&1.3.6.1.4.1.21367.2 005.1.1&ISO XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO RCP I
PIX Query: Number 2	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIST 20090527142639  QBP^Q23^QBP_Q21 NIST-090527142639342 D 2.5 QPD IHE PIX QUERY QRY1243448799280 ABC10501^^^HIMSS2005&1.3.6.1.4.1.21367.2 005.1.1&ISO^PI text^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO RCP I
PIX Query Response: Number 1	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIS T 20090527142639  RSP^K23^RSP_K23 NIST- 090527142638655 P 2.5        124.3.11.62382.03 MSA AA NIST-090527142637983 QAK QRY1243448797905 OK QPD IHE PIX QUERY QRY1243448797905 PIX10501^^^HIMSS2005&1.3.6.1.4.1.21367.2 005.1.1&ISO XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO PID   XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO PID   XYZ10501^^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO
PIX Query Response: Number 2	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIS T 20090527142641  RSP^K23^RSP_K23 NIST- 090527142641077 P 2.5       124.3.11.62382.03 MSA AA NIST-090527142639342 QAK QRY1243448799280 NF QPD IHE PIX QUERY QRY1243448799280 ABC10501^^^HIMSS2005&1.3.6.1.4.1.21367.2 005.1.1&ISO^PI text^^XREF2005&1.3.6.1.4.1.21367.2005.1.2&ISO
PIX Query Response Validation Context: Number 1	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition   xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m   essage"&gt; FailureInterpretation&gt; MessageFailure Type="VERSION" Level="ERROR" /&gt; MessageFailure Type="LENGTH" Level="IGNORE" /&gt; MessageFailure Type="DATATYPE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" /&gt; MessageFailure Type="DATA" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"   Level="USER" /&gt;  MessageInstanceSpecificValues&gt;   <!--</td--></pre>

```
Message Type
                                             Message
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>RSP</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>RSP_K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.1
              -->
             DataValueLocationItem>
```

```
Message Type
                                             Message
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>XYZ10501</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="4">
             SubComponent Position="1" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>XREF2005</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="4">
             SubComponent Position="2" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1.3.6.1.4.1.21367.2005.1.2</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.3
```

**Message Type** Message DataValueLocationItem> Location> Segment Name="PID"> Field Position="3"> Component Position="4"> SubComponent Position="3" /> </Component> </Field> </Segment> </Location> Value> PlainText>ISO</PlainText> </Value> </DataValueLocationItem> <!--PID 5.7 --> DataValueLocationItem> Location> Segment Name="PID"> Field Position="5"> Component Position="7" /> </Field> </Segment> </Location> Value> PlainText>S</PlainText> </Value> </DataValueLocationItem> <!--MSA 1 --> DataValueLocationItem> Location> Segment Name="MSA"> Field Position="1" /> </Segment> </Location> Value> PlainText>AA</PlainText> </Value> </DataValueLocationItem> <!--QAK 2 --> DataValueLocationItem>

```
Message Type
                                              Message
               Location>
               Segment Name="QAK">
               Field Position="2" />
               </Segment>
               </Location>
               Value>
               PlainText>OK</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1:HL7V2MessageValidationContextDefinition>
               <?xml version="1.0" encoding="UTF-8" ?>
PIX Query
Response
               n1: HL7V2MessageValidationContextDefinition
Validation Context:
                xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
Number 2
                essage">
               FailureInterpretation>
               MessageFailure Type="LENGTH" Level="IGNORE" />
               MessageFailure Type="DATATYPE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
               MessageFailure Type="DATA" Level="ERROR" />
               MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
               MessageInstanceSpecificValues>
               <!--
               PIX Manager RSP K23
               -->
               <!--
               MSH 9.1
               -->
               DataValueLocationItem>
               Location>
               Segment Name="MSH">
               Field Position="9">
               Component Position="1" />
               </Field>
               </Segment>
               </Location>
               Value>
               PlainText>RSP</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
               MSH 9.2
               DataValueLocationItem>
```

```
Message Type
                                             Message
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>RSP_K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSA 1
             DataValueLocationItem>
             Location>
             Segment Name="MSA">
             Field Position="1" />
              </Segment>
              </Location>
             Value>
             PlainText>AA</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             QAK 2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="QAK">
             Field Position="2" />
              </Segment>
```

Message Type	Message
	Value>
	PlainText> <b>NF</b>

# 2.1.6 Test Case 10512: PIX Patient Feed: A04

Message Type	Message
Acknowledge	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST 200942735276  A
Patient Add:	CK^A04^ACK 12434560552760 P 2.3.1
Number 1	MSA AA NIST-090527162729385
Acknowledge	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST 200942735276  A
Patient Add:	CK^A04^ACK 12434560552760 P 2.3.1
Number 2	MSA AA NIST-090527162729385
Acknowledge	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST 200942735276  A
Patient Add:	CK^A04^ACK 12434560552760 P 2.3.1
Number 3	MSA AA NIST-090527162729385
Acknowledge Validation Content: All	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition    xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/message"&gt; FailureInterpretation&gt; MessageFailure Type="VERSION" Level="ERROR" /&gt; MessageFailure Type="LENGTH" Level="IGNORE" /&gt; MessageFailure Type="DATATYPE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"    Level="USER" /&gt;  MessageInstanceSpecificValues&gt;    <!--</td--></pre>

Message Type	Message
	<value><plaintext>P</plaintext></value>
	> <br MSA.1
	> DataValueLocationItem> Location>
	Segment Name="MSA"> Field Position="1" />
	Value>
	PlainText> <b>AA</b>
Patient Add: Number 1	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527144212  ADT^A04^ADT_A01 NIST-090527144209435 1 2.3.1 EVN A04 20090527 PID   PIX10512^^^HIMSS2005  EPSILON^ELLIE JACK 19380224 F   1 PINETREE^^WEBSTER^MO^63119  (314)555-1234 (314)555- 4444    163-12-5432 PV1  V
Patient Add: Number 2	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527144846  ADT^A04^ADT_A01 NIST-090527144842416 1 2.3.1 EVN A04 20090527 PID   PIX10512^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  E PSILON^ELLIE JACK 19380224 F   1 PINETREE^^WEBSTER^MO^63119  (314)555-1234 (314)555- 4444    163-12-5432 PV1  V
Patient Add: Number 3	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090527162732  ADT^A04^ADT_A01 NIST-090527162729385 1 2.3.1 EVN A04 20090527 PID   PIX10512^^^&1.3.6.1.4.1.21367.2005.1.1&ISO  EPSILON^ELLIE  JACK 19380224 F   1 PINETREE^^WEBSTER^MO^63119  (314)555- 1234 (314)555-4444     163-12-5432PV1  V

### 2.1.7 TEST CASE 10515: PIX PATIENT FEED: A40

Message Type	Message
Acknowledge Patient Add: Number 1	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST  200942828226  ACK^A04^ACK 12435227682260 P 2.3.1           MSA AA NIST-090528105921882
Acknowledge	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Flame_PIX_Source NIST

```
Message Type
                                              Message
Patient Add:
                200942833507 | ACK^A04^ACK | 12435227735071 | P | 2.3.1 | | | | | | | | |
Number 2
                MSA|AA|NIST-090528105928523||
                MSH|^~\&|NIST_Swan_PIX_Manager|NIST|NIST_Flame_PIX_Source|NIST|
Acknowledge
Patient Add:
                200942839289||ACK^A04^ACK|12435227792892|P|2.3.1|||||||||
Number 3
                MSA | AA | NIST-090528105934554 | |
                MSH|^~\&|NIST_Swan_PIX_Manager|NIST|NIST_Flame_PIX_Source|NIST|
Acknowledge
                200942826665||ACK^A40^ACK|12435228266653|P|2.3.1|||||||
Patient Merge
                MSA | AA | NIST-090528110022806 | |
Acknowledge
               <?xml version="1.0" encoding="UTF-8" ?>
Content Validation:
              n1: HL7V2MessageValidationContextDefinition
                xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
                essage">
               FailureInterpretation>
               MessageFailure Type="VERSION" Level="ERROR" />
               MessageFailure Type="LENGTH" Level="IGNORE" />
               MessageFailure Type="DATATYPE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
               MessageFailure Type="DATA" Level="ERROR" />
               MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
                Level="USER" />
               </FailureInterpretation>
               MessageInstanceSpecificValues>
               <!--
               MSH.11.1
               -->
               <!--
                        <DataValueLocationItem>
                        <Location>
                                <Segment Name="MSH">
                                <Field Position="11">
                                <Component Position="1">
                                </Component>
                                </Field>
                                </Segment>
                        </Location>
                        <Value><PlainText>P</PlainText></Value>
                        </DataValueLocationItem>
               -->
               <!--
               MSA.1
               -->
               DataValueLocationItem>
               Location>
               Segment Name="MSA">
              Field Position="1" />
               </Segment>
               </Location>
               Value>
```

Message Type	Message
	PlainText>AA
Patient Add: Number 1	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090528105925  ADT^A04^ADT_A01 NIST-090528105921882 P 2.3.1 EVN A04 20090528 PID   PIX10515W^^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI   WASHINGTON^MARY JOHN 19781208 F   820 JORIE BLVD^^CHICAGO^IL^60523  (312)555-1234 (312)555-6789    100-9- 1234 PV1  V
Patient Add: Number 2	MSH   ^~\&   NIST_Flame_PIX_Source   NIST   NIST_Swan_PIX_Manager   NIST   20090528105932     ADT^A04^ADT_A01   NIST-090528105928523   P   2.3.1
Patient Add: Number 3	MSH   ^~\&   NIST_Flame_PIX_Source   NIST   NIST_Swan_PIX_Manager   NIST   20090528105938     ADT^A04^ADT_A01   NIST-090528105934554   P   2.3.1 EVN   A04   20090528   PID     PIX10515L^^*HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI   LINCOLN^MARY   JOHN   19781208   F       JEAN JAQUES BLVD^*New York^NY^60001     (213)455-4321   (213)555-0001           100-9-1234 PV1     V
Patient Merge: Number 1	MSH ^~\& NIST_Flame_PIX_Source NIST NIST_Swan_PIX_Manager NIST  20090528110025  ADT^A40^ADT_A39 NIST-090528110022806 P 2.3.1 EVN A40 20090528 PID  PIX10515L^^*HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI   LINCOLN^MARY JOHN 19781208 F  JEAN JAQUES BLVD^^New York^NY^60001  (213)455-4321 (213)555-0001    100-9-1234 MRG PIX10515W^^*HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO PID   ^^*HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO PID   ^*AHIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO

Message Type	Message
PIX Query	MSH ^~\& NIST_Hydra_PIX_Consumer NIST NIST_Swan_PIX_Manager NIST 20090528110358  QBP^Q23^QBP_Q21 NIST-090528110358016 P 2.5 QPD IHE PIX QUERY QRY1243523037937 XYZ10515W^^^XREF2005&1.3.6.1.4.1.21367.2 005.1.2&ISO RCP I
PIX Query Response	MSH ^~\& NIST_Swan_PIX_Manager NIST NIST_Hydra_PIX_Consumer NIS T 20090528110359  RSP^K23^RSP_K23 NIST- 090528110359359 P 2.5        124.3.11.62382.03 MSA AA NIST-090528110358016 QAK QRY1243523037937 OK QPD IHE PIX QUERY QRY1243523037937 XYZ10515W^^^XREF2005&1.3.6.1.4.1.21367.2 005.1.2&ISO PID   PIX10515L^^HIMSS2005&1.3.6.1.4.1.21367.2005.1.1&ISO^PI  ~^^^S
PIX Query Response Validation Context	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V2MessageValidationContextDefinition    xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m    essage"&gt; FailureInterpretation&gt; MessageFailure Type="VERSION" Level="ERROR" /&gt; MessageFailure Type="LENGTH" Level="IGNORE" /&gt; MessageFailure Type="DATATYPE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" LID" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_STRUCTURE" LID" Level="ERROR" /&gt; MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"    Level="USER" /&gt;  MessageInstanceSpecificValues&gt;    <!-- PIX Manager RSP K23-->    <!-- MSH 9.1--> DataValueLocationItem&gt; Location&gt; Segment Name="MSH"&gt; Field Position="9"&gt; Component Position="1" /&gt;    Value&gt; PlainText&gt;RSP   <!--  Value--> </pre>

```
Message Type
                                             Message
             MSH 9.2
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="2" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             MSH 9.3
              -->
             DataValueLocationItem>
             Location>
             Segment Name="MSH">
             Field Position="9">
             Component Position="3" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>RSP_K23</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.1
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="1" />
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>PIX10515L</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.1
              -->
             DataValueLocationItem>
```

```
Message Type
                                             Message
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="4">
             SubComponent Position="1" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>HIMSS2005</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.2
              -->
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="4">
             SubComponent Position="2" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>1.3.6.1.4.1.21367.2005.1.1</PlainText>
              </Value>
              </DataValueLocationItem>
              <!--
             PID 3.4.3
             DataValueLocationItem>
             Location>
             Segment Name="PID">
             Field Position="3">
             Component Position="4">
             SubComponent Position="3" />
              </Component>
              </Field>
              </Segment>
              </Location>
             Value>
             PlainText>ISO</PlainText>
              </Value>
              </DataValueLocationItem>
```

**Message Type** Message <!--PID 5.7 --> DataValueLocationItem> Location> Segment Name="PID"> Field Position="5"> Component Position="7" /> </Field> </Segment> </Location> Value> PlainText>S</PlainText> </Value> </DataValueLocationItem> <!--MSA 1 --> DataValueLocationItem> Location> Segment Name="MSA"> Field Position="1" /> </Segment> </Location> Value> PlainText>AA</PlainText> </Value> </DataValueLocationItem> <!--QAK 2 --> DataValueLocationItem> Location> Segment Name="QAK"> Field Position="2" /> </Segment> </Location> Value> PlainText>OK</PlainText> </Value> </DataValueLocationItem> </MessageInstanceSpecificValues> </n1:HL7V2MessageValidationContextDefinition>

## 2.2 HL7 V3 Messages

### 2.2.1 Test Case 10501v3: PIX Query Case 1 and Case 2

```
Message Type
                                            Message
Acknowledge
               <?xml version="1.0" encoding="UTF-8" ?>
Validation Content:
              n1:HL7V3MessageValidationContextDefinition
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
               essage">
              FailureInterpretation>
              MessageFailure Type="VERSION" Level="ERROR" />
              MessageFailure Type="LENGTH" Level="IGNORE" />
              MessageFailure Type="DATATYPE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
              DataValueLocationItem>
               <XPath>/*:MCCI_IN000002UV01/*:acknowledgement/*:typeCode
               /@code</XPath>
              Value>
              PlainText>CA</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1: HL7V3MessageValidationContextDefinition>
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Patient Add:
Number 1
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="b0b596f4-e145-4ad2-8e12-d20c623960af" />
              creationTime value="20090818163443" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
```

```
Message Type
                                            Message
              </device>
              </receiver>
             sender typeCode="SND">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99998" />
              </representedOrganization>
              </asAgent>
              </device>
              </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id extension="100" assigningAuthorityName="domain1"
              root="1.2.3.4.5.1000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>John</given>
             family>ALPHA</family>
              </name>
             telecom use="HP" value="tel:+1-514-555-1234" />
             administrativeGenderCode code="F" />
             birthTime value="19840711" />
             addr>
             city>Montreal</city>
              </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
             relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
             name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
             family>Barnes</family>
              </name>
              </relationshipHolder1>
              </personalRelationship>
              </patientPerson>
             providerOrganization classCode="ORG" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
```

```
Message Type
                                            Message
              contactParty classCode="CON">
              telecom value="SENDER TELECOM GOES HERE!" />
               </contactParty>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA IN201301UV02>
Patient Add:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Number 2
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="bf433029-255c-481c-8966-4e718cb3208c" />
              creationTime value="20090818162938" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
```

```
Message Type
                                           Message
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id extension="200" assigningAuthorityName="domain2"
              root="1.2.3.4.5.2000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>John</given>
             family>ALPHA</family>
             </name>
             telecom use="HP" value="tel:+1-514-555-1234" />
             administrativeGenderCode code="F" />
             birthTime value="19840711" />
             addr>
             city>Montreal</city>
             </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
             relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
             name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
             family>Barnes</family>
             </name>
             </relationshipHolder1>
             </personalRelationship>
             </patientPerson>
             providerOrganization classCode="ORG" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             contactParty classCode="CON">
             telecom value="SENDER TELECOM GOES HERE!" />
              </contactParty>
             </patient>
             </subject1>
             custodian typeCode="CST">
             assignedEntity classCode="ASSIGNED">
             id root="1.2.840.114350.1.13.99998.8734" />
             </assignedEntity>
             </custodian>
             </registrationEvent>
             </subject>
              </controlActProcess>
```

```
Message Type
                                             Message
               </PRPA_IN201301UV02>
Patient Add:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Number 3
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="02778280-e801-4ee2-94a8-d5eb79581d8c" />
              creationTime value="20090818162949" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              subject typeCode="SUBJ">
              registrationEvent classCode="REG" moodCode="EVN">
              id nullFlavor="NA" />
              statusCode code="active" />
              subject1 typeCode="SBJ">
              patient classCode="PAT">
              id extension="101" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
              statusCode code="active" />
              patientPerson>
              name>
              given>John</given>
              family>SIMPSON</family>
               </name>
```

```
Message Type
                                            Message
              telecom use="HP" value="tel:+1-514-555-1234" />
              administrativeGenderCode code="F" />
              birthTime value="19840711" />
              addr>
              city>Montreal</city>
               </addr>
              personalRelationship classCode="PRS">
              code codeSystem="2.16.840.1.113883.5.111"
               codeSystemName="PersonalRelationshipRoleType" code="MTH"
               displayName="Mother" />
              relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
              name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
              family>AMSTRONG</family>
               </name>
               </relationshipHolder1>
               </personalRelationship>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON">
              telecom value="SENDER TELECOM GOES HERE!" />
               </contactParty>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA_IN201301UV02>
PIX Query:
              PRPA_IN201309UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
Number 1
              id root="4a8aa794-b703-401c-8677-cca493c22d14" />
              creationTime value="20090821104213" />
              interactionId extension="PRPA_IN201309UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
```

```
Message Type
                                             Message
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              code code="PRPA_IN201309UV02"
               codeSystem="2.16.840.1.113883.1.6" />
              queryByParameter>
              queryId root="10501Q1" />
              statusCode code="new" />
              responsePriorityCode code="I"/>
              parameterList>
              dataSource>
              value root="1.2.3.4.5.2000" />
              semanticsText>DataSource.id</semanticsText>
               </dataSource>
              patientIdentifier>
              value extension="100" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
              semanticsText>Patient.id</semanticsText>
               </patientIdentifier>
               </parameterList>
               </queryByParameter>
               </controlActProcess>
               </PRPA_IN201309UV02>
              PRPA_IN201309UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
PIX Querv:
Number 2
              id root="b425af6a-0ade-4720-89fc-599c3bda76cf" />
              creationTime value="20090821104228" />
              interactionId extension="PRPA_IN201309UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
```

```
Message Type
                                              Message
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
                classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              code code="PRPA_IN201309UV02"
                codeSystem="2.16.840.1.113883.1.6" />
              queryByParameter>
              queryId root="10501Q2" />
              statusCode code="new" />
              responsePriorityCode code="I"/>
              parameterList>
              dataSource>
              value root="1.2.3.4.5.2000" />
              semanticsText>DataSource.id</semanticsText>
               </dataSource>
              patientIdentifier>
              value extension="101" assigningAuthorityName="domain1"
                root="1.2.3.4.5.1000" />
              semanticsText>Patient.id</semanticsText>
               </patientIdentifier>
               </parameterList>
               </queryByParameter>
               </controlActProcess>
               </PRPA_IN201309UV02>
               <?xml version="1.0" encoding="UTF-8" ?>
PIX Query
Response
              n1: HL7V3MessageValidationContextDefinition
Validation Context:
                xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
Number 1
                essage">
              FailureInterpretation>
```

```
Message Type
                                           Message
             MessageFailure Type="DATA" Level="ERROR" />
             MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
             Level="USER" />
             </FailureInterpretation>
             MessageInstanceSpecificValues>
             assigningAuthorityName
             -->
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:subject/
              *:registrationEvent/*:subject1/*:patient/*:id/@assigningAuthorit
             yName</XPath>
             Value>
             PlainText>domain2</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             extension
             -->
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:subject/
              *:registrationEvent/*:subject1/*:patient/*:id/@extension</XPath
              >
             Value>
             PlainText>200</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             root
             -->
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:subject/
              *:registrationEvent/*:subject1/*:patient/*:id/@root</XPath>
             Value>
             PlainText>1.2.3.4.5.2000</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             ack type code
             -->
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:typeCod
              e/@code</XPath>
             Value>
             PlainText>AA</PlainText>
```

```
Message Type
                                             Message
               </Value>
               </DataValueLocationItem>
               <!--
               Query ack code
               -->
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
               /*:queryId/@root</XPath>
              Value>
              PlainText>10501Q1</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
               Query response code
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
               /*:queryResponseCode/@code</XPath>
              Value>
              PlainText>OK</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1: HL7V3MessageValidationContextDefinition>
PIX Query
               <?xml version="1.0" encoding="UTF-8" ?>
Response
              n1: HL7V3MessageValidationContextDefinition
Validation Context:
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
Number 2
               essage">
              FailureInterpretation>
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
               <!--
               ack type code
               -->
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:typeCod
               e/@code</XPath>
              Value>
              PlainText>AA</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
```

```
Message Type
                                           Message
                    ack code
              Query
             -->
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
              /*:queryId/@root</XPath>
             Value>
             PlainText>10501Q2</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             Query response code
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
              /*:queryResponseCode/@code</XPath>
             Value>
             PlainText>NF</PlainText>
             </Value>
             </DataValueLocationItem>
             </MessageInstanceSpecificValues>
             </n1: HL7V3MessageValidationContextDefinition>
```

#### 2.2.2 Test Case 10502v3: PIX Ouery Case 3

```
Message Type
                                            Message
               <?xml version="1.0" encoding="UTF-8" ?>
Acknowledge
Validation Content:
             n1: HL7V3MessageValidationContextDefinition
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
               essage">
              FailureInterpretation>
              MessageFailure Type="VERSION" Level="ERROR" />
              MessageFailure Type="LENGTH" Level="IGNORE" />
              MessageFailure Type="DATATYPE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
              DataValueLocationItem>
               <XPath>/*:MCCI_IN000002UV01/*:acknowledgement/*:typeCode
               /@code</XPath>
              Value>
```

```
Message Type
                                             Message
              PlainText>CA</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1: HL7V3MessageValidationContextDefinition>
Patient Add:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Number 1
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="c3b31337-dd62-4b69-b70b-17bf67bf9a00" />
              creationTime value="20090818163705" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6"/>
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              subject typeCode="SUBJ">
              registrationEvent classCode="REG" moodCode="EVN">
              id nullFlavor="NA" />
              statusCode code="active" />
              subject1 typeCode="SBJ">
              patient classCode="PAT">
              id extension="100" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
              statusCode code="active" />
              patientPerson>
```

```
Message Type
                                            Message
              name>
              given>John</given>
              family>ALPHA</family>
               </name>
              telecom use="HP" value="tel:+1-514-555-1234" />
              administrativeGenderCode code="F" />
              birthTime value="19840711" />
              addr>
              city>Montreal</city>
               </addr>
              personalRelationship classCode="PRS">
              code codeSystem="2.16.840.1.113883.5.111"
               codeSystemName="PersonalRelationshipRoleType" code="MTH"
               displayName="Mother" />
              relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
              name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
              family>Barnes</family>
               </name>
               </relationshipHolder1>
               </personalRelationship>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON">
              telecom value="SENDER TELECOM GOES HERE!" />
               </contactParty>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA IN201301UV02>
Patient Add:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Number 2
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="d0186b53-da99-4a0c-a9f3-e686aef25b30" />
              creationTime value="20090818163718" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
```

```
Message Type
                                            Message
             receiver typeCode="RCV">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99999.4567" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99999.1234" />
              </representedOrganization>
              </asAgent>
              </device>
              </receiver>
             sender typeCode="SND">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99998" />
              </representedOrganization>
              </asAgent>
              </device>
              </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id extension="101" assigningAuthorityName="domain1"
              root="1.2.3.4.5.1000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>John</given>
             family>SIMPSON</family>
              </name>
             telecom use="HP" value="tel:+1-514-555-1234" />
             administrativeGenderCode code="F" />
             birthTime value="19840711" />
             addr>
             city>Montreal</city>
              </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
```

```
Message Type
                                            Message
              relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
              name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
              family>AMSTRONG</family>
               </name>
               </relationshipHolder1>
               </personalRelationship>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON">
              telecom value="SENDER TELECOM GOES HERE!" />
               </contactParty>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA_IN201301UV02>
              PRPA_IN201309UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
PIX Query
              id root="6d79fe84-133c-4c15-9534-79642f13881b" />
              creationTime value="20090821104312" />
              interactionId extension="PRPA_IN201309UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
```

```
Message Type
                                             Message
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              code code="PRPA_IN201309UV02"
               codeSystem="2.16.840.1.113883.1.6" />
              queryByParameter>
              queryId root="10502Q1" />
              statusCode code="new" />
              responsePriorityCode code="I"/>
              parameterList>
              patientIdentifier>
              value extension="109" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
              semanticsText>Patient.id</semanticsText>
               </patientIdentifier>
               </parameterList>
               </queryByParameter>
               </controlActProcess>
               </PRPA_IN201309UV02>
PIX Query
               <?xml version="1.0" encoding="UTF-8" ?>
Response
              n1: HL7V3MessageValidationContextDefinition
Validation Context
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
               essage">
              FailureInterpretation>
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
               <!--
               ack type code
               -->
              DataValueLocationItem>
                <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:typeCod
               e/@code</XPath>
              Value>
              PlainText>AE</PlainText>
               </Value>
               </DataValueLocationItem>
               acknowledgementDetail
               -->
```

```
Message Type
                                          Message
            DataValueLocationItem>
             <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:acknowl
             edgementDetail/@typeCode</XPath>
            Value>
            PlainText>E</PlainText>
             </Value>
             </DataValueLocationItem>
            DataValueLocationItem>
             <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:acknowl
             edgementDetail/*:code</XPath>
            Value>
            PlainText>240</PlainText>
             </Value>
             </DataValueLocationItem>
             acknowledgementDetail text
            DataValueLocationItem>
             <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:acknowl
             edgementDetail/*:text</XPath>
            Value>
            PlainText>Unknown key identifier</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             Query response code
             -->
            DataValueLocationItem>
             <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
             /*:queryResponseCode/@code</XPath>
            Value>
            PlainText>AE</PlainText>
             </Value>
             </DataValueLocationItem>
             </MessageInstanceSpecificValues>
             </n1:HL7V3MessageValidationContextDefinition>
```

### 2.2.3 Test Case 10503v3: PIX Ouery Case 4

Message Type	Message
PIX Query	PRPA_IN201309UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"> id root="5d9728c6-cdb9-4039-a2a5-379203f08099" /> creationTime value="20090821104335" />

```
Message Type
                                            Message
             interactionId extension="PRPA_IN201309UV02"
              root="2.16.840.1.113883.1.6" />
             processingCode code="P" />
             processingModeCode code="R" />
             acceptAckCode code="AL" />
             receiver typeCode="RCV">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99999.4567" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99999.1234" />
              </representedOrganization>
              </asAgent>
              </device>
              </receiver>
             sender typeCode="SND">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99998" />
              </representedOrganization>
              </asAgent>
              </device>
              </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             code code="PRPA_IN201309UV02"
              codeSystem="2.16.840.1.113883.1.6" />
             queryByParameter>
             queryId root="10503Q1" />
             statusCode code="new" />
             responsePriorityCode code="I"/>
             parameterList>
             dataSource>
             value root="1.2.3.4.5.8888" />
             semanticsText>DataSource.id</semanticsText>
              </dataSource>
             patientIdentifier>
             value extension="100" assigningAuthorityName="UnknownDomain1"
              root="1.2.3.4.5.9999" />
             semanticsText>Patient.id</semanticsText>
              </patientIdentifier>
              </parameterList>
              </queryByParameter>
              </controlActProcess>
```

```
Message Type
                                            Message
               </PRPA_IN201309UV02>
               <?xml version="1.0" encoding="UTF-8" ?>
PIX Query
Response
              n1: HL7V3MessageValidationContextDefinition
Validation Context
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
               essage">
              FailureInterpretation>
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
               <!--
               ack type code
               -->
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:typeCod
               e/@code</XPath>
              Value>
              PlainText>AE</PlainText>
               </Value>
               </DataValueLocationItem>
               < |--
               acknowledgementDetail code
               <!--
               acknowledgementDetail
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:acknowl
               edgementDetail/@typeCode</XPath>
              Value>
              PlainText>E</PlainText>
               </Value>
               </DataValueLocationItem>
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:acknowl
               edgementDetail/*:code</XPath>
              Value>
              PlainText>240</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
               acknowledgementDetail text
              DataValueLocationItem>
```

```
Message Type
                                                                                                                                                                                                                               Message
                                                                        <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement/*:acknowledgement
                                                                        edgementDetail/*:text</XPath>
                                                                   Value>
                                                                   PlainText>Unknown key identifier</PlainText>
                                                                       </DataValueLocationItem>
                                                                     <!--
                                                                       Query response code
                                                                      -->
                                                                   DataValueLocationItem>
                                                                        <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
                                                                        /*:queryResponseCode/@code</XPath>
                                                                   Value>
                                                                   PlainText>AE</PlainText>
                                                                       </Value>
                                                                       </DataValueLocationItem>
                                                                       </MessageInstanceSpecificValues>
                                                                      </n1: HL7V3MessageValidationContextDefinition>
```

### 2.2.4 Test Case 10506v3: PIX Query Patient Update

```
Message Type
                                            Message
Acknowledge
               <?xml version="1.0" encoding="UTF-8" ?>
Validation Content:
              n1: HL7V3MessageValidationContextDefinition
ΑII
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
               essage">
              FailureInterpretation>
              MessageFailure Type="VERSION" Level="ERROR" />
              MessageFailure Type="LENGTH" Level="IGNORE" />
              MessageFailure Type="DATATYPE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
              DataValueLocationItem>
               <XPath>/*:MCCI_IN000002UV01/*:acknowledgement/*:typeCode
               /@code</XPath>
              Value>
              PlainText>CA</PlainText>
               </Value>
               </DataValueLocationItem>
```

```
Message Type
                                             Message
               </MessageInstanceSpecificValues>
               </n1: HL7V3MessageValidationContextDefinition>
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Patient Add:
Number 1
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="4c117afc-6473-4689-82ec-241e1196a57b" />
              creationTime value="20090831133241" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              subject typeCode="SUBJ">
              registrationEvent classCode="REG" moodCode="EVN">
              id nullFlavor="NA" />
              statusCode code="active" />
              subject1 typeCode="SBJ">
              patient classCode="PAT">
              id extension="100" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
              statusCode code="active" />
              patientPerson>
              name>
              given>John</given>
              family>Simpson</family>
```

```
Message Type
                                            Message
               </name>
              telecom use="HP" value="tel:+1-514-555-1234" />
              administrativeGenderCode code="F" />
              birthTime value="19840711" />
              addr>
              city>Montreal</city>
               </addr>
              personalRelationship classCode="PRS">
              code codeSystem="2.16.840.1.113883.5.111"
               codeSystemName="PersonalRelationshipRoleType" code="MTH"
               displayName="Mother" />
              relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
              name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
              family>Albert</family>
               </name>
               </relationshipHolder1>
               </personalRelationship>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON" />
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA IN201301UV02>
Patient Add:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Number 2
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="5c2951ed-5896-487b-97e1-16a8031afb46" />
              creationTime value="20090831133409" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
```

```
Message Type
                                            Message
              classCode="ORG">
             id root="1.2.840.114350.1.13.99999.1234" />
              </representedOrganization>
              </asAgent>
              </device>
              </receiver>
             sender typeCode="SND">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99998" />
              </representedOrganization>
              </asAgent>
              </device>
              </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id extension="200" assigningAuthorityName="domain2"
              root="1.2.3.4.5.2000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>Jhn</given>
             family>Spson</family>
              </name>
             telecom use="HP" value="tel:+1-514-555-1234" />
             administrativeGenderCode code="F" />
             birthTime value="19840715" />
             addr>
             city>Montreal</city>
              </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
             relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
             name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
             family>Albrt</family>
              </name>
              </relationshipHolder1>
```

```
Message Type
                                            Message
               </personalRelationship>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON" />
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA_IN201301UV02>
Patient Update
              PRPA_IN201302UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="36834a1b-6d39-456c-8040-6d9a3a25bee6" />
              creationTime value="20090831133457" />
              interactionId extension="PRPA_IN201302UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
```

```
Message Type
                                            Message
              </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id assigningAuthorityName="domain2" extension="200"
              root="1.2.3.4.5.2000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>John</given>
             family>Simpson</family>
             </name>
             telecom use="HP" value="tel:+1-514-555-1234" />
             administrativeGenderCode code="F" />
             birthTime value="19840711" />
             addr>
             city>Montreal</city>
             </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
             relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
             name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
             family>Albert</family>
             </name>
             </relationshipHolder1>
             </personalRelationship>
              </patientPerson>
             providerOrganization classCode="ORG" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             contactParty classCode="CON" />
             </patient>
             </subject1>
             custodian typeCode="CST">
             assignedEntity classCode="ASSIGNED">
             id root="1.2.840.114350.1.13.99998.8734" />
             </assignedEntity>
             </custodian>
             </registrationEvent>
             </subject>
              </controlActProcess>
```

```
Message Type
                                             Message
               </PRPA_IN201302UV02>
              PRPA_IN201309UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
PIX Query
              id root="28bbddad-5a16-4cf6-a57e-a4579dcc2de6" />
              creationTime value="20090831152446" />
              interactionId extension="PRPA IN201309UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              code code="PRPA_IN201309UV02"
               codeSystem="2.16.840.1.113883.1.6" />
              queryByParameter>
              queryId root="10506Q1" />
              statusCode code="new" />
              responsePriorityCode code="I"/>
              parameterList>
              dataSource>
              value extension="200" assigningAuthorityName="domain2"
               root="1.2.3.4.5.2000" />
              semanticsText>DataSource.id</semanticsText>
               </dataSource>
              patientIdentifier>
              value extension="100" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
```

```
Message Type
                                             Message
              semanticsText>Patient.id</semanticsText>
               </patientIdentifier>
               </parameterList>
               </queryByParameter>
               </controlActProcess>
               </PRPA_IN201309UV02>
PIX Query
               <?xml version="1.0" encoding="UTF-8" ?>
Response
              n1: HL7V3MessageValidationContextDefinition
Validation Context
               xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
               essage">
              FailureInterpretation>
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
               <!--
              assigningAuthorityName
               -->
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:subject/
               *:registrationEvent/*:subject1/*:patient/*:id/@assigningAuthorit
               yName</XPath>
              Value>
              PlainText>domain1</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
              extension
               -->
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:subject/
               *:registrationEvent/*:subject1/*:patient/*:id/@extension</XPath
               >
              Value>
              PlainText>100</PlainText>
               </Value>
               </DataValueLocationItem>
               <!--
              root
               -->
              DataValueLocationItem>
               <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:subject/
               *:registrationEvent/*:subject1/*:patient/*:id/@root</XPath>
              Value>
```

```
Message Type
                                           Message
             PlainText>1.2.3.4.5.1000</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             ack type code
             -->
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:typeCod
             e/@code</XPath>
             Value>
             PlainText>AA</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             Query ack code
             -->
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
              /*:queryId/@root</XPath>
             Value>
             PlainText>10506Q1</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             Query response code
             DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
              /*:queryResponseCode/@code</XPath>
             Value>
             PlainText>OK</PlainText>
             </Value>
             </DataValueLocationItem>
             </MessageInstanceSpecificValues>
             </n1:HL7V3MessageValidationContextDefinition>
```

## 2.2.5 Test Case 10512v3: PIX Patient Feed

Message Type	Message
Acknowledge Validation Content: All	<pre><?xml version="1.0" encoding="UTF-8" ?> n1:HL7V3MessageValidationContextDefinition   xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m   essage"&gt; FailureInterpretation&gt;</pre>

```
Message Type
                                            Message
              MessageFailure Type="VERSION" Level="ERROR" />
              MessageFailure Type="LENGTH" Level="IGNORE" />
              MessageFailure Type="DATATYPE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
              MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
              MessageFailure Type="DATA" Level="ERROR" />
              MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
               Level="USER" />
               </FailureInterpretation>
              MessageInstanceSpecificValues>
              DataValueLocationItem>
               <XPath>/*:MCCI_IN000002UV01/*:acknowledgement/*:typeCode
               /@code</XPath>
              Value>
              PlainText>CA</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1: HL7V3MessageValidationContextDefinition>
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Add Patient:
Number 1
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="29fc4647-c7a3-4520-ba1f-99cd20e17adf" />
              creationTime value="20090818164138" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
```

```
Message Type
                                           Message
             </representedOrganization>
             </asAgent>
             </device>
             </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id extension="120" assigningAuthorityName="domain1"
             root="1.2.3.4.5.1000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>ELLIE</given>
             family>EPSILON</family>
             </name>
             telecom use="HP" value="tel:314.555.1234" />
             telecom use="HP" value="tel:314.555.4444" />
             administrativeGenderCode code="F" />
             birthTime value="19380224" />
             addr>
             streetAddressLine>1 PINETREE</streetAddressLine>
             city>WEBSTER</city>
             state>MO</state>
             postalCode>63119</postalCode>
             </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
             relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
             name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
             family>Barnes</family>
             </name>
             </relationshipHolder1>
             </personalRelationship>
             </patientPerson>
             providerOrganization classCode="ORG" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             contactParty classCode="CON">
             telecom value="SENDER TELECOM GOES HERE!" />
             </contactParty>
             </patient>
```

```
Message Type
                                             Message
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA IN201301UV02>
Add Patient:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
Number 2
              id root="4bcc595c-c336-4fd7-a2ce-70f33721db30" />
              creationTime value="20090818164145" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              subject typeCode="SUBJ">
              registrationEvent classCode="REG" moodCode="EVN">
              id nullFlavor="NA" />
              statusCode code="active" />
              subject1 typeCode="SBJ">
              patient classCode="PAT">
```

```
Message Type
                                            Message
              id extension="120" assigningAuthorityName="domain1" />
              statusCode code="active" />
              patientPerson>
              name>
              given>ELLIE</given>
              family>EPSILON</family>
               </name>
              telecom use="HP" value="tel:314.555.1234" />
              telecom use="HP" value="tel:314.555.4444" />
              administrativeGenderCode code="F" />
              birthTime value="19380224" />
              addr>
              streetAddressLine>1 PINETREE</streetAddressLine>
              city>WEBSTER</city>
              state>MO</state>
              postalCode>63119</postalCode>
               </addr>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON">
              telecom value="SENDER TELECOM GOES HERE!" />
               </contactParty>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA_IN201301UV02>
Add Patient:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Numbwe 3
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="2499fee7-5469-49d6-8806-f04e8fe9ea18" />
              creationTime value="20090818164154" />
              interactionId extension="PRPA IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
```

```
Message Type
                                            Message
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99999.1234" />
              </representedOrganization>
              </asAgent>
              </device>
              </receiver>
             sender typeCode="SND">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99998" />
              </representedOrganization>
              </asAgent>
              </device>
              </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id extension="120" root="1.2.3.4.5.1000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>ELLIE</given>
             family>EPSILON</family>
              </name>
             telecom use="HP" value="tel:314.555.1234" />
             telecom use="HP" value="tel:314.555.4444" />
             administrativeGenderCode code="F" />
             birthTime value="19380224" />
             addr>
             streetAddressLine>1 PINETREE</streetAddressLine>
             city>WEBSTER</city>
             state>MO</state>
             postalCode>63119</postalCode>
              </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
```

```
Message Type
                                           Message
             relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
             name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
            family>Barnes</family>
             </name>
             </relationshipHolder1>
             </personalRelationship>
             </patientPerson>
             providerOrganization classCode="ORG" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             contactParty classCode="CON">
             telecom value="SENDER TELECOM GOES HERE!" />
             </contactParty>
             </patient>
             </subject1>
             custodian typeCode="CST">
             assignedEntity classCode="ASSIGNED">
             id root="1.2.840.114350.1.13.99998.8734" />
             </assignedEntity>
             </custodian>
             </registrationEvent>
             </subject>
             </controlActProcess>
             </PRPA_IN201301UV02>
```

## 2.2.6 Test Case 10515v3: Patient Identity Merge

```
Message Type
                                               Message
Acknowledge
                <?xml version="1.0" encoding="UTF-8" ?>
\label{lem:validationContextDefinition} Validation Content: \ n1: HL7V3 Message Validation Context Definition
ΑII
                xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
                essage">
               FailureInterpretation>
               MessageFailure Type="VERSION" Level="ERROR" />
               MessageFailure Type="LENGTH" Level="IGNORE" />
               MessageFailure Type="DATATYPE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE" Level="ERROR" />
               MessageFailure Type="MESSAGE_STRUCTURE_ID" Level="ERROR" />
               MessageFailure Type="DATA" Level="ERROR" />
               MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
                Level="USER" />
                </FailureInterpretation>
               MessageInstanceSpecificValues>
               DataValueLocationItem>
                <XPath>/*:MCCI_IN000002UV01/*:acknowledgement/*:typeCode
```

```
Message Type
                                             Message
               /@code</XPath>
              Value>
              PlainText>CA</PlainText>
               </Value>
               </DataValueLocationItem>
               </MessageInstanceSpecificValues>
               </n1: HL7V3MessageValidationContextDefinition>
Add Patient:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Number 1
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="02273d23-cb98-4629-9055-c4d9bb518267" />
              creationTime value="20090909174947" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              subject typeCode="SUBJ">
              registrationEvent classCode="REG" moodCode="EVN">
              id nullFlavor="NA" />
              statusCode code="active" />
              subject1 typeCode="SBJ">
              patient classCode="PAT">
              id extension="101" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
```

```
Message Type
                                             Message
              statusCode code="active" />
              patientPerson>
              name>
              given>John</given>
              family>SIMPSON</family>
               </name>
              telecom use="HP" value="tel:+1-514-555-1234" />
              administrativeGenderCode code="F" />
              birthTime value="19840711" />
              addr>
              city>Montreal</city>
               </addr>
              personalRelationship classCode="PRS">
              code codeSystem="2.16.840.1.113883.5.111"
               codeSystemName="PersonalRelationshipRoleType" code="MTH"
               displayName="Mother" />
              relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
              name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
              family>Albert</family>
               </name>
               </relationshipHolder1>
               </personalRelationship>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON" />
               /providerOrganization>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA IN201301UV02>
Add Patient:
              PRPA_IN201301UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3"
Number 2
               xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance">
              id root="007dea5c-5933-4098-b180-b6696e7b05eb" />
              creationTime value="20090818164650" />
              interactionId extension="PRPA_IN201301UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
```

```
Message Type
                                            Message
             receiver typeCode="RCV">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99999.4567" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99999.1234" />
              </representedOrganization>
              </asAgent>
              </device>
              </receiver>
             sender typeCode="SND">
             device classCode="DEV" determinerCode="INSTANCE">
             id root="1.2.840.114350.1.13.99998.8734" />
             asAgent classCode="AGNT">
             representedOrganization determinerCode="INSTANCE"
              classCode="ORG">
             id root="1.2.840.114350.1.13.99998" />
              </representedOrganization>
              </asAgent>
              </device>
              </sender>
             controlActProcess classCode="CACT" moodCode="EVN">
             subject typeCode="SUBJ">
             registrationEvent classCode="REG" moodCode="EVN">
             id nullFlavor="NA" />
             statusCode code="active" />
             subject1 typeCode="SBJ">
             patient classCode="PAT">
             id extension="105" assigningAuthorityName="domain1"
              root="1.2.3.4.5.1000" />
             statusCode code="active" />
             patientPerson>
             name>
             given>Jhn</given>
             family>Spson</family>
              </name>
             telecom use="HP" value="tel:+1-514-555-1234" />
             administrativeGenderCode code="F" />
             birthTime value="19840711" />
             addr>
             city>Montreal</city>
              </addr>
             personalRelationship classCode="PRS">
             code codeSystem="2.16.840.1.113883.5.111"
              codeSystemName="PersonalRelationshipRoleType" code="MTH"
              displayName="Mother" />
```

```
Message Type
                                            Message
              relationshipHolder1 classCode="PSN" determinerCode="INSTANCE">
              name xsi:type="urn:PN" xmlns:urn="urn:hl7-org:v3">
              family>Albert</family>
               </name>
               </relationshipHolder1>
               </personalRelationship>
               </patientPerson>
              providerOrganization classCode="ORG" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              contactParty classCode="CON">
              telecom value="SENDER TELECOM GOES HERE!" />
               </contactParty>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="1.2.840.114350.1.13.99998.8734" />
               </assignedEntity>
               </custodian>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA_IN201301UV02>
              PRPA_IN201304UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
Patient Merge
              id root="e05b87c8-3270-4aa1-afd2-56cc0a37cd58" />
              creationTime value="20090817115101" />
              interactionId root="2.16.840.1.113883.1.6"
               extension="PRPA IN201304UV02" />
              processingCode code="P" />
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
```

```
Message Type
                                             Message
              representedOrganization determinerCode="INSTANCE"
               classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              subject typeCode="SBJ">
              registrationEvent classCode="REG" moodCode="EVN">
              id nullFlavor="NA" />
              statusCode code="active" />
              subject1 typeCode="SBJ">
              patient classCode="PAT">
              id extension="101" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
              statusCode code="active" />
              patientPerson>
              name />
               </patientPerson>
               </patient>
               </subject1>
              custodian typeCode="CST">
              assignedEntity classCode="ASSIGNED">
              id root="SENDER OID GOES HERE!" />
               </assignedEntity>
               </custodian>
              replacementOf typeCode="RPLC">
              priorRegistration classCode="REG" moodCode="EVN">
              subject1 typeCode="SBJ">
              priorRegisteredRole classCode="PAT">
              id extension="105" assigningAuthorityName="domain1"
               root="1.2.3.4.5.1000" />
               </subject1>
               </priorRegistration>
               </replacementOf>
               </registrationEvent>
               </subject>
               </controlActProcess>
               </PRPA_IN201304UV02>
Patient Query
              PRPA_IN201309UV02 ITSVersion="XML_1.0" xmlns="urn:hl7-org:v3">
              id root="0c6835b6-3587-461a-9273-f0f70d21de4f" />
              creationTime value="20090821104419" />
              interactionId extension="PRPA_IN201309UV02"
               root="2.16.840.1.113883.1.6" />
              processingCode code="P" />
```

```
Message Type
                                              Message
              processingModeCode code="R" />
              acceptAckCode code="AL" />
              receiver typeCode="RCV">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99999.4567" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
                classCode="ORG">
              id root="1.2.840.114350.1.13.99999.1234" />
               </representedOrganization>
               </asAgent>
               </device>
               </receiver>
              sender typeCode="SND">
              device classCode="DEV" determinerCode="INSTANCE">
              id root="1.2.840.114350.1.13.99998.8734" />
              asAgent classCode="AGNT">
              representedOrganization determinerCode="INSTANCE"
                classCode="ORG">
              id root="1.2.840.114350.1.13.99998" />
               </representedOrganization>
               </asAgent>
               </device>
               </sender>
              controlActProcess classCode="CACT" moodCode="EVN">
              code code="PRPA_IN201309UV02"
                codeSystem="2.16.840.1.113883.1.6" />
              queryByParameter>
              queryId root="10515Q1" />
              statusCode code="new" />
              responsePriorityCode code="I"/>
              parameterList>
              patientIdentifier>
              value extension="105" assigningAuthorityName="domain1"
                root="1.2.3.4.5.1000" />
              semanticsText>Patient.id</semanticsText>
               </patientIdentifier>
               </parameterList>
               </queryByParameter>
               </controlActProcess>
               </PRPA IN201309UV02>
Patient Query
               <?xml version="1.0" encoding="UTF-8" ?>
Response
              n1: HL7V3MessageValidationContextDefinition
Validation Context
                xmlns:n1="http://www.nist.gov/hl7/core/xmlbeans/validation/m
                essage">
              FailureInterpretation>
              MessageFailure Type="DATA" Level="ERROR" />
```

```
Message Type
                                          Message
            MessageFailure Type="MESSAGE_VALIDATION_CONTEXT"
             Level="USER" />
             </FailureInterpretation>
            MessageInstanceSpecificValues>
             <!--
             ack type code
            DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:acknowledgement/*:typeCod
             e/@code</XPath>
            Value>
            PlainText>AE</PlainText>
             </Value>
             </DataValueLocationItem>
             <!--
             Query ack code
            DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
              /*:queryId/@root</XPath>
            Value>
            PlainText>10515Q1</PlainText>
             </Value>
             </DataValueLocationItem>
             -->
             <!--
             Query response code
             -->
            DataValueLocationItem>
              <XPath>/*:PRPA_IN201310UV02/*:controlActProcess/*:queryAck
             /*:queryResponseCode/@code</XPath>
            Value>
            PlainText>AE</PlainText>
             </Value>
             </DataValueLocationItem>
             </MessageInstanceSpecificValues>
             </n1: HL7V3MessageValidationContextDefinition>
```