# Acquired Immune Deficiency Syndrome (AIDS) Drug Assistance Program (ADAP) Data Reports (ADR)

# XML Schema Implementation Guide Version 2.4

November 15, 2017



Health Resources and Services Administration 5600 Fishers Lane Rockville, MD 20857

## **Document Version History**

| Version | Date       | Description   |
|---------|------------|---|
| 1.0     | 6/23/2014  | ADR 3.0 Release   |
| 1.1     | 12/12/2014 | Revised to indicate whether data elements are required, to match the XML schema, and to update fields, as necessary.  |
| 1.2     | 12/16/2014 | Added the document version number.  |
| 2.0     | 2/23/2016  | The following updates were addressed in this version:  Removed the following tables since these elements were removed during the ADR 3.0 release: ReportPeriodId ADAPNumber MedicationDispensingFeeFlag MedicationDispensingFeeAmount  Changed the maximum allowed value for Medication Cost (item 29) from 20,000 to 100,000.  Changed the document title to "ADR XML Schema Implementation Guide Release 4.0".  Applied updates to the URLs in Appendix A – Resources.  Applied updates to meet HRSA guidelines for document to be 508-compliant. |
| 2.1     | 4/20/2016  | Removed blank pages from document.  |
| 2.2     | 5/13/2016  | <ul> <li>The following updates were address in this version:</li> <li>Changed the allowed values text for recertification date (item 17).</li> <li>Removed the text "as required by program" from option 5 for DisenrollmentReasonId (Item 19), which now reads as "Did not fill prescription".</li> </ul>  |
| 2.3     | 4/28/2017  | Revised the response descriptions for DisenrollmentReasonId to match the ADR Instruction Manual.  |
| 2.4     | 9/22/2017  | The following updates were address in this version:  Update ADR Schema version number  Remove TransgenderID element  Update GenderID element to include 3 new transgender code and remove transgender code  |

## **Table of Contents**

| 1 | INTRODU            | CTION   | . 1 |
|---|--------------------|---|-----|
|   |                    | se<br>nce   |     |
|   | 1.3 Structu        | ure of This Document                                    | . 1 |
| 2 | OVERVIE            | W OF THE ADR CLIENT-LEVEL DATA XML FILE                 | . 2 |
|   | 2.1 Main 0         | Components of the Client-Level Data XML File            | . 2 |
|   | 2.1.1              | File Header   |     |
|   | 2.1.2              | Root Element  | . 2 |
|   | 2.1.3              | Body Elements   | . 3 |
| 3 | ADR CLIE           | NT-LEVEL XML DATA ELEMENTS                              | . 4 |
|   | 3.1 Compl          | lex Elements  | . 5 |
|   | 3.1.1              | AdrClientReportXmlVersion                               | . 5 |
|   | 3.1.2              | AdrClientReport   | . 5 |
|   | 3.1.3              | AdrClientReportRace                                     | . 5 |
|   | 3.1.4              | AdrClientReportMedicalInsurance                         | . 6 |
|   | 3.1.5              | AdrClientReportDisenrollmentReason                      | . 6 |
|   | 3.1.6              | AdrClientReportMedication                               | . 6 |
|   | 3.2 Simple         | e Elements  |     |
|   | 3.2.1              | XML Schema Version Elements                             |     |
|   | 3.2.1.1            | AdrSchemaVersion  |     |
|   | 3.2.1.2<br>3.2.1.3 | Vendor VendorVersionNumber                              |     |
|   | 3.2.1.4            | VendorTechnicalContactName                              |     |
|   | 3.2.1.5            | VendorTechnicalContactEmail                             |     |
|   |                    | VendorTechnicalContactPhone                             |     |
|   | 3.2.2<br>3.2.2.1   | ClientUci   |     |
|   | 3.2.3              | Client Demographics Elements                            |     |
|   | 3.2.3.1            | EthnicityId   |     |
|   | 3.2.3.2            | Raceld  |     |
|   | 3.2.3.3            | AdrClientReportHispanicSubgroup                         |     |
|   | 3.2.3.4<br>3.2.3.5 | AdrClientReportAsianSubgroupAdrClientReportNhpiSubgroup |     |
|   | 3.2.3.6            | Genderld  |     |
|   | 3.2.3.7            | TransgenderId   | 12  |

|      | 3.2.3.8   | SexAtBirthId  | .12 |
|------|-----------|---|-----|
|      | 3.2.3.9   | BirthYear   | .12 |
|      | 3.2.3.10  | HivAidsStatusId   | .13 |
|      |           | PovertyLevelld  |     |
|      |           | HighRiskInsuranceId   |     |
|      | 3.2.3.13  | MedicalInsuranceId  | .14 |
|      | 3.2.4     | Enrollment and Certification Elements                             |     |
|      | 3.2.4.1   | NewEnrollmentFlag   |     |
|      | 3.2.4.2   | ApplicationReceivedDate   |     |
|      | 3.2.4.3   | ApplicationApprovalDate   |     |
|      | 3.2.4.4   | RecertificationDate   |     |
|      | 3.2.4.5   | EnrollmentStatusId  |     |
|      | 3.2.4.6   | DisenrollmentReasonId   |     |
|      | 3.2.5     | Insurance Services Elements                                       |     |
|      | 3.2.5.1   | InsuranceAssistanceReceivedFlag                                   |     |
|      | 3.2.5.2   | InsuranceAssistanceType   |     |
|      | 3.2.5.3   | InsurancePremiumAmount  |     |
|      | 3.2.5.4   | InsurancePremiumMonthCount  |     |
|      | 3.2.5.5   | InsuranceDeductibleAndCopayAmount                                 |     |
|      | 3.2.6     | Drug and Drug Expenditure Elements                                |     |
|      | 3.2.6.1   | MedicationsDispensedFlag  |     |
|      | 3.2.6.2   | MedicationId  |     |
|      | 3.2.6.3   | MedicationStartDate   |     |
|      | 3.2.6.4   | MedicationDays  |     |
|      | 3.2.6.5   | MedicationCost  |     |
|      | 3.2.7     | Clinical Elements   |     |
|      | 3.2.7.1   | LastCd4Date   |     |
|      | 3.2.7.2   | LastCd4Count  |     |
|      | 3.2.7.3   | LastViralLoadDate   |     |
|      | 3.2.7.4   | LastViralLoadCount  | .22 |
| ₽ Al | DR CLIE   | NT-LEVEL DATA XML FILE FORMAT                                     | 22  |
| 4.   | 1 Validat | ion Checks to Pass before File Is Accepted by ADR Web Application | 22  |
| 4.   | 2 Sample  | e XML File Format – Collapsed                                     | 23  |
| 4.   | 3 Sample  | e XML File Format – Expanded                                      | 24  |
|      |           | : RESOURCES   |     |
|      |           | lient XML Schema Definition Files                                 |     |
|      |           | (XML Generator)   |     |
|      |           | ET Center Website   |     |
|      |           |   |     |
| ٩PP  | ENDIX B   | : ACRONYMS  | 29  |

#### 1 Introduction

Grantees must submit Acquired Immune Deficiency Syndrome (AIDS) Drug Assistance Program (ADAP) Data Reports (ADR) to the Health Resources Services Administration's (HRSA) Human Immunodeficiency Virus (HIV)/AIDS Bureau (HAB) annually. To submit the ADR successfully, each grantee must complete the online section of the grantee report and create and upload one or more Extensible Markup Language (XML) files containing client-level data. The structure, sequence, values, and format of the data elements must conform to the definitions specified in this document. The client-level data XML file must then be uploaded to the ADR web application, where it is validated for conformance to the data schema and business rules. For instructions on how to upload the ADR client-level data XML files to the ADR web application, please see the ADR Instruction Manual available on the TARGET website (ADR Instruction Manual).

## 1.1 Purpose

The purpose of this document is to provide reference information to grantees on the allowable structure, sequence, values, and format of the ADR client-level data XML files. Grantees may use this information to be better prepared when they create their own applications and/or processes to extract the appropriate data from their data sources and convert it to the required XML format. All ADR client-level data XML files must conform to the definitions in this document.

The goal of this document is to help grantees reduce and/or avoid errors that may result when they generate and submit client-level data XML files to the ADR web application. This document includes data definitions that describe the meaning of each element in the ADR client-level data XML files. In addition, this document describes the required format of the XML file, provides examples of XML files, and includes references to the XML schema definitions that are used to validate the XML file. For grantees that are using the same application for submitting their Ryan White Services Report, the coding for similar data element values (such as demographics) for the ADR are consistent.

#### 1.2 Audience

This document is intended for ADAP technical and/or administrative staff that must collect and report ADR client-level data elements in an XML file format to HRSA's HAB. Staff may include developers, data quality specialists, ADAP Administrators, or other individuals who are responsible for generating and submitting the ADR.

#### 1.3 Structure of This Document

This document contains the following sections:

• Section 1: Introduction describes the purpose of the XML Schema Implementation Guide.

- Section 2: Overview of the ADR Client-Level Data XML File describes the main components of the ADR client-level data XML file.
- Section 3: ADR Client-Level Data Elements defines the individual client-level data elements required in the XML file.
- Section 4: ADR Client-Level Data XML File Format provides the the validation checks
  that the XML file must pass before the file Is accepted by the ADR web application as well
  as sample XML files.
- Appendix A: Resources contains a list of available resources, including the ADR client-level data XML schema definitions, sample XML files, and an ADR client-level data XML generation tool.
- Appendix B: Acronyms contains a list of acronyms used in this document and their definitions.

#### 2 Overview of the ADR Client-Level Data XML File

As mentioned in the introduction, grantees must submit ADR client-level data to the ADR web application on an annual basis. The required file format for submitting the ADR report is XML. XML is a structured document standard for defining a file format, as well as for specifying allowed data element values, data element sequence, and the number of occurrences for data elements. XML is a platform-independent language that simplifies the process of exchanging data in a standardized way over the Internet between different applications.

## 2.1 Main Components of the Client-Level Data XML File

The ADR client-level data XML file consists of three components:

- 1) File Header.
- 2) Root Element.
- 3) Body Elements.

Body elements consist of both complex and simple data elements.

#### 2.1.1 File Header

The file header is simply the first line of text in the XML file. It is static text and does not change. This first line of text contains the XML declaration—that is, the version of XML is being used, as well as what encoding method is being used. The following is an example of a File Header:

<?xml version="1.0" encoding="UTF-8"?>

#### 2.1.2 Root Element

The Root Element consists of static text and does not change. A Root Element is required for every XML file, and it serves as "the parent" of all the other elements. For the ADR client-level data XML file, the Root Element is <CLD:ROOT>, and it appears as follows:

<CLD:ROOT xsi:schemaLocation="urn:adrNamespace AdrClientSchema.xsd"</pre>

```
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xmlns:CLD="urn:adrNamespace">
```

In this example, CLD stands for "Client-Level Data." In addition, the <CLD:ROOT> element contains extra information—called "attributes"—about the file. Each of the attributes has a name and value. The definitions of each attribute is contained in Table 1.

**Table 1 - XML Attribute Definitions** 

| Attribute Name     | Definition   |
|--------------------|--|
| xsi:schemaLocation | The location of the XML schema definition file used to validate the client-level |
|                    | data XML file.   |
| xmlns:xsi          | The location of the XML schema instance used to determine the base XML           |
|                    | schema standards.  |
| xmlns:CLD          | The XML schema namespace used for custom definitions within the XML file.        |

#### 2.1.3 Body Elements

The body of the ADR client-level data XML file contains all the elements under the Root Element. In the following sample, the top-level elements under the <CLD:ROOT> element have been collapsed (i.e., their child elements have been hidden) to keep the code sample short.

```
<?xml version="1.0" encoding="UTF-8"?>
<CLD:ROOT xsi:schemaLocation="urn:adrNamespace AdrClientSchema.xsd" ♂
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xmlns:CLD="urn:adrNamespace">
   <AdrClientReportXmlVersion>
   <AdrClientReport>
   <AdrClientReportRace>
     </AdrClientReportRace>
     <AdrClientReportHispanicSubgroup>
     </AdrClientReportHispanicSubgroup>
   <AdrClientReportAsianSubgroup>
     </AdrClientReportAsianSubgroup>
     <AdrClientReportNhpiSubgroup>
     </AdrClientReportNhpiSubgroup>
   <AdrClientReportMedicalInsurance>
     </AdrClientReportMedicalInsurance>
   <AdrClientReportDisenrollmentReason>
     </AdrClientReportDisenrollmentReason>
   <AdrClientReportMedication>
   <Medication>
   </Medication>
     </AdrClientReportMedication>
   </AdrClientReport>
```

```
</CLD:ROOT>
```

The body contains "simple" and "complex" elements. In XML, "simple" elements do not contain any "child" elements while "complex" elements are elements that contain other "child" elements.

The example below shows the format for a complex element.

The <ComplexElement> element is "complex" because it contains other elements, whereas the <SimpleElement1> and <SimpleElement2> elements are "simple" elements because they do not contain other elements.

In the ADR client-level data XML file, the complex data elements must appear in a specific order and contain simple data elements in order to pass the validation check.

Likewise, the simple data elements must appear in a specific order, and the data they contain must conform to the specific rules defined in this data dictionary document to pass the validation check.

For more information about the other validation checks that the file must pass, please see Section 4: ADR Client-Level Data XML File Format.

## 3 ADR Client-Level XML Data Elements

This section includes definitions for all the data elements (both complex and simple) in the body of the ADR client-level data XML file. The definitions are presented in tables, and each table includes one or more of the following metadata:

- **Id** Indicates the data element's unique identifier and is used consistently across all public ADR documents.
- Variable Name Indicates the name of the complex element.
- **Element Name** Indicates the name of the element in the XML file.
- Parent Element Indicates the name of the parent element.
- **Definition** Gives a description of what the element means and/or for what it is used.
- **Required** Indicates whether or not a value must be provided for the element when submitting the ADR. Some elements are optional and do not need values.
- Occurrence Indicates how many times the element can occur in the file.
- **Allowed Values** Describes the values that can be used, cannot be used, or must be used for a given element.
- **Schema** Depicts the XML format for the element.

Empty or "null" data element tags are not permitted in the XML file. For example, data elements of the form <tag></tag> or <tag /> are not allowed.

## 3.1 Complex Elements

The complex elements in the ADR client-level data XML file are listed and described in the following sub-sections. These elements are the containers for all the simple elements defined in Section 3.2: Simple Elements. Each complex element, except for AdrClientReportXmlVersion contains a required attribute, CLD\_ID, that indicates the relationship between each complex element. For example, complex elements with a value of "1" for the CLD\_ID indicate that this set of complex elements all belong to the same client.

## 3.1.1 AdrClientReportXmlVersion

| Field          | Description   |
|----------------|---|
| ld             | Not applicable  |
| Variable Name  | AdrClientReportXmlVersion   |
| Definition     | Complex data element containing information about which version of the ADR XML schema is being used and which version of the vendor's application is being used to generate the ADR XML file. It includes data such as the schema version, vendor name, vendor application version, vendor phone number, etc. |
| Required       | Yes   |
| Occurrence     | 1 per file  |
| Allowed Values | Not applicable  |
| Schema         | <adrclientreportxmlversion> </adrclientreportxmlversion>  |

## 3.1.2 AdrClientReport

| Field          | Description  |
|----------------|--|
| ld             | Not applicable   |
| Variable Name  | AdrClientReport  |
| Definition     | Complex data element containing non-repeating client information, such as the client's unique identifier, birth year, etc. |
| Required       | Yes  |
| Occurrence     | 1 per client   |
| Allowed Values | Not applicable   |
| Schema         | <adrclientreport></adrclientreport>  |
|                |  |

## 3.1.3 AdrClientReportRace

| Field         | Description  |
|---------------|--|
| ld            | Not applicable   |
| Variable Name | AdrClientReportRace  |
| Definition    | Complex data element containing race Ids. Allows multiple race Ids to be reported. |
| Required      | Yes  |
| Occurrence    | 1 per client   |

| Field          | Description                                 |
|----------------|---|
| Allowed Values | Not applicable                              |
| Schema         | <adrclientreportrace></adrclientreportrace> |
|                |   |

## 3.1.4 AdrClientReportMedicalInsurance

| Field          | Description  |
|----------------|--|
| ld             | Not applicable   |
| Variable Name  | AdrClientReportMedicalInsurance  |
| Definition     | Complex data element containing medical insurance lds. Allows multiple medical insurance lds to be reported. |
| Required       | Yes  |
| Occurrence     | 1 per client   |
| Allowed Values | Not applicable   |
| Schema         | <adrclientreportmedicalinsurance> </adrclientreportmedicalinsurance>   |

## 3.1.5 AdrClientReportDisenrollmentReason

| Field                 | Description  |
|-----------------------|--|
| ld                    | Not applicable   |
| Variable Name         | AdrClientReportDisenrollmentReason   |
| Definition            | Complex data element containing reasons for why disenrollment is being reported. |
| Required              | Yes, only if DisenrollmentReasonId is true                                       |
| Occurrence            | 0 to 1 per client  |
| <b>Allowed Values</b> | Not applicable   |
| Schema                | <adrclientreportdisenrollmentreason></adrclientreportdisenrollmentreason>        |
|                       |  |

## 3.1.6 AdrClientReportMedication

| Field          | Description   |
|----------------|---|
| ld             | Not applicable  |
| Variable Name  | AdrClientReportMedication   |
| Definition     | Complex data element containing medication information, such as medication Id, start date, cost, etc. |
| Required       | Yes, only if MedicationsDispensedFlag is true   |
| Occurrence     | 0 to N per client   |
| Allowed Values | Not applicable  |
| Schema         | <adrclientreportmedication></adrclientreportmedication>   |
|                |   |

## 3.2 Simple Elements

The simple data elements are categorized under the following seven logical "groupings" or subsections:

- XML Schema Version Elements
- System Variables Elements
- Demographic Elements
- Enrollment and Certification Elements
- Insurance Services Elements
- Drug and Drug Expenditure Elements
- Clinical Elements

The purpose of these sub-sections or groupings is to further organize the elements to make them easier to find in the dictionary as well as the XML file.

**Important:** Some of the data elements are not required. If no data for a particular client is being provided for an element, then remove that element entirely from the client's record (i.e., remove the data element's start tag, end tag, and value.)

#### 3.2.1 XML Schema Version Elements

The following XML Schema Version elements are designed to capture data about which version of the ADR XML schema is being used.

#### 3.2.1.1 AdrSchemaVersion (Revised)

| Field          | Description                                     |
|----------------|---|
| ld             | XV1   |
| Element Name   | AdrSchemaVersion                                |
| Parent Element | AdrClientReportXmlVersion                       |
| Definition     | The currently supported ADR XML schema version. |
| Allowed Values | 3.0.0   |
| Required       | Yes   |
| Occurrence     | 1 per file                                      |
| Schema         | <adrschemaversion>3.0.0</adrschemaversion>      |

#### 3.2.1.2 **Vendor**

| Field               | Description  |
|---------------------|--|
| ld                  | XV2  |
| <b>Element Name</b> | Vendor   |
| Parent Element      | AdrClientReportXmlVersion  |
| Definition          | The name of your application that is used to generate the ADR XML file.      |
| Allowed Values      | Text from 1 to 150 characters excluding special characters, such as < and >. |
| Required            | Yes  |
| Occurrence          | 1 per file   |

| Field  | Description             |
|--------|-------------------------|
| Schema | <vendor>Rx-REX</vendor> |

#### 3.2.1.3 VendorVersionNumber

| Field          | Description  |
|----------------|--|
| ld             | XV3  |
| Element Name   | VendorVersionNumber  |
| Parent Element | AdrClientReportXmlVersion  |
| Definition     | The version of your application that is used to generate the ADR XML file.   |
| Allowed Values | Text from 1 to 150 characters excluding special characters, such as < and >. |
| Required       | Yes  |
| Occurrence     | 1 per file   |
| Schema         | <pre><vendorversionnumber>1.0.2.0</vendorversionnumber></pre>                |

#### 3.2.1.4 VendorTechnicalContactName

| Field          | Description   |
|----------------|---|
| ld             | XV4   |
| Element Name   | VendorTechnicalContactName  |
| Parent Element | AdrClientReportXmlVersion   |
| Definition     | The name of the technical contact responsible for maintaining your application that is used to generate the ADR XML file. |
| Allowed Values | Text from 1 to 150 characters excluding special characters, such as, < and >.   |
| Required       | Yes   |
| Occurrence     | 1 per file  |
| Schema         | <pre><vendortechnicalcontactname>John, Doe</vendortechnicalcontactname></pre>   |

#### 3.2.1.5 VendorTechnicalContactEmail

| Field               | Description  |
|---------------------|--|
| ld                  | XV5  |
| <b>Element Name</b> | VendorTechnicalContactEmail  |
| Parent Element      | AdrClientReportXmlVersion  |
| Definition          | The email address of the technical contact responsible for maintaining your application that is used to generate the ADR XML file. |
| Allowed Values      | The technical contact email address must be a valid email address no greater than 150 characters in length.                        |
| Required            | Yes  |
| Occurrence          | 1 per file   |
| Schema              | <pre><vendortechnicalcontactemail>JohnDoe@Somewhere.com</vendortechnicalcontactemail></pre>  |

#### 3.2.1.6 VendorTechnicalContactPhone

| Field | Description |
|-------|-------------|
| ld    | XV6         |

| Field          | Description  |
|----------------|--|
| Element Name   | VendorTechnicalContactPhone  |
| Parent Element | AdrClientReportXmlVersion  |
| Definition     | The telephone number of the technical contact responsible for maintaining your application that is used to generate the ADR XML file.            |
| Allowed Values | Must be a valid telephone number in the format 999,999,9999 [x99999], where the extension is optional, but there must be a space before the "x". |
| Required       | Yes  |
| Occurrence     | 1 per file   |
| Schema         | <pre><vendortechnicalcontactphone>123,456,789</vendortechnicalcontactphone></pre>  |

## 3.2.2 System Variables Elements

The following System Variables XML elements are designed to capture unique identifying information for each client.

#### 3.2.2.1 ClientUci

| Field               | Description  |
|---------------------|--|
| ld                  | 2  |
| <b>Element Name</b> | ClientUci  |
| Parent Element      | AdrClientReport  |
| Definition          | The encrypted, unique client identifier generated by the HAB UCI generation utilities.   |
| Allowed Values      | A 40-character upper-cased, hexadecimal string plus a single character in the range A-Z. |
| Required            | Yes  |
| Occurrence          | 1 per client   |
| Schema              | <clientuci>AEC5C1142DE217CD1FA5CBEDB99ED2E265E8E4F8U</clientuci>                         |

## 3.2.3 Client Demographics Elements

The following Clinical Demographics XML elements are designed to capture data about the socio-demographic characteristics of all clients enrolled in the ADAP, whether or not they received services.

#### 3.2.3.1 EthnicityId

| Field                 | Description  |
|-----------------------|--|
| ld                    | 4  |
| <b>Element Name</b>   | EthnicityId  |
| Parent Element        | AdrClientReport  |
| Definition            | The client's ethnicity.                                    |
| <b>Allowed Values</b> | A valid ethnicity identifier from the EthnicityLkup table: |
|                       | 1 = Hispanic   |
|                       | 2 = Non-Hispanic   |
| Required              | No   |

| Field      | Description                  |
|------------|------------------------------|
| Occurrence | 1 per client                 |
| Schema     | <ethnicityid>2</ethnicityid> |

#### 3.2.3.2 Raceld

| Field               | Description  |
|---------------------|--|
| ld                  | 5  |
| <b>Element Name</b> | Raceld   |
| Parent Element      | AdrClientReportRace  |
| Definition          | The client's race.   |
| Allowed Values      | A valid race identifier from the RaceLkup table:  1 = White  2 = Black or African American  3 = Asian  4 = Native Hawaiian/Pacific Islander  5 = American Indian or Alaskan Native |
| Required            | Yes  |
| Occurrence          | 1 to 5 per client  |
| Schema              | <raceid>1</raceid>   |

## 3.2.3.3 AdrClientReportHispanicSubgroup

| Field               | Description  |
|---------------------|--|
| ld                  | 68   |
| <b>Element Name</b> | AdrClientReportHispanicSubgroup  |
| Parent Element      | AdrClientReport  |
| Definition          | Value indicating the client's Hispanic/Latino breakdown.   |
| Allowed Values      | A valid Hispanic Subgroup identifier from the HispanicSubgroupLkup table:  1 = Mexican, Mexican American, or Chicano/a  2 = Puerto Rican  3 = Cuban  4 = Another Hispanic, Latino/a, or Spanish origin |
| Required            | Yes, only if the client's Ethnicity Id is Hispanic   |
| Occurrence          | 1 – 4 per client   |
| Schema              | <pre><adrclientreporthispanicsubgroup>     <subgroupid>3</subgroupid>     <subgroupid>1</subgroupid> </adrclientreporthispanicsubgroup></pre>  |

## 3.2.3.4 AdrClientReportAsianSubgroup

| Field               | Description   |
|---------------------|---|
| ld                  | 69  |
| <b>Element Name</b> | AdrClientReportAsianSubgroup  |
| Parent Element      | AdrClientReport   |
| Definition          | Value indicating the client's Asian breakdown.                      |
| Allowed Values      | A valid Asian Subgroup identifier from the AsianSubgroupLkup table: |

| Field      | Description   |
|------------|---|
|            | 1 = Asian Indian  |
|            | 2 = Chinese   |
|            | 3 = Filipino  |
|            | 4 = Japanese  |
|            | 5 = Korean  |
|            | 6 = Vietnamese  |
|            | 7 = Other Asian   |
| Required   | Yes, only if the client's Raceld is Asian                     |
| Occurrence | 1 – 7 per client  |
| Schema     | <adrclientreportasiansubgroup></adrclientreportasiansubgroup> |
|            | <subgroupid>3</subgroupid>                                    |
|            | <subgroupid>1</subgroupid>                                    |
|            |   |

## 3.2.3.5 AdrClientReportNhpiSubgroup

| Field          | Description   |
|----------------|---|
| ld             | 70  |
| Element Name   | AdrClientReportNhpiSubgroup   |
| Parent Element | AdrClientReport   |
| Definition     | Value indicating the client's Native Hawaiian or Pacific Islander breakdown.  |
| Allowed Values | A valid NHPI Subgroup identifier from the NhpiSubgroupLkup table:  1 = Native Hawaiian  2 = Guamanian or Chamorro  3 = Samoan  4 = Other Pacific Islander |
| Required       | Yes, only if the client's Raceld is Native Hawaiian/Pacific Islander  |
| Occurrence     | 1 – 4 per client  |
| Schema         | <adrclientreportnhpisubgroup> <subgroupid>4</subgroupid> <subgroupid>1</subgroupid> </adrclientreportnhpisubgroup>  |

## 3.2.3.6 Genderld (Revised)

| Field               | Description   |
|---------------------|---|
| ld                  | 6   |
| <b>Element Name</b> | Genderld  |
| Parent Element      | AdrClientReport   |
| Definition          | The client's gender.  |
|                     | This is the variable that is used for the encrypted unique client identifier (eUCI).  |
|                     | Note: Although value 3 (Transgender) is no longer an acceptable value, the eUCI encryption algorithm remains unchanged and only accepts value 3 for Transgender. The eUCI generator will map value 6 (Transgender Male to Female), 7 (Transgender Female to Male), and 8 (Transgender Other) to 3 (Transgender) when generating eUCI. Refer to page 3 of the eUCI Application |

| Field          | Description  |
|----------------|--|
|                | User Guide for additional details.   |
| Allowed Values | A valid gender identifier from the GenderLkup table:                             |
|                | 1 = Male   |
|                | 2 = Female   |
|                | 4 = Unknown  |
|                | 6 = Transgender Male to Female   |
|                | 7 = Transgender Female to Male   |
|                | 8 = Transgender Other  |
|                |  |
|                | The allowed value below has been removed:  |
|                | 3 = Transgender (Removed)  |
|                |  |
|                | <b>Note:</b> Unknown is identified using 9 when generating the encrypted, unique |
|                | client identifier (eUCI).  |
| Required       | Yes  |
| Occurrence     | 1 per client   |
| Schema         | <genderid>1</genderid>   |

## 3.2.3.7 Transgenderld (Removed)

| Field               | Description  |
|---------------------|--|
| ld                  | 7  |
| <b>Element Name</b> | Transgenderld  |
| Comments            | This data element has been removed and should not be included in the client-level data XML file. |

## 3.2.3.8 SexAtBirthId

| Field          | Description  |
|----------------|--|
| ld             | 71   |
| Element Name   | SexAtBirthId   |
| Parent Element | AdrClientReport  |
| Definition     | The biological sex assigned to the client at birth.            |
| Allowed Values | A valid sex at birth identifier from the SexAtBirthLkup table: |
|                | 1 = Male   |
|                | 2 = Female   |
| Required       | No   |
| Occurrence     | 1 per client   |
| Schema         | <sexatbirthid>1</sexatbirthid>                                 |

## 3.2.3.9 Birth Year

| Field               | Description                            |
|---------------------|--|
| ld                  | 9                                      |
| <b>Element Name</b> | BirthYear                              |
| Parent Element      | AdrClientReport                        |
| Definition          | The year in which the client was born. |

| Field                 | Description  |
|-----------------------|--|
| <b>Allowed Values</b> | Four digit years that cannot be greater than the reporting year. |
| Required              | Yes  |
| Occurrence            | 1 per client   |
| Schema                | <birthyear>1900</birthyear>                                      |

#### 3.2.3.10 HivAidsStatusId

| Field          | Description   |
|----------------|---|
| ld             | 10  |
| Element Name   | HivAidsStatusId   |
| Parent Element | AdrClientReport   |
| Definition     | Client's HIV/AIDS status at the end of the reporting period.  |
| Allowed Values | A valid HIV/AIDS status identifier from the HivAidsStatusLkup table:  2 = HIV-Positive, not AIDS  3 = HIV-Positive, AIDS status unknown  4 = CDC-defined AIDS |
| Required       | No  |
| Occurrence     | 1 per client  |
| Schema         | <hivaidsstatusid>4</hivaidsstatusid>  |

## 3.2.3.11 PovertyLevelId

| Field          | Description  |
|----------------|--|
| ld             | 11   |
| Element Name   | PovertyLevelId   |
| Parent Element | AdrClientReport  |
| Definition     | Client's annual household income as a percent of the Federal Poverty Level (FPL) at the end of the reporting period.   |
| Allowed Values | A valid Federal poverty level identifier from the PovertyLevelLkup table:  13 = Below 100% of the FPL  9 = 100-138% of the FPL  10 = 139-200% of the FPL  11 = 201-250% of the FPL  12 = 251-400% of the FPL  7 = 401-500% of the FPL  8 = More than 500% of the FPL |
| Required       | No   |
| Occurrence     | 1 per client   |
| Schema         | <povertylevelid>10</povertylevelid>  |

## 3.2.3.12 HighRiskInsuranceId

| Field               | Description  |
|---------------------|--|
| ld                  | 12   |
| <b>Element Name</b> | HighRiskInsuranceId  |
| Parent Element      | AdrClientReport  |
| Definition          | Value indicating if the client was in a High Risk Insurance Pool at any time |

| Field          | Description  |
|----------------|--|
|                | during the reporting period.   |
| Allowed Values | A valid High Risk Insurance identifier from the HighRiskInsuranceLkup table:  1 = No 2 = Yes 3 = Unknown |
| Required       | No   |
| Occurrence     | 1 per client   |
| Schema         | <highriskinsuranceid>1</highriskinsuranceid>   |

#### 3.2.3.13 MedicalInsuranceId

| Field               | Description   |
|---------------------|---|
| ld                  | 13  |
| <b>Element Name</b> | MedicalInsuranceId  |
| Parent Element      | AdrClientReportMedicalInsurance   |
| Definition          | Value indicating all sources of the client's health insurance during the reporting period.  |
| Allowed Values      | A valid medical insurance identifier from the MedicalInsuranceLkup table:  10 = Private - Employer  11 = Private - Individual  8 = Medicare Part A/B  9 = Medicare Part D  12 = Medicaid, CHIP, or other public plan  13 = VA, Tricare, or other military health care  14 = IHS  15 = Other Plan  16 = No Insurance/uninsured |
| Required            | Yes   |
| Occurrence          | 1 to 8 per client   |
| Schema              | <medicalinsuranceid>11</medicalinsuranceid>   |

## 3.2.4 Enrollment and Certification Elements

The following Enrollment and Certification elements capture client enrollment patterns and certification processes.

## 3.2.4.1 NewEnrollmentFlag

| Field               | Description  |
|---------------------|--|
| ld                  | 14   |
| <b>Element Name</b> | NewEnrollmentFlag  |
| Parent Element      | AdrClientReport  |
| Definition          | Value indicating if the client is newly enrolled. Newly enrolled clients in ADAP for this reporting period meet <u>all</u> the following criteria: applied to ADAP for the first time ever; and met the financial and medical eligibility criteria of the ADAP during the period for which you are reporting data. |

| Examples of clients who should not be included in this number are the following:  Clients who have been recertified as eligible. Clients who have been re-enrolled after a period of having been decertified/disenrolled. Clients who have moved out of the state and then returned. Clients who moved on and off ADAP because of fluctuations in eligibility for a Medicaid/Medically Needy program, based on whether they met spend-down requirements.  An existing ADAP client is a client who met the following criteria: Enrolled in ADAP in a previous reporting period. Continues to be enrolled in the current reporting period, regardless of whether they used ADAP services in either reporting period.  Note: An individual enrolled in ADAP (new or existing client) may or may not use services. Use of services is not required to be an enrolled client.  Allowed Values  No Occurrence 1 per client |                |  |
|--|----------------|--|
| following:  Clients who have been recertified as eligible. Clients who have been re-enrolled after a period of having been decertified/disenrolled. Clients who have moved out of the state and then returned. Clients who moved on and off ADAP because of fluctuations in eligibility for a Medicaid/Medically Needy program, based on whether they met spend-down requirements.  An existing ADAP client is a client who met the following criteria: Enrolled in ADAP in a previous reporting period. Continues to be enrolled in the current reporting period, regardless of whether they used ADAP services in either reporting period.  Note: An individual enrolled in ADAP (new or existing client) may or may not use services. Use of services is not required to be an enrolled client.  Allowed Values Required No Occurrence 1 per client   | Field          | Description  |
| <ul> <li>Clients who have been re-enrolled after a period of having been decertified/disenrolled.</li> <li>Clients who have moved out of the state and then returned.</li> <li>Clients who moved on and off ADAP because of fluctuations in eligibility for a Medicaid/Medically Needy program, based on whether they met spend-down requirements.</li> <li>An existing ADAP client is a client who met the following criteria:         <ul> <li>Enrolled in ADAP in a previous reporting period.</li> <li>Continues to be enrolled in the current reporting period, regardless of whether they used ADAP services in either reporting period.</li> </ul> </li> <li>Note: An individual enrolled in ADAP (new or existing client) may or may not use services. Use of services is not required to be an enrolled client.</li> <li>Allowed Values</li> <li>No</li> <li>Occurrence</li> <li>1 per client</li> </ul>    |                |  |
| <ul> <li>Enrolled in ADAP in a previous reporting period.</li> <li>Continues to be enrolled in the current reporting period, regardless of whether they used ADAP services in either reporting period.</li> <li>Note: An individual enrolled in ADAP (new or existing client) may or may not use services. Use of services is not required to be an enrolled client.</li> <li>Allowed Values</li> <li>No</li> <li>Occurrence</li> <li>1 per client</li> </ul>  |                | <ul> <li>Clients who have been re-enrolled after a period of having been decertified/disenrolled.</li> <li>Clients who have moved out of the state and then returned.</li> <li>Clients who moved on and off ADAP because of fluctuations in eligibility for a Medicaid/Medically Needy program, based on whether they met</li> </ul> |
| Continues to be enrolled in the current reporting period, regardless of whether they used ADAP services in either reporting period.  Note: An individual enrolled in ADAP (new or existing client) may or may not use services. Use of services is not required to be an enrolled client.  Allowed Values  Of for No or 1 for Yes  Required  No  Occurrence  1 per client  |                | An existing ADAP client is a client who met the following criteria:  |
| use services. Use of services is not required to be an enrolled client.  Allowed Values 0 for No or 1 for Yes  Required No  Occurrence 1 per client  |                | <ul> <li>Continues to be enrolled in the current reporting period, regardless of<br/>whether they used ADAP services in either reporting period.</li> </ul>  |
| Required No Occurrence 1 per client  |                | ,  |
| Occurrence 1 per client  | Allowed Values | 0 for No or 1 for Yes  |
|  | Required       | No   |
|  | Occurrence     | 1 per client   |
| Schema <pre></pre>   | Schema         | <pre><newenrollmentflag>0</newenrollmentflag></pre>  |

## 3.2.4.2 ApplicationReceivedDate

| Field               | Description   |
|---------------------|---|
| ld                  | 15  |
| <b>Element Name</b> | ApplicationReceivedDate   |
| Parent Element      | AdrClientReport   |
| Definition          | The date that the completed application was received by the ADAP.                         |
| Allowed Values      | A valid date on or before the last date of the reporting period in the format mm,dd,yyyy. |
| Required            | Yes, only if client is reported as newly enrolled   |
| Occurrence          | 0 for existing clients and 1 for newly enrolled clients                                   |
| Schema              | <pre><applicationreceiveddate>10,29,2014</applicationreceiveddate></pre>                  |

## 3.2.4.3 ApplicationApprovalDate

| Field          | Description  |
|----------------|--|
| ld             | 16   |
| Element Name   | ApplicationApprovalDate  |
| Parent Element | AdrClientReport  |
| Definition     | The date that the client was approved to begin to receive ADAP services. This is when the client was first enrolled in the ADAP. |
| Allowed Values | A valid date on or before the last date of the reporting period in the format mm,dd,yyyy.  |
| Required       | Yes, only if client is reported as newly enrolled  |

| Field      | Description  |
|------------|--|
| Occurrence | 0 for existing clients and 1 for newly enrolled clients                  |
| Schema     | <pre><applicationapprovaldate>03,27,2014</applicationapprovaldate></pre> |

## 3.2.4.4 RecertificationDate

| Field                 | Description   |
|-----------------------|---|
| ld                    | 17  |
| Element Name          | RecertificationDate   |
| Parent Element        | AdrClientReportRecertificationDate  |
| Definition            | The dates on which the client was determined to be eligible to continue to receive ADAP services.  Note: All individuals enrolled in ADAP, regardless of whether they received services, must be recertified every six months. This includes clients on a |
|                       | waiting list. The minimum activities for recertification include: financial eligibility determination; ensuring that ADAP is the Payer of Last Resort; and appropriate documentation (i.e.: financial/insurance – or lack thereof/denial of coverage).    |
| <b>Allowed Values</b> | Valid dates should be in the reporting period in the format mm,dd,yyyy.   |
| Required              | No  |
| Occurrence            | Up to 2 per client  |
| Schema                | <pre><recertificationdate>10,29,2014</recertificationdate></pre>  |

## 3.2.4.5 EnrollmentStatusId

| Field               | Description  |
|---------------------|--|
| ld                  | 18   |
| <b>Element Name</b> | EnrollmentStatusId   |
| Parent Element      | AdrClientReport  |
| Definition          | The status of the individual in the ADAP at the end of the reporting period.   |
| Allowed Values      | A valid enrollment status identifier from the EnrollmentStatusLkup table:  8 = Enrolled, receiving services  9 = Enrolled, on waiting list  10 = Enrolled services not requested  11 = Disenrolled |
| Required            | No   |
| Occurrence          | 1 per client   |
| Schema              | <pre><enrollmentstatusid>11</enrollmentstatusid></pre>   |

#### 3.2.4.6 DisenrollmentReasonId

| Field          | Description   |
|----------------|---|
| ld             | 19  |
| Element Name   | DisenrollmentReasonId   |
| Parent Element | AdrClientReportDisenrollmentReason  |
| Definition     | The reasons the client was disenrolled or discharged during the reporting period. |

| Field          | Description  |
|----------------|--|
| Allowed Values | A valid disenrollment reason identifier from the DisenrollmentReasonLkup table:  9 = Ineligible due to change in ADAP eligibility criteria  10 = Ineligible for ADAP due to no longer meeting ADAP eligibility criteria  4 = Did not recertify  5 = Did not fill prescription as required by program  6 = Deceased  7 = Dropped out, no reason given  11 = Other/Unknown |
| Required       | Yes, only if the client's enrollment status Id is reported as disenrolled  |
| Occurrence     | 1 to 6 per client, where Other/Unknown is mutually exclusive   |
| Schema         | <pre><disenrollmentreasonid>6</disenrollmentreasonid></pre>  |

## 3.2.5 Insurance Services Elements

The following Insurance Services elements capture data about ADAP-funded insurance assistance services and expenditures. ADAP-funded insurance assistance includes premiums, co-payments (i.e., co-pays), and deductibles. Co-pays and deductibles for medications should be reported through these elements.

#### 3.2.5.1 InsuranceAssistanceReceivedFlag

| Field          | Description   |
|----------------|---|
| ld             | 20  |
| Element Name   | InsuranceAssistanceReceivedFlag   |
| Parent Element | AdrClientReport   |
| Definition     | A value indicating if the client received ADAP-funded insurance assistance during the reporting period, including Medicare Part D. This includes premiums, deductibles, and co-payments for which ADAP funds were used. |
| Allowed Values | 0 for No or 1 for Yes.  |
| Required       | No  |
| Occurrence     | 1 per client  |
| Schema         | <pre><insuranceassistancereceivedflag>1</insuranceassistancereceivedflag></pre>   |

#### 3.2.5.2 InsuranceAssistanceType

| Field               | Description   |
|---------------------|---|
| ld                  | 67  |
| <b>Element Name</b> | InsuranceAssistanceTypeId   |
| Parent Element      | AdrInsuranceAssistanceReceived  |
| Definition          | The type of insurance service(s) that the client received during the reporting period.  |
| Allowed Values      | A valid insurance assistance identifier from the InsuranceAssistanceTypeLkup table:  1 = Full Premium payment  2 = Partial Premium payment  3 = Co-pay/deductible including Medicare Part D co-Insurance, co-payment, |

| Field      | Description   |
|------------|---|
|            | or donut hole coverage.   |
| Required   | Yes, if client indicated that insurance assistance was received     |
| Occurrence | 1 to 3 per client   |
| Schema     | <pre><insuranceassistancetypeid>1</insuranceassistancetypeid></pre> |

#### 3.2.5.3 InsurancePremiumAmount

| Field               | Description   |
|---------------------|---|
| ld                  | 21  |
| <b>Element Name</b> | InsurancePremiumAmount  |
| Parent Element      | AdrClientReport   |
| Definition          | The total amount of insurance premium paid on behalf of the client. This pertains to any premium paid during the reporting period, including Medicare Part D, regardless of the time frame that it covers (i.e., if it extends outside the reporting period). |
| Allowed Values      | An integer value between 0 and 100,000. Do not include dollar signs or commas.  |
| Required            | Yes, only if the client received insurance assistance during the reporting period.  |
| Occurrence          | 1 if client received insurance assistance, otherwise 0  |
| Schema              | <pre><insurancepremiumamount>100</insurancepremiumamount></pre>   |

#### 3.2.5.4 InsurancePremiumMonthCount

| Field               | Description  |
|---------------------|--|
| ld                  | 22   |
| <b>Element Name</b> | InsurancePremiumMonthCount   |
| Parent Element      | AdrClientReport  |
| Definition          | The total amount of months of coverage for which insurance premium was paid. Report all months even if they fall outside the reporting period. |
| Allowed Values      | An integer value between 0 and 12.   |
| Required            | Yes, only if the client received insurance assistance during the reporting period.   |
| Occurrence          | 1 if client received insurance assistance, otherwise 0   |
| Schema              | <pre><insurancepremiummonthcount>2</insurancepremiummonthcount></pre>  |

## 3.2.5.5 InsuranceDeductibleAndCopayAmount

| Field               | Description  |
|---------------------|--|
| ld                  | 23   |
| <b>Element Name</b> | InsuranceDeductibleAndCopayAmount  |
| Parent Element      | AdrClientReport  |
| Definition          | The total amount of insurance deductibles and co-pays paid on behalf of the client, including Medicare Part D. The amount reported should be based on the date that the deductible or co-pay was paid. |
| Allowed Values      | An integer value between 0 and 100,000. Do not include dollar signs or commas.   |

| Field      | Description   |
|------------|---|
| Required   | Yes, only if the client received insurance assistance during the reporting period   |
| Occurrence | 1 if client received insurance assistance, otherwise 0                              |
| Schema     | <pre><insurancedeductibleandcopayamount>0</insurancedeductibleandcopayamount></pre> |

## 3.2.6 Drug and Drug Expenditure Elements

The following Drug and Drug Expenditure XML elements are designed to capture data about ADAP-funded medications dispensed to clients and total expenditures for those services. These elements are only for clients who were dispensed ADAP-funded medications paid in full by ADAP (i.e., not clients for whom only the co-pay or deductible was paid). This includes Antiretroviral (ARV), Hepatitis B, Hepatitis C, and A1-O1 medications.

#### 3.2.6.1 MedicationsDispensedFlag

| Field                 | Description  |
|-----------------------|--|
| ld                    | 25   |
| <b>Element Name</b>   | MedicationsDispensedFlag   |
| Parent Element        | AdrClientReport  |
| Definition            | A value indicating if ADAP-funded medications were dispensed to the client during the reporting period. ADAP-funded medications include any ARV, Hepatitis B, Hepatitis C, or A1-OI medication on your ADAP-formulary that was paid for in full with ADAP funds. |
| <b>Allowed Values</b> | 0 for No or 1 for Yes  |
| Required              | No   |
| Occurrence            | 1 per client   |
| Schema                | <pre><medicationsdispensedflag>1</medicationsdispensedflag></pre>  |

#### 3.2.6.2 MedicationId

| Field               | Description  |
|---------------------|--|
| ld                  | 26   |
| <b>Element Name</b> | MedicationId   |
| Parent Element      | AdrClientReportMedication  |
|                     | Medication   |
| Definition          | The dispensed medication five-digit drug code dispensed to the client during the reporting period. |
| Allowed Values      | A valid drug code from the MedicationLkup table in the format d####.                               |
| Required            | Yes  |
| Occurrence          | 1 or more if medications were dispensed to this client during the reporting period, otherwise 0    |
| Schema              | <pre><medicationid>d03984</medicationid></pre> /MedicationId>                                      |

#### 3.2.6.3 MedicationStartDate

| Field | Description |
|-------|-------------|
|       | -           |

| Field               | Description  |
|---------------------|--|
| ld                  | 27   |
| <b>Element Name</b> | MedicationStartDate  |
| Parent Element      | AdrClientReportMedication Medication   |
| Definition          | The dispense date for the medication dispensed to the client during the reporting period.  |
| Allowed Values      | A valid dispense date during the reporting period for each instance the medication was given to the client in the format mm,dd,yyyy. |
| Required            | Yes, if medications were dispensed to this client during the reporting period, otherwise No  |
| Occurrence          | 1 or more if medications were dispensed to this client during the reporting period, otherwise 0                                      |
| Schema              | <pre><medicationstartdate>10,15,2012</medicationstartdate></pre>   |

## 3.2.6.4 MedicationDays

| Field               | Description  |
|---------------------|--|
| ld                  | 28   |
| <b>Element Name</b> | MedicationDays   |
| Parent Element      | AdrClientReportMedication Medication   |
| Definition          | The number of days for which the medication was dispensed.   |
| Allowed Values      | An integer value between 1 and 360. Values should be from 1 through 30, and then in increments of 30 (i.e., 1 through 30, 60, 90,, 360). For any value less than 30, report the actual number of days, otherwise report the number of days in 30 day increments. |
| Required            | Yes, if medications were dispensed to this client during the reporting period, otherwise No  |
| Occurrence          | 1 or more if medications were dispensed to this client during the reporting period, otherwise 0  |
| Schema              | <medicationdays>30</medicationdays>  |

## 3.2.6.5 MedicationCost

| Field               | Description   |
|---------------------|---|
| ld                  | 29  |
| <b>Element Name</b> | MedicationCost  |
| Parent Element      | AdrClientReportMedication  Medication   |
| Definition          | Indicate the cost of each ADAP-funded medication listed in Item 26 that was dispensed to the client during the reporting period. Cost should be reported per medication per date dispensed. Include the amount paid for each prescription that is dispensed, even if the medication prescription period extended beyond the reporting period. |
| Allowed Values      | An integer amount, rounded to the nearest dollar, between 0 and 100,000. Do not include dollar signs, commas, or cents.   |

| Field      | Description   |
|------------|---|
| Required   | Yes, if medications were dispensed to this client during the reporting period, otherwise No     |
| Occurrence | 1 or more if medications were dispensed to this client during the reporting period, otherwise 0 |
| Schema     | <medicationcost>221</medicationcost>  |

#### 3.2.7 Clinical Elements

The following Clinical Elements describe the clinical characteristics of ADAP clients who received ADAP-funded medications. All clients receiving ADAP-funded medications should have at least one CD4 test result and one viral load reported during the 12 month reporting period.

#### 3.2.7.1 LastCd4Date

| Field                 | Description  |
|-----------------------|--|
| ld                    | 32   |
| <b>Element Name</b>   | LastCd4Date  |
| Parent Element        | AdrClientReport  |
| Definition            | Value indicating the client's most recent CD4 test date during the reporting period. |
| <b>Allowed Values</b> | A valid date during the reporting period in the format mm,dd,yyyy.                   |
| Required              | Yes, if client prescribed medication during the reporting period                     |
| Occurrence            | 0 to 1 per client  |
| Schema                | <lastcd4date>10,25,2014</lastcd4date>  |

#### 3.2.7.2 LastCd4Count

| Field               | Description   |
|---------------------|---|
| ld                  | 33  |
| <b>Element Name</b> | LastCd4Count  |
| Parent Element      | AdrClientReport   |
| Definition          | Value indicating the client's most recent CD4 test count during the reporting period. |
| Allowed Values      | A valid integer value between 0 and 100,000,000 (cells/mm3). Do not include commas.   |
| Required            | Yes, if client prescribed medication  |
| Occurrence          | 0 to 1 per client   |
| Schema              | <lastcd4count>332</lastcd4count>  |

#### 3.2.7.3 LastViralLoadDate

| Field          | Description       |
|----------------|-------------------|
| ld             | 34                |
| Element Name   | LastViralLoadDate |
| Parent Element | AdrClientReport   |

| Field                 | Description   |
|-----------------------|---|
| Definition            | Value indicating the client's most recent viral load test date during the reporting period. |
| <b>Allowed Values</b> | A valid date during the reporting period in the format mm,dd,yyyy.                          |
| Required              | Yes, if client prescribed medication  |
| Occurrence            | 0 to 1 per client   |
| Schema                | <pre><lastviralloaddate>04,25,2014</lastviralloaddate></pre>                                |

#### 3.2.7.4 LastViralLoadCount

| Field               | Description  |
|---------------------|--|
| ld                  | 35   |
| <b>Element Name</b> | LastViralLoadCount   |
| Parent Element      | AdrClientReport  |
| Definition          | Value indicating the client's most recent viral load during the reporting period.  |
| Allowed Values      | A valid integer value between 0 and 100,000,000 (copies/mL). Do not include commas.  For clients who are undetectable, report the lower test limit for the viral load count, if available, otherwise report 0. |
| Required            | Yes, if client prescribed medication during the reporting period   |
| Occurrence          | 0 to 1 per client  |
| Schema              | <pre><lastviralloadcount>47</lastviralloadcount></pre>   |

#### 4 ADR Client-Level Data XML File Format

The ADR client-level data XML file structure and content is defined through a set of XML Schema Definition (XSD) files. The XSD files are used to validate the ADR client-level data XML files before they can be loaded into the ADR web application. Once loaded, further checks are performed by the ADR web application.

## 4.1 Validation Checks to Pass before File Is Accepted by ADR Web Application

The following validation checks must be satisfied before an ADR client-level data XML file will be accepted by the ADR web application:

- The XML file must have the .xml extension.
- The XML file must conform to the XML Schema Definition files.
- One and only one set of records per client is allowed in a single XML file.
  - An encrypted unique client identifier (ClientUci) may not be repeated within the same XML file.
  - A client is uniquely identified by their encrypted, Unique Client Identifier (eUCI). This
    value is represented in the ADR client-level data XML file by the ClientUci data element
    within the AdrClientReport complex element. The ClientUci value is an upper-cased, 40
    character, hexadecimal value (0-9, A-F) followed by a single suffix from A through Z,
    which is used to further identify clients that may share the same base, 40 character

encrypted UCI. The CLD\_ID XML attribute is used to link the parent client record with its child records. The CLD\_ID can be any integer value from 1 through 100000, but must be the same value for a single client.

- The XML complex data elements must appear in the specified order within the file. See Section 4.2: Sample XML File Format – Collapsed for an example of the sequencing required.
- The XML simple data elements must appear in the specified order within each complex data element. See Section 4.3: Sample XML File Format – Expanded for an example of the sequencing required.
- The XML simple data elements must conform to the definitions appearing in this document.
   Required fields must be reported and values must be valid and match the documented format, if defined.
- Empty or "null" data element tags are not permitted in the XML file (i.e., Data elements of the form <tag></tag> or <tag /> are not allowed.)

**Important:** Some of the data elements are not required. If no data for a particular client is being provided for an element, then remove that element entirely from the client's record (i.e., remove the data element's start tag, end tag, and value.)

#### 4.2 Sample XML File Format – Collapsed

The following sample XML displays the complex data elements collapsed to show the required sequence of the complex elements.

**Note:** The **CLD\_ID** attribute name below indicates a unique Id for each client report and associated data such as race and medical insurance.

#### 4.3 Sample XML File Format – Expanded

The following example shows a sample XML file with the complex data elements expanded in order to show the required sequence of the simple elements that are organized within them. Please note that this data are solely used as an example and represent the structure, sequence, values, and format of the data elements.

```
<CLD:ROOT xmlns:CLD="urn:adrNamespace" xmlns:xsi="http://www.w3.org/2001/XMLSchema-</pre>
instance">
   <AdrClientReportXmlVersion>
      <AdrSchemaVersion>3.0.0</AdrSchemaVersion>
      <Vendor>Rx-REX</Vendor>
      <VendorVersionNumber>1.0.2.0</VendorVersionNumber>
      <VendorTechnicalContactName>John, Doe</VendorTechnicalContactName>
      <VendorTechnicalContactEmail>JohnDoe@Somewhere.com</VendorTechnicalContactEmail>
      <VendorTechnicalContactPhone>123,456,7890/VendorTechnicalContactPhone>
   </AdrClientReportXmlVersion>
   <AdrClientReport>
      <ClientUci>AEC5C1142DE217CD1FA5CBEDB99ED2E265E8E4F8U</ClientUci>
      <EthnicityId>1</EthnicityId>
      <GenderId>1</GenderId>
      <BirthYear>1900</BirthYear>
      <hivAidsStatusId>4</hivAidsStatusId>
      <PovertyLevelId>10</PovertyLevelId>
      <NewEnrollmentFlag>0</NewEnrollmentFlag>
      <ApplicationReceivedDate>03,29,2014</applicationReceivedDate>
      <ApplicationApprovalDate>04,27,2014</applicationApprovalDate>
      <EnrollmentStatusId>11/EnrollmentStatusId>
      <InsuranceAssistanceReceivedFlag>1/InsuranceAssistanceReceivedFlag>
      <InsurancePremiumAmount>0</InsurancePremiumAmount>
      <InsurancePremiumMonthCount>2</InsurancePremiumMonthCount>
      <InsuranceDeductibleAndCopayAmount>0</InsuranceDeductibleAndCopayAmount>
      <MedicationsDispensedFlag>1</MedicationsDispensedFlag>
      <LastCd4Date>10,25,2014</LastCd4Date>
      <LastCd4Count>332
      <LastViralLoadDate>04,25,2014</LastViralLoadDate>
      <LastViralLoadCount>47</LastViralLoadCount>
      <SexAtBirthId>1</SexAtBirthId>
      <AdrClientReportRace>
          <RaceId>1</RaceId>
          <RaceId>3</RaceId>
      </AdrClientReportRace>
      <AdrClientReportHispanicSubgroup>
          <SubgroupId>3</SubgroupId>
          <SubgroupId>1</SubgroupId>
      </AdrClientReportHispanicSubgroup>
      <AdrClientReportAsianSubgroup>
          <SubgroupId>3</SubgroupId>
```

```
<SubgroupId>1</SubgroupId>
   </AdrClientReportAsianSubgroup>
   <AdrClientReportNhpiSubgroup>
       <SubgroupId>4</SubgroupId>
       <SubgroupId>1</SubgroupId>
   </AdrClientReportNhpiSubgroup>
   <AdrClientReportMedicalInsurance>
       <MedicalInsuranceId>11</MedicalInsuranceId>
       <MedicalInsuranceId>13</MedicalInsuranceId>
   </AdrClientReportMedicalInsurance>
   <AdrClientReportRecertificationDate>
   <RecertificationDate>10,29,2014/RecertificationDate>
       <RecertificationDate>10,15,2014/RecertificationDate>
   </AdrClientReportRecertificationDate>
   <AdrClientReportDisenrollmentReason>
       <DisenrollmentReasonId>6</DisenrollmentReasonId>
       <DisenrollmentReasonId>4</DisenrollmentReasonId>
   </AdrClientReportDisenrollmentReason>
   <AdrClientReportMedication>
       <Medication>
          <MedicationId>d03984</MedicationId>
          <MedicationStartDate>10,15,2014</medicationStartDate>
          <MedicationDays>30</MedicationDays>
          <MedicationCost>221</MedicationCost>
       </Medication>
       <Medication>
          <MedicationId>d05352</MedicationId>
          <MedicationStartDate>10,15,2014</medicationStartDate>
          <MedicationDays>30</MedicationDays>
          <MedicationCost>994</MedicationCost>
       </Medication>
       <Medication>
          <MedicationId>d05353</MedicationId>
          <MedicationStartDate>10,15,2014</medicationStartDate>
          <MedicationDays>30</MedicationDays>
          <MedicationCost>999</MedicationCost>
       </Medication>
   </AdrClientReportMedication>
   <AdrInsuranceAssistanceReceived>
       <InsuranceAssistanceTypeId>1</InsuranceAssistanceTypeId>
       <InsuranceAssistanceTypeId>2</InsuranceAssistanceTypeId>
       <InsuranceAssistanceTypeId>3</InsuranceAssistanceTypeId>
   </AdrInsuranceAssistanceReceived>
</AdrClientReport>
<AdrClientReport>
   <ClientUci>AEC5C1142DE217CD1FA5CBEDB99ED2E265E8E4F8X</ClientUci>
   <EthnicityId>1</EthnicityId>
   <GenderId>1</GenderId>
   <BirthYear>1900</BirthYear>
   <hivAidsStatusId>4</hivAidsStatusId>
   <PovertyLevelId>11</PovertyLevelId>
   <NewEnrollmentFlag>0</NewEnrollmentFlag>
   <ApplicationReceivedDate>10,29,2014</applicationReceivedDate>
   <ApplicationApprovalDate>03,27,2014</applicationApprovalDate>
   <EnrollmentStatusId>11/EnrollmentStatusId>
   <InsuranceAssistanceReceivedFlag>1</InsuranceAssistanceReceivedFlag>
   <InsurancePremiumAmount>0</InsurancePremiumAmount>
   <InsurancePremiumMonthCount>2</InsurancePremiumMonthCount>
```

```
<InsuranceDeductibleAndCopayAmount>0</InsuranceDeductibleAndCopayAmount>
<MedicationsDispensedFlag>1</MedicationsDispensedFlag>
<LastCd4Date>10,25,2014</LastCd4Date>
<LastCd4Count>332</LastCd4Count>
<LastViralLoadDate>04,25,2014</LastViralLoadDate>
<LastViralLoadCount>47</LastViralLoadCount>
<SexAtBirthId>1</SexAtBirthId>
<AdrClientReportRace>
   <RaceId>1</RaceId>
   <RaceId>4</RaceId>
   <RaceId>6</RaceId>
</AdrClientReportRace>
<AdrClientReportHispanicSubgroup>
   <SubgroupId>3</SubgroupId>
   <SubgroupId>1</SubgroupId>
</AdrClientReportHispanicSubgroup>
<AdrClientReportAsianSubgroup>
   <SubgroupId>3</SubgroupId>
   <SubgroupId>1</SubgroupId>
</AdrClientReportAsianSubgroup>
<AdrClientReportNhpiSubgroup>
   <SubgroupId>4</SubgroupId>
   <SubgroupId>1</SubgroupId>
</AdrClientReportNhpiSubgroup>
<AdrClientReportMedicalInsurance>
   <MedicalInsuranceId>8</MedicalInsuranceId>
   <MedicalInsuranceId>9</MedicalInsuranceId>
</AdrClientReportMedicalInsurance>
<AdrClientReportRecertificationDate>
   <RecertificationDate>10,29,2014/RecertificationDate>
   <RecertificationDate>10,15,2014/RecertificationDate>
</AdrClientReportRecertificationDate>
<AdrClientReportDisenrollmentReason>
   <DisenrollmentReasonId>7</DisenrollmentReasonId>
   <DisenrollmentReasonId>4</DisenrollmentReasonId>
</AdrClientReportDisenrollmentReason>
<AdrClientReportMedication>
   <Medication>
       <MedicationId>d03984</MedicationId>
       <MedicationStartDate>10,15,2014</medicationStartDate>
       <MedicationDays>30</MedicationDays>
       <MedicationCost>221</MedicationCost>
   </Medication>
   <Medication>
       <MedicationId>d05352</MedicationId>
       <MedicationStartDate>10,15,2014/MedicationStartDate>
       <MedicationDays>30</MedicationDays>
       <MedicationCost>994</MedicationCost>
   </Medication>
   <Medication>
       <MedicationId>d05825</MedicationId>
       <MedicationStartDate>10,15,2014/MedicationStartDate>
       <MedicationDays>30</MedicationDays>
       <MedicationCost>879</MedicationCost>
   </Medication>
</AdrClientReportMedication>
<AdrInsuranceAssistanceReceived>
   <InsuranceAssistanceTypeId>1</InsuranceAssistanceTypeId>
```

## **Appendix A: Resources**

#### A.1 ADR Client XML Schema Definition Files

The ADR XML schema definitions and sample XML files can be downloaded from <u>ADR</u> <u>Download Package</u>.

## A.2 TRAX (XML Generator)

The <u>Tool for RSR and ADR XML Generation (TRAX)</u> is a HAB tool that can be used to generate the ADR client-level data XML files. This tool is available on the TARGET Center website.

#### A.3 TARGET Center Website

The <u>TARGET Center website</u> contains a vast array of technical assistance resources including the TRAX application, webcasts, training materials, and reference documents, such as the ADR Instruction Manual.

## **Appendix B: Acronyms**

ADAP AIDS Drug Assistance Program

ADR ADAP Data Report

AIDS Acquired ImmunoDeficiency Syndrome

eUCI Encrypted Unique Client Identifier

HAB HIV/AIDS Bureau

HIV Human Immunodeficiency Virus

HRSA Health Resources and Services Administration

UCI Unique Client Identifier

XML Extensible Markup Language

XMLNS XML Namespace

XSD XML Schema Definition XSI XML Schema Instance