EvaluationWeb® PS Version 2.0 XML Records: Using Case Numbers Correctly

Background

EvaluationWeb® Partner Service (PS) Version 2.0 XML schema file uploads have two associated validation rules (among others) concerning how client roles and relationships are specified in a file record. These roles and relationships must be indicated correctly before the file can be committed to the EvaluationWeb database.

Validation Rules

The validation rules in question are:

- Client may not be named as both a partner and an index in the same case
- Client may not be named as a partner more than once in a single case

These rules validate how Index patients and Partners are connected in an XML record and in the EvaluationWeb database. The XML element that links clients is the case number, which is denoted as <**partnerServiceCaseNumber**>. We will subsequently refer to this number as 'case number.'

> **Warning**
> Using the **partnerServiceCaseNumber** incorrectly will:
> - Prevent your data from being committed to the database and submitted to CDC
> - Prevent your data from being included in CDC analyses for HIV prevention and management research.

Understanding How Case Number and Client ID Work

You may think of a person's case number and **localClientId** as being somewhat similar in function to a person's phone number and name.

Similar to a person's name, the **localClientId** in a record uniquely identifies a person as distinct from other individuals in the system.

- All clients have a **localClientId**
- A client's **localClientId** never changes.
- A 'record' corresponds to all information under one **localClientId**.

Similar to phone numbers, case numbers are used to establish contact and networks between clients.

- Every Index patient has a case number, and this number never changes.

- Since case numbers are used to connect clients, if you repeat a case number in a single record, you are connecting a client to him- or herself. When this happens, you will receive a validation error message, and you must correct the error before you can commit the file to the database. The messages you will receive, again, are:

  > "Client may not be named as both a Partner and an Index in the same case"
  > "Client may not be named as a Partner more than once in a single case"

A Common Cause of Case Number Validation Errors

In the day-to-day collection of PS data, you might gather an Index patient's demographics, risk information, etc., and also elicit the names of that Index patient's Partners. The result might be a paper or electronic record listing the Index patient and all of his or her Partners.

However, this format—an Index patient followed by a list of Partners—is not the structure that EvaluationWeb accepts for PS XML upload records. Instead, below are guidelines for two common scenarios:

Scenario 1
Grace is an Index patient who identifies Steve and Thomas as Partners

1. Create an XML record for Grace which has her case number.
2. Create an XML record for Steve.
3. Add Grace's case number **Steve's** record (in the 'partnerInformation' section—more on this later). This makes Steve a Partner to Grace.
4. Create an XML record for Thomas.
5. Add Grace's case number to Thomas's record (in the 'partnerInformation' section). This makes Thomas a Partner to Grace.

You have now correctly established the link between these clients—Steve is identified as a Partner to Grace in his record, and Thomas is identified as a Partner to Grace in his record.

> **Note**
>
> The possible network structures for Index patients and Partners are endless—a client could be a Partner to many Index patients, an Index patient could have many partners, etc. Therefore, the scenarios here are just two possibilities out of many.
>
> The important thing to remember is that EvaluationWeb does not accept an XML record in the form of "Index patient followed by a list of his or her partners."

Scenario 2
Martin and Alex are Index patients who identify Grace as a Partner.
1. Create an XML record for Martin which has his case number.
2. Create an XML record for Alex which has his case number.
3. Add Martin's and Alex's case numbers to Grace's record (in the partnerInformation section). This makes Grace a Partner to both Martin and Alex.

You have now correctly established the link between these clients—Grace is identified as a partner to Martin and Alex in her record.

Once your Partner Services data follow this structure, EvaluationWeb can upload your file, extract your data, and submit it to the database. More information on XML structure is given in the next section

Case Number Usage in XML

One or more case numbers may appear in a single XML record depending on how many role(s) a client has (Index, Partner or both) and how many Index patients the client is a Partner to.

Index-Only Client

This type of client has the role of Index patient, but partners have not been identified for the client.

Example - James

- James tested HIV positive and is being referred to Partner Services.
- Like all clients, his XML record has his unique **localClientId** (10000).
- His record also has an **indexPatientInformation** section (among other information).
- James was assigned the **partnerServiceCaseNumber** 100, which appears in the **indexPatientInformation** section.
- Since James is not a Partner to anyone, his record contains no **partnerInformation** section.
- The above information is seen here in James's partial XML record:

```
<client localClientId="10000" clientid_status="U" clientid_lastModifiedDate="04/03/2015">
      <collectedDateForClient>01/10/2012</collectedDateForClient>
      <birthYear>1979</birthYear>
      <ethnicity>E1</ethnicity>
      …
      <indexPatientInformation>
            <partnerServiceCaseNumber>100</partnerServiceCaseNumber>
            ….
```

- See Appendix A for James's expanded XML record.

Partner-Only Client

This type of client has the role of partner but is not him- or herself an Index patient. This kind of PS record can occur when a client is identified as a partner by an Index patient.

Example

- Rafael was named as a Partner by Mark.
- Like all clients, Rafael's XML record contains his unique **localClientId** (20000).
- His record also has a <**partnerInformation**> section (among other information) since he has the role of Partner.
- In Rafael's **partnerInformation** section, we list **Mark's** case number (200), connecting Raphael to Mark.
- Since Rafael is not an Index patient at this point, there is no <**indexPatientInformation**> section in his record.
- The above information is seen below in Rafael's partial XML record:

```
<client localClientId="20000" clientid_status="U" clientid_lastModifiedDate="04/03/2015">
        <collectedDateForClient>01/21/2012</collectedDateForClient>
        <birthYear>1987</birthYear>
        <ethnicity>E1</ethnicity>
        …
        <partnerInformation>
                <partner>
                        <partnerDateCollected>01/21/2012</partnerDateCollected>
                        <partnerServiceCaseNumber>200</partnerServiceCaseNumber>
```

- See Appendix B for Rafael's expanded XML record.

Dual Index and Partner Client

This type of client has the role of Index patient and at the same time is a Partner to one or more other Index patients.

Example

- Talia tested HIV positive and is being referred to Partner Services.

- Like all clients, her XML record has her unique **localClientId** (30000).

- Since she is an Index patient, her record has an **indexPatientInformation** section (among other information).

- Talia was assigned a **partnerServiceCaseNumber** (300), which appears in her **indexPatientInformation** section.

- Later during separate interviews, Talia was elicited as a Partner by both Javier and Miguel. Javier's case number is 400, and Miguel's is 500.

- Since Talia has been elicited as a Partner, her record has a <**partnerInformation**> section.

- We list Javier's and Miguel's case numbers in Talia's **partnerInformation** section, connecting Talia as a Partner to Javier and Mark.

- The above information is seen below in Talia's partial XML record:

```
<client localClientId="30000" clientid_status="U" clientid_lastModifiedDate="04/03/2015">
    <collectedDateForClient>03/15/2012</collectedDateForClient>
    <birthYear>1983</birthYear>
    <ethnicity>E1</ethnicity>
    …
    <indexPatientInformation>
            <partnerServiceCaseNumber>300</partnerServiceCaseNumber>
        …
    <partnerInformation>
        <partner>
            <partnerDateCollected>02/22/2012</partnerDateCollected>
            <partnerServiceCaseNumber>400</partnerServiceCaseNumber>
            …
        </partner>
        <partner>
            <partnerDateCollected>02/22/2012</partnerDateCollected>
            <partnerServiceCaseNumber>500</partnerServiceCaseNumber>
            …
        </partner>
        …
```

Special Case: Out-of Jurisdiction Partner

This type of client has the role of Partner, who has been identified by an Out-of-Jurisdiction (OOJ) Index patient.

Example

- Sam was identified as a Partner by Suzanne, an OOJ Index patient.

- Like all clients, Sam's XML record has his unique **localClientId** (40000).

- Since he is a partner, his record also has a **<partnerInformation>** section (among other information).

- In Sam's **partnerInformation** section, you may put a locally developed case number for Suzanne to indicate that Sam is a partner to an OOJ Index patient.

- Since Sam is not an Index patient at this point, there is no **<indexPatientInformation>** section in his record.

- The above information is seen below in Sam's partial XML record:

> **Note**
>
> Although you may put a locally developed case number in the partnerInformation section for an OOJ partner, this is not a requirement. EvaluationWeb will not generate a validation error message if this is left blank.

```
<client localClientId="40000" clientid_status="U" clientid_lastModifiedDate="04/03/2015">
        <collectedDateForClient>01/21/2012</collectedDateForClient>
        <birthYear>1981</birthYear>
        <ethnicity>E1</ethnicity>
        …
        <partnerInformation>
                <partner>
                        <partnerDateCollected>01/21/2012</partnerDateCollected>
                        <partnerServiceCaseNumber>OOJ1000</partnerServiceCaseNumber>
```

Tips to Avoid Case Number Validation Error Messages

- The same case number should never be repeated in a client record.
    - Multiple case numbers may appear in a record, but none should be repeated.
    - One case number can appear for a client as an Index patient.
    - Other case numbers appear each time the same client is being reported as a Partner to other Index patients.

- Use only one case number per index patient / partner relationship.
    - If you have subsequent interviews, phone calls, data collecting interactions, etc., with a client, you do not need a distinct case number for each encounter.

- Don't create a new case for a client with an existing closed case.
    - A closed case should be re-opened if needed to add new information or update the client's record.

> **Warning**
> A common error is putting the same case number more than once in a client's record—once in the indexPatientInformation and once or multiple times in the partnerInformation section. Avoid this, because, repeating a case number is essentially saying that the client is a Partner to him- or herself.

- When submitting an updated record, be sure to submit the full record, not just the updated information.
    - If you submit the updated information only, the previous information already saved in the database will be lost (that is to say, replaced with null values).

Appendix A

'James' - Index-Only Client Sample XML

```
<client localClientId="10000" clientid_status="U" clientid_lastModifiedDate="04/03/2015">
        <collectedDateForClient>01/10/2012</collectedDateForClient>
        <birthYear>1979</birthYear>
        <ethnicity>E1</ethnicity>
        <races>
                <race raceId="1">
                        <raceValueCode>R1</raceValueCode>
                </race>
        </races>
        <stateOfResidence>4</stateOfResidence>
        <birthGenderValueCode>1</birthGenderValueCode>
        <currentGenderValueCode>1</currentGenderValueCode>
        <clientRiskProfiles>
                <clientRiskProfile>
                        <dateCollectedForRiskProfile>01/01/2012</dateCollectedForRiskProfile>
                        <noClientRiskFactors>1</noClientRiskFactors>
                        <vaginalOrAnalSexInLast12Mnths>
                                <withMale>1</withMale>
                                <withFemale>1</withFemale>
                                <withTransgender>0</withTransgender>
                                <vaginalOrAnalSexWithoutCondomPS>1</vaginalOrAnalSexWithoutCon
                        domPS>
                                <vaginalOrAnalSexWithIDUPS>0</vaginalOrAnalSexWithIDUPS>
                        </vaginalOrAnalSexInLast12Mnths>
                        <injectionDrugUse>0</injectionDrugUse>
                        <shareDrugInjectionEquipment>0</shareDrugInjectionEquipment>
                </clientRiskProfile>
                <clientRiskProfile>
                        <dateCollectedForRiskProfile>01/01/2012</dateCollectedForRiskProfile>
                        <noClientRiskFactors>1</noClientRiskFactors>
                        <vaginalOrAnalSexInLast12Mnths>
                                <withMale>1</withMale>
                                <withFemale>1</withFemale>
                                <withTransgender>0</withTransgender>
                                <vaginalOrAnalSexWithoutCondomPS>1</vaginalOrAnalSexWithoutCon
                        domPS>
                                <vaginalOrAnalSexWithIDUPS>0</vaginalOrAnalSexWithIDUPS>
                        </vaginalOrAnalSexInLast12Mnths>
                        <injectionDrugUse>0</injectionDrugUse>
                        <shareDrugInjectionEquipment>0</shareDrugInjectionEquipment>
                </clientRiskProfile>

        </clientRiskProfiles>
        <indexPatientInformation>
```

James's localClientId is 10000.

There is an indexPatientInformation section, but no partnerInformation section since James is an Index-only client.

```
<partnerServiceCaseNumber>100</partnerServiceCaseNumber>
<localPartnerServiceId>0202</localPartnerServiceId>
<partnerServiceCases>
        <partnerServiceCase>
                <caseOpenDate>01/10/2012</caseOpenDate>
                <caseCloseDate>03/31/2012</caseCloseDate>
                <dateOfReport>01/10/2012</dateOfReport>
                <reportedToSurveillance>1</reportedToSurveillance>
        </partnerServiceCase>
        <partnerServiceCase>
                <caseOpenDate>01/05/2015</caseOpenDate>
        </partnerServiceCase>
</partnerServiceCases>
<attemptToLocate>
        <attemptToLocateOutcome>1</attemptToLocateOutcome>
        <reasonForUnsuccessfulAttempt>89</reasonForUnsuccessfulAttempt>
        <specifyReasonUnsuccessAttempt>No permanent
address</specifyReasonUnsuccessAttempt>
        <enrollmentStatus>1</enrollmentStatus>
</attemptToLocate>
<elicitPartner>
        <timePeriodForRecallInMonths>12</timePeriodForRecallInMonths>
        <totalNumberOfPartnersClaimed>1</totalNumberOfPartnersClaimed>
        <totalNumberOfNamedPartners>1</totalNumberOfNamedPartners>
        <totalNumberOfNamedMalePartners>1</totalNumberOfNamedMalePartners>
        <totalNumberOfNamedFemalePartners>0</totalNumberOfNamedFemalePartn
ers>
        <totalNumberOfTransgenderPartners>0</totalNumberOfTransgenderPartners>
</elicitPartner>
<sessions>
        <session>
                <interventionId>123456</interventionId>
                <sessionDate>01/10/2012</sessionDate>
                <siteId>17001</siteId>
        </session>
        <session>
                <interventionId>123456</interventionId>
                <sessionDate>02/02/2015</sessionDate>
                <siteId>17021</siteId>
        </session>
</sessions>
</indexPatientInformation>
</client>
```

James's case number is 100.

The jurisdiction has closed and re-opened this case repeatedly for adding new information as needed.

Appendix B

'Rafael' – Partner-Only Client Sample XML

```
<client localClientId="20000" clientid_status="U" clientid_lastModifiedDate="04/03/2015">
        <collectedDateForClient>01/21/2012</collectedDateForClient>
        <birthYear>1987</birthYear>
        <ethnicity>E1</ethnicity>
        <races>
                <race raceId="1">
                <raceValueCode>R1</raceValueCode>
                </race>
                <race raceId="2">
                <raceValueCode>R5</raceValueCode>
                </race>
        </races>
        <stateOfResidence>4</stateOfResidence>
        <birthGenderValueCode>2</birthGenderValueCode>
        <currentGenderValueCode>1</currentGenderValueCode>
        <clientRiskProfiles>
                <clientRiskProfile>
                        <dateCollectedForRiskProfile>01/21/2012</dateCollectedForRiskProfile>
                        <noClientRiskFactors>1</noClientRiskFactors>
                        <vaginalOrAnalSexInLast12Mnths>
                                <withMale>1</withMale>
                                <withFemale>0</withFemale>
                                <withTransgender>0</withTransgender>
                                <vaginalOrAnalSexWithoutCondomPS>1</
                                vaginalOrAnalSexWithoutCondomPS>
                                <vaginalOrAnalSexWithIDUPS>99</ vaginalOrAnalSexWithIDUPS>
                        </vaginalOrAnalSexInLast12Mnths>
                        <injectionDrugUse>0</injectionDrugUse>
                        <shareDrugInjectionEquipment/>
                </clientRiskProfile>
                <clientRiskProfile>
                        <dateCollectedForRiskProfile>01/05/2015</dateCollectedForRiskProfile>
                        <noClientRiskFactors>1</noClientRiskFactors>
                        <vaginalOrAnalSexInLast12Mnths>
                                <withMale>0</withMale>
                                <withFemale>0</withFemale>
                                <withTransgender>0</withTransgender>
                                <vaginalOrAnalSexWithoutCondomPS>0</
                                vaginalOrAnalSexWithoutCondomPS>
                                <vaginalOrAnalSexWithIDUPS>1</ vaginalOrAnalSexWithIDUPS>
                        </vaginalOrAnalSexInLast12Mnths>
                        <injectionDrugUse>1</injectionDrugUse>
```

Rafael's localClientId is 20000.

```
                              <shareDrugInjectionEquipment>1</shareDrugInjectionEquipment>
                </clientRiskProfile>
          </clientRiskProfiles>
          <partnerInformation>
                <partner>
                <partnerDateCollected>01/21/2012</partnerDateCollected>
                <partnerServiceCaseNumber>200</partnerServiceCaseNumber>
                <localPartnerServiceId>12</localPartnerServiceId>
                <partnerType>03</partnerType>
                <notificationPlan>02</notificationPlan>
                <exposureNotifications>
                        <exposureNotification>
                                <partnerNotifiability>6</partnerNotifiability>
                                <actualNotificationMethod>2</actualNotificationMethod>
                                <previousHIVTest>0</previousHIVTest>
                                <dateOfLastHIVTest>01/01/1800</dateOfLastHIVTest>
                        </exposureNotification>
                </exposureNotifications>
                <referrals>
                        <referral>
                                <referralDate>01/21/2012</referralDate>
                                <referredToHIVTesting>1</referredToHIVTesting>
                                <referredToMedicalCare>1</referredToMedicalCare>
                                <firstMedicalCareAppointment>01</firstMedicalCareAppointm
                                ent>
                                <HIVTestPerformed>1</HIVTestPerformed>
                                        <HIVTestResult>1</HIVTestResult>
                                        <HIVTestResultsProvided>1</ HIVTestResultsProvided>
                        </referral>
                </referrals>
                <sessions>
                        <session>
                                <interventionId>123456</interventionId>
                                <sessionDate>01/21/2012</sessionDate>
                                <siteId>17021</siteId>
                        </session>
                        <session>
                                <interventionId>123456</interventionId>
                                <sessionDate>01/05/2015</sessionDate>
                                <siteId>17021</siteId>
                        </session>
                </sessions>
                </partner>
          </partnerInformation>
    </client>
```

There is a partnerInformation section, but no indexPatientInformation section since Rafael is a Partner-only client.

In the partnerInformation section, we indicate that Raphael is a Partner to Mark by listing Mark's case number (200).

Multiple sessions are listed in the same record. You do not need to open a new case to add new sessions.