Integrating the Healthcare Enterprise

IHE MESA PIX/PDQ v3 Tests
User Guide

École de technologie supérieure,
University of Quebec
1100 Notre-Dame Street West
Montreal, QC H3W 1K3
Canada
514.396.8800 (Voice)
514.396.8950 (Fax)

TABLE OF CONTENTS

1 Introduction

1.1 Contact

Technical comments, problems and bugs or should be reported to:

- Jean-François Pambrun jean-francois.pambrun.1@ens.etsmtl.ca
- Rita Noumeir rita.noumeir@etsmtl.ca

1.2 Logging

During a test execution all created logs and evidence files are stored under the root directory specified in the config file: '/<tomcat_installation_dir>/webapps/mesa/WEB-INF/config/config.xml'.

1.3 Test Execution

All tests are performed using an identical procedure.

- Go to Start Menu\Programs\Apache Tomcat 5.5, select Configure Tomcat and click on Start.
- Access page http://<your_ip>:8080/mesa/ with a browser.
- Follow on screen instructions.
- Evaluation is performed automatically at the end of the test execution. The result is displayed on screen and contained in the logs.
  In order to submit a result, archive the above mentioned directory and send it in compressed form to your project manager.
  This procedure may also be chosen if there are problems or unsolvable error situations during the test execution.

2   Test Cases

2.1   ID source

2.1.1   Test Case 10512v3: PIX Patient Feed

2.1.1.1   References
ITI TF-2: 3.8B.4.1

2.1.1.2   Actors Tested
Patient identity source

2.1.1.3   Description
Test case 10512 covers PIX Patient Feed and the Add new patient message.
Patient Identify Source can send a patient ID in three different configurations. These may be runtime configurations required by a combination of actors. Each value represents the same concept:

- Test A: id assigningAuthorityName="domain1" extension="100" root="1.2.3.4.5.1000"
- Test B: id assigningAuthorityName="domain1" extension="100"
- Test C: id extension="100" root="1.2.3.4.5.1000"

2.1.1.4   Instructions
The consumer is expected to send three new patiean message with the following parameters:
- addr/streetAddressLine = 1 PINETREE
- addr/city = WEBSTER
- addr/state = MO
- addr/postalCode = 63119
- telecom@use=WP = 314.555.4444
- telecom@use=HP = 314.555.1234
- name/given = ELLIE
- name/family = EPSILON
- administrativeGenderCode = F
- birthTime = 19380224

and

- Test A: id assigningAuthorityName="domain1" extension="100" root="1.2.3.4.5.1000"
- Test B: id assigningAuthorityName="domain1" extension="100"
- Test C: id extension="100" root="1.2.3.4.5.1000"

2.1.2 Test Case 10514v3: PIX Patient Feed - Update

2.1.2.1 References
ITI TF-2: 3.8B.4.1

2.1.2.2 Actors Tested
Patient identity source

2.1.2.3 Description
Test case 10514v3 covers PIX Patient Feed and the patient update message.
The Patient Identify Source should be able to send well formed patient update message.

2.1.2.4 Instructions
The consumer is expected to send one patient update message with the following parameters:

- id assigningAuthorityName="domain2" extension="200" root="1.2.3.4.5.2000"
- name/given = John
- name/family = Simpson
- birthTime/@value = 19840711

2.1.3 Test Case 10515v3: Patient Identity Merge

2.1.3.1 References
ITI TF-2: 3.8B.4.1

2.1.3.2 Actors Tested
Patient identity source

2.1.3.3 Description
Test case 10515v3 covers patient Identity Merge messeagea.
The Patient Identify Source should be able to send well formed patient update message.

2.1.3.4 Instructions
The consumer is expected to send one patient merge message with the following parameters:

- id assigningAuthorityName="domain1" extension="100" root="1.2.3.4.5.1000"
- name/given = John
- name/family = Simpson
- priorRegistration / id assigningAuthorityName="domain1" extension="105" root="1.2.3.4.5.1000"

2.2 Pix Consumer

2.2.1 Test Case 10501v3: Pix Query Case 1 and Case2

2.2.1.1 References
ITI TF-2: 3.9B.4.2.2

2.2.1.2 Actors Tested
Pix Consumer

2.2.1.3 Description
Test case 10501v3 covers the PIX Query Case 1 and 2. One patient (SIMPSON) is registered in two different domains. A second patient (ALPHA) is registered in a single domain. A PIX Query is sent to resolve a reference to SIMPSON.

A second PIX Query is sent to resolve a reference to ALPHA. Because ALPHA is not registered in the second domain, the response to that PIX Query will indicate no data.

2.2.1.4 Instructions
Your consumer should perform queries with the following parameters

- patientId / id root = 1.2.3.4.5.1000, extension = 100, assigningAuthorityName = domain1
  AssigningAuthorityId / id root = 1.2.3.4.5.2000, assigningAuthorityName = domain2
- patientId / id root = 1.2.3.4.5.1000, extension = 101, assigningAuthorityName = domain1
  AssigningAuthorityId / id root = 1.2.3.4.5.2000, assigningAuthorityName = domain2

2.2.2 Test Case 10502v3: PIX Query Case 3

2.2.2.1 References
ITI TF-2: 3.9B.4.2.2

2.2.2.2 Actors Tested
Pix Consumer

2.2.2.3 Description
Test case 10502v3 covers the PIX Query case 3. A PIX consumer sends a query for a patient in a known domain who is not recognized as a registered patient.

2.2.2.4 Instructions
Your consumer should perform pix queries.
Any requested id and domain will result in an error message being sent to your consumer.

2.2.3 TEST CASE 10503v3: PIX QUERY CASE 4

2.2.3.1 REFERENCES
ITI TF-2: 3.9B.4.2.2

2.2.3.2 ACTORS TESTED
Pix Consumer

2.2.3.3 DESCRIPTION
Test case 10503v3 covers the PIX Query case 4. A PIX query is sent with a Patient ID that includes an unknown issuer. The Cross Reference Manager responds appropriately.

2.2.3.4 INSTRUCTIONS
Your consumer should perform pix queries.
Any requested id and domain will result in an error message being sent to your consumer.

2.2.4 TEST CASE 10531v3: PIX UPDATE NOTIFICATION

2.2.4.1 REFERENCES
ITI TF-2: 3.10B.4.1

2.2.4.2 ACTORS TESTED
Pix Consumer

2.2.4.3 DESCRIPTION
Test case 10531V3 covers the PIX Update Notification. A PIX Update Notification is sent to your consumer

2.2.4.4 INSTRUCTIONS
A PIX Update Notification is sent to your consumer and it should behave accordingly.

2.3 Pix Manager

2.3.1 Test Case 10501v3: Pix Query Case 1 and Case2

2.3.1.1 References
ITI TF-2: 3.9B.4.2.2

2.3.1.2 Actors Tested
Pix Manager

2.3.1.3 Description
Test case 10501v3 covers the PIX Query Case 1 and 2. One patient (SIMPSON) is registered in two different domains. A second patient (ALPHA) is registered in a single domain. A PIX Query is sent to resolve a reference to SIMPSON.

A second PIX Query is sent to resolve a reference to ALPHA. Because ALPHA is not registered in the second domain, the response to that PIX Query will indicate no data.

2.3.1.4 Instructions
Three new patient added messages will be sent to your pix manager, followed by two get corresponding identifier query.

2.3.2 Test Case 10502v3: PIX Query Case 3

2.3.2.1 References
ITI TF-2: 3.9B.4.2.2

2.3.2.2 Actors Tested
Pix Manager

2.3.2.3 Description
Test case 10502v3 covers the PIX Query case 3. Two patients are registered in a single domain. A PIX consumer sends a query for a third patient who is not recognized as one of the two registered patients.

2.3.2.4 Instructions
Two new patient added messages will be sent to your pix manager, followed by a get corresponding identifier query.

2.3.3   Test Case 10503v3: PIX Query Case 4

2.3.3.1 References
ITI TF-2: 3.9B.4.2.2

2.3.3.2 Actors Tested
Pix Manager

2.3.3.3 Description
Test case 10503v3 covers the PIX Query case 4. No new patients are registered. A PIX query is sent with a Patient ID that includes an unknown issuer. The Cross Reference Manager responds appropriately.

2.3.3.4 Instructions
A get corresponding identifier query will be sent to your manager.

2.3.4   Test Case 10506v3: PIX Query, Patient Update

2.3.4.1 References
ITI TF-2: 3.8B.4.1

2.3.4.2 Actors Tested
Pix Manager

2.3.4.3 Description
Test case 10506v3 covers PIX Patient Feed, the Update Patient message, and PIX queries. Patient is registered in domain1 with "correct" demographics.

This patient is then registered in domain2 with incorrect demographics. The demographics are sufficiently different that a Cross Reference Manager should not link these two records.

A patient update message is sent for the patient in domain domain2 that should synchronize the demographics with those seen in domain1. The Cross Reference Manager should now link the two records.

2.3.4.4 Instructions
Two new patient added messages will be sent to your pix manager, followed by a Update Patien message and a get corresponding identifier query.

2.3.5   Test Case 10512v3: PIX Patient Feed

2.3.5.1   References
ITI TF-2: 3.9B.4.2.2

2.3.5.2   Actors Tested
Pix Manager

2.3.5.3   Description
Test case 10512v3 covers PIX Patient Feed and the new patient message.
The Patient Identity Cross-reference Manager should be capable of receiving and processing a properly constructed new patient message.

2.3.5.4   Instructions
Three new patient added messages will be sent to your manager.

2.3.6   Test Case 10515v3: Patient Identity Merge

2.3.6.1   References
ITI TF-2: 3.8B.4.1

2.3.6.2   Actors Tested
Pix Manager

2.3.6.3   Description
Test case 10515v3 covers patient identity merge interaction.
The Patient Identity Cross-reference Manager should be capable of receiving and processing a properly constructed Patient merge message.

2.3.6.4   Instructions
Two new patient added messages will be sent to your pix manager, followed by a patien merge message and a get corresponding identifier query.

2.3.7 TEST CASE 10531v3: PIX UPDATE NOTIFICATION

2.3.7.1 REFERENCES
ITI TF-2: 3.10B.4.1

2.3.7.2 ACTORS TESTED
Pix Manager

2.3.7.3 DESCRIPTION
Test case 10531v3 covers PIX Update Notification message. A patient is registered in domain1 with "correct" demographics.

This patient is then registered in domain2 with incorrect demographics. The demographics are sufficiently different that a Cross Reference Manager should not link these two records.

A patient update message is sent for the patient in domain domain2 that should synchronize the demographics with those seen in domain1. The Cross Reference Manager should now link the two records and send a PIX Update Notification to all registered consumer.
Your manager should be configured to send PIX Update Notification to the test tools.

2.3.7.4 INSTRUCTIONS
Two new patient added messages will be sent to your pix manager, followed by a Update Patien message.
Your manager is then expected to send a send PIX Update Notification.

2.4   Patient Demographics Consumer

2.4.1   Test Case 11311v3: Exact Name Search

2.4.1.1   References
ITI TF-2: 3.21B

2.4.1.2   Actors Tested
Patient Demographics Consumer

2.4.1.3   Description
Test case 11311v3 covers an exact name search by the Patient Demographics Consumer.

2.4.1.4   Instructions
The consumer is expected to query by exact patient name:

- name/family = MOORE
- name/given = CHIP

2.4.2   Test Case 11312v3: Exact name search - No Match

2.4.2.1   References
ITI TF-2: 3.21B

2.4.2.2   Actors Tested
Patient Demographics Consumer

2.4.2.3   Description
Test case 11312v3 covers an exact name search by the Patient Demographics Consumer that results in no records found/returned by the Supplier.

2.4.2.4   Instructions
The consumer is expected to query by exact patient name:

- name/family = ZEBRA

2.4.3   TEST CASE 11315V3: PARTIAL NAME SEARCH

2.4.3.1   REFERENCES
ITI TF-2: 3.21B

2.4.3.2   ACTORS TESTED
Patient Demographics Consumer

2.4.3.3   DESCRIPTION
Test case 11315V3 covers a partial name search by the Patient Demographics Consumer.

2.4.3.4   INSTRUCTIONS
The consumer is expected to query with a partial name:

- name/family = MOO*

No other query keys should be present.

2.4.4   TEST CASE 11320v3: COMPLETE ID SEARCH - UNSPECIFIED DOMAIN

2.4.4.1   REFERENCES
ITI TF-2: 3.21B

2.4.4.2   ACTORS TESTED
Patient Demographics Consumer

2.4.4.3   DESCRIPTION
Test case 11320v3 covers a complete ID search where the return domains are unspecified by the Patient Demographics Consumer.

2.4.4.4   INSTRUCTIONS
The consumer is expected to query by exact patient ID:

- id/value/@extension = 100

2.4.5 TEST CASE 11325v3: COMPLETE ID SEARCH - SINGLE DOMAIN

2.4.5.1 REFERENCES
ITI TF-2: 3.21B

2.4.5.2 ACTORS TESTED
Patient Demographics Consumer

2.4.5.3 DESCRIPTION
Test case 11325V3 covers a complete ID search within a single domain that is specified by the PD Consumer.

2.4.5.4 INSTRUCTIONS
The consumer is expected to query by exact patient and domain id:

- id/value/@extension = 100
- otherIDsScopingOrganization/value/@root = 1.2.3.4.5.1000

2.4.6 TEST CASE 11330v3: COMPLETE ID SEARCH - MULTIPLE DOMAINS

2.4.6.1 REFERENCES
ITI TF-2: 3.21B

2.4.6.2 ACTORS TESTED
Patient Demographics Consumer

2.4.6.3 DESCRIPTION
Test case 11330 covers a complete ID search where the domain of interest is different from the Patient ID Domain associated with Receiving Application.

2.4.6.4 INSTRUCTIONS
The consumer is expected to query by patient and domain id:

- id/value/@extension = 100 @root = 1.2.3.4.5.1000
- otherIDsScopingOrganization/value/@root = 1.2.3.4.5.2000

2.4.7 TEST CASE 11335v3: PARTIAL ID SEARCH - SINGLE DOMAIN

2.4.7.1 REFERENCES
ITI TF-2: 3.21B

2.4.7.2 ACTORS TESTED
Patient Demographics Consumer

2.4.7.3 DESCRIPTION
Test case 11335 covers a partial ID search within a single domain that is specified by the PD Consumer.

2.4.7.4 INSTRUCTIONS
The consumer is expected to query with a domain and partial id :

- id/value/@extension = 100*
- assigningAuthority/value/@root = 1.2.3.4.5.1000

No other query keys should be present.

2.4.8 TEST CASE 11340v3: DATE OF BIRTH SEARCH

2.4.8.1 REFERENCES
ITI TF-2: 3.21B

2.4.8.2 ACTORS TESTED
Patient Demographics Consumer

2.4.8.3 DESCRIPTION
Test case 11340 covers a Date of Birth search.

2.4.8.4 INSTRUCTIONS
The consumer is expected to query by exact Date of Birth:

- birthTime/value/@value = 19840711

2.4.9   TEST CASE 11350v3: MULTI KEY SEARCH 1

2.4.9.1   REFERENCES
ITI TF-2: 3.21B

2.4.9.2   ACTORS TESTED
Patient Demographics Consumer

2.4.9.3   DESCRIPTION
In test 11350v3, a Patient Demographics Consumer is required to send a search using two search keys, patient name and date of birth.

2.4.9.4   INSTRUCTIONS
The consumer is expected to query with the following parameters:

- name/family = MOORE
- birthTime = 19840711

2.4.10   TEST CASE 11365v3: CONTINUATION TEST 1

2.4.10.1   REFERENCES
ITI TF-2: 3.21B

2.4.10.2   ACTORS TESTED
Patient Demographics Consumer

2.4.10.3   DESCRIPTION
Test 11365 is a test of the HL7 Continuation Protocol.
In this test, a Patient Demographics Consumer needs to configure their request with a specific limit and successfully process the response from the PD Supplier.

2.4.10.4   INSTRUCTIONS
The consumer is expected to query with a partial name and an initial Quantity:

- name/value/family = MOO*
- queryByParameter/initialQuantity/@value="1"
- queryByParameter/initialQuantityCode/@code="RD"

2.5 Patient Demographics Supplier

2.5.1 Test Case 11311v3: Exact Name Search

2.5.1.1 References

ITI TF-2: 3.21B

2.5.1.2 Actors Tested

Patient Demographics Supplier

2.5.1.3 Description

Test case 11311v3 covers an exact name search by the Patient Demographics Consumer.
Several add new patient messages are sent to the Patient Demographics Supplier.Then, the PD test
Consumer sends a Patient Demographics Query that includes an exact patient name.

- name/family = MOORE
- name/given = CHIP

No other query keys should be present.

2.5.1.4 Instructions

A find candidates query will be sent to your pd supplier.

2.5.2 Test Case 11312v3: Exact name search - No Match

2.5.2.1 References

ITI TF-2: 3.21B

2.5.2.2 Actors Tested

Patient Demographics Supplier

2.5.2.3 Description

Test case 11312v3 covers a search by last name that results in no patient records found.
The MESA PD Consumer sends a Patient Demographics Query that includes an exact patient name.

- name/family = ZEBRA

2.5.2.4 Instructions

A find candidates query will be sent to your pd supplier.

2.5.3 Test Case 11315V3: Partial Name Search

2.5.3.1 References
ITI TF-2: 3.21B

2.5.3.2 Actors Tested
Patient Demographics Supplier

2.5.3.3 Description
Test case 11315V3 covers a partial name search by the Patient Demographics Consumer.
Several add new patieant messages are sent to the Patient Demographics Supplier. Then, the MESA PD Consumer sends a Patient Demographics Query that includes a partial patient name.

- name/family = MOO*

2.5.3.4 Instructions
A find candidates query will be sent to your pd supplier.

2.5.4 Test Case 11320v3: Complete ID Search - Unspecified Domain

2.5.4.1 References
ITI TF-2: 3.21B

2.5.4.2 Actors Tested
Patient Demographics Supplier

2.5.4.3 Description
Test case 11320v3 covers a complete ID search where the return domains are unspecified by the Patient Demographics Consumer.
The MESA PD Consumer sends a Patient Demographics Query that includes a complete Patient ID:

- id/value/@extension = 100

2.5.4.4 Instructions
A find candidates query will be sent to your pd supplier.

2.5.5 Test Case 11325v3: Complete ID Search - Single Domain

2.5.5.1 References
ITI TF-2: 3.21B

2.5.5.2 Actors Tested
Patient Demographics Supplier

2.5.5.3 Description
Test case 11325V3 covers a complete ID search within a single domain that is specified by the PD Consumer.
The MESA PD Consumer sends a Patient Demographics Query that includes a complete Patient ID and a specific, single domain :

- id/value/@extension = 100
- otherIDsScopingOrganization/value/@root = 1.2.3.4.5.1000

2.5.5.4 Instructions
A find candidates query will be sent to your pd supplier.

2.5.6 Test Case 11330v3: Complete ID Search - Multiple Domains

2.5.6.1 References
ITI TF-2: 3.21B

2.5.6.2 Actors Tested
Patient Demographics Supplier

2.5.6.3 Description
Test case 11330v3 covers a complete ID search where the domain of interest is different from the Patient ID Domain associated with Receiving Application.
The PD Consumer sends a query:

- id/value/@extension = 100 @root = 1.2.3.4.5.1000
- otherIDsScopingOrganization/value/@root = 1.2.3.4.5.1000

2.5.6.4 Instructions
A find candidates query will be sent to your pd supplier.

2.5.7 Test Case 11335v3: Partial ID Search - Single Domain

2.5.7.1 References
ITI TF-2: 3.21B

2.5.7.2 Actors Tested
Patient Demographics Supplier

2.5.7.3 Description
Test case 11335v3 covers a partial ID search within a single domain that is specified by the PD Consumer.
The MESA PD Consumer sends a Patient Demographics Query that includes a partial Patient ID:

- id/value/@extension = 100*
- otherIDsScopingOrganization/value/@root = 1.2.3.4.5.1000

2.5.7.4 Instructions
A find candidates query will be sent to your pd supplier.

2.5.8 Test Case 11340v3: Date of Birth Search

2.5.8.1 References
ITI TF-2: 3.21B

2.5.8.2 Actors Tested
Patient Demographics Supplier

2.5.8.3 Description
Test case 11340V3 covers a Date of Birth search.
The PD test Consumer sends a Patient Demographics Query that include an exact Date of Birth.

- birthTime/value/@value = 19840711

2.5.8.4 Instructions
A find candidates query will be sent to your pd supplier.

2.5.9 TEST CASE 11350v3: MULTI KEY SEARCH 1

2.5.9.1 REFERENCES
ITI TF-2: 3.21B

2.5.9.2 ACTORS TESTED
Patient Demographics Supplier

2.5.9.3 DESCRIPTION
In test 11350v3, a Patient Demographics Consumer is required to send a search using two search keys, patient name and date of birth.
The MESA PD Consumer sends a Patient Demographics Query that includes a patient name and patient date of birth.

- name/family = MOORE
- birthTime = 19840711

2.5.9.4 INSTRUCTIONS
A find candidates query will be sent to your pd supplier.

2.5.10 TEST CASE 11365v3: CONTINUATION TEST 1

2.5.10.1 REFERENCES
ITI TF-2: 3.21B

2.5.10.2 ACTORS TESTED
Patient Demographics Supplier

2.5.10.3 DESCRIPTION
Test 11365v3 is a test of the HL7 Continuation Protocol. In this test, a Patient Demographics Consumer needs to configure their request with a specific limit and successfully process the response from the PD Supplier.

- name/value/family = MOO*

2.5.10.4 INSTRUCTIONS
A find candidates query will be sent to your pd supplier followed three continuation query.

3 Patient Demographics Supplier Data

In order to test the pd supplier record need to be loaded, you can use the patient_records element listed in Pd supplier test case if your pd supplier can accept new patient message or load the following patient.

```xml
<patient classCode="PAT">
   <id assigningAuthorityName="domain1" extension="100" root="1.2.3.4.5.1000"/>
   <addr>
      <city partType="CTY" representation="TXT" mediaType="text/plain">
         Montreal
      </city>
   </addr>
   <statusCode code="active"/>
   <patientPerson classCode="PSN" determinerCode="INSTANCE">
      <name use="L">
         <given>CHIP</given>
         <family>MOORE</family>
      </name>
      <administrativeGenderCode code="M"/>
      <birthTime value="19840711"/>
   </patientPerson>
   <providerOrganization>
      <id root="1.2.3.4.5.3000"/>
      <contactParty/>
   </providerOrganization>
</patient>
```

```xml
<patient classCode="PAT">
   <id assigningAuthorityName="domain1" extension="101" root="1.2.3.4.5.1000"/>
   <addr>
      <city partType="CTY" representation="TXT" mediaType="text/plain">
         Montreal
      </city>
   </addr>
   <statusCode code="active"/>
   <patientPerson classCode="PSN" determinerCode="INSTANCE">
      <name use="L">
         <given>JOHN</given>
         <family>MOO</family>
      </name>
      <administrativeGenderCode code="M"/>
      <birthTime value="19840712"/>
   </patientPerson>
   <providerOrganization>
      <id root="1.2.3.4.5.3000"/>
      <contactParty/>
   </providerOrganization>
</patient>
```

```xml
<patient classCode="PAT">
   <id assigningAuthorityName="domain1" extension="102" root="1.2.3.4.5.1000"/>
   <addr>
      <city partType="CTY" representation="TXT" mediaType="text/plain">
         Montreal
      </city>
   </addr>
   <statusCode code="active"/>
   <patientPerson classCode="PSN" determinerCode="INSTANCE">
      <name use="L">
         <given>CHARLE</given>
         <family>MOORE</family>
      </name>
      <administrativeGenderCode code="M"/>
      <birthTime value="19840713"/>
   </patientPerson>
   <providerOrganization>
      <id root="1.2.3.4.5.3000"/>
      <contactParty/>
   </providerOrganization>
</patient>
```

```
<patient classCode="PAT">
   <id assigningAuthorityName="domain1" extension="103" root="1.2.3.4.5.1000"/>
   <addr>
      <city partType="CTY" representation="TXT" mediaType="text/plain">
         Montreal
      </city>
   </addr>
   <statusCode code="active"/>
   <patientPerson classCode="PSN" determinerCode="INSTANCE">
      <name use="L">
         <given>PETER</given>
         <family>MOORE</family>
      </name>
      <administrativeGenderCode code="M"/>
      <birthTime value="19840714"/>
   </patientPerson>
   <providerOrganization>
      <id root="1.2.3.4.5.3000"/>
      <contactParty/>
   </providerOrganization>
</patient>
```

```
<patient classCode="PAT">
   <id assigningAuthorityName="domain1" extension="104" root="1.2.3.4.5.2000"/>
   <addr>
      <city partType="CTY" representation="TXT" mediaType="text/plain">
         Montreal
      </city>
   </addr>
   <statusCode code="active"/>
   <patientPerson classCode="PSN" determinerCode="INSTANCE">
      <name use="L">
         <given>CARL</given>
         <family>SMITH</family>
      </name>
      <administrativeGenderCode code="M"/>
      <birthTime value="19840715"/>
   </patientPerson>
   <providerOrganization>
      <id root="1.2.3.4.5.3000"/>
      <contactParty/>
   </providerOrganization>
</patient>
```

```
<patient classCode="PAT">
   <id assigningAuthorityName="domain1" extension="1001" root="1.2.3.4.5.1000"/>
   <addr>
      <city partType="CTY" representation="TXT" mediaType="text/plain">
         Montreal
      </city>
   </addr>
   <statusCode code="active"/>
   <patientPerson classCode="PSN" determinerCode="INSTANCE">
      <name use="L">
         <given>JOHN</given>
         <family>LABBE</family>
      </name>
      <administrativeGenderCode code="M"/>
      <birthTime value="19840721"/>
   </patientPerson>
   <providerOrganization>
      <id root="1.2.3.4.5.3000"/>
      <contactParty/>
   </providerOrganization>
</patient>
```

```
<patient classCode="PAT">
   <id assigningAuthorityName="domain2" extension="100" root="1.2.3.4.5.2000"/>
   <addr>
      <city partType="CTY" representation="TXT" mediaType="text/plain">
         Montreal
      </city>
   </addr>
   <statusCode code="active"/>
   <patientPerson classCode="PSN" determinerCode="INSTANCE">
      <name use="L">
         <given>ALAN</given>
         <family>SIMPSON</family>
      </name>
      <administrativeGenderCode code="M"/>
      <birthTime value="19840717"/>
   </patientPerson>
   <providerOrganization>
      <id root="1.2.3.4.5.3000"/>
      <contactParty/>
   </providerOrganization>
</patient>
```