

Healthy Start Monitoring and Evaluation Data System (HSMED)

Data Dictionary and XML Schema Implementation Guide

Introduction and Healthy Start Screening Tool 1: Demographics

Version 2.2

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Healthy Start Monitoring and Evaluation Data System
Data Dictionary and Implementation Guide

Document Version History

Version	Date	Author	Description
1.0	11/19/2015	Echo Wang	Initial document.
1.1	12/15/2015	Stefani Olsen	Revised.
2.0	12/9/2016	Echo Wang	Updated document based on new instrument – the 6 screening tools
2.1	1/27/2017	Echo Wang	Fixed truncation issues and other inconsistency
2.2	2/17/2017	Echo Wang	Consent flag and bug fixes

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1. Introduction

On November 4, 2016, the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCHB) received a Notice of Office of Management and Budget Action from the Office of Management and Budget (OMB) approving revisions to the previously approved program data collection tool for the Healthy Start Program. (See OMB Control Number 0915-0338.) The revised data collection tool is divided into six screening tools. Beginning in January 2017 Healthy Start program grantees are expected to submit data based on these tools as a condition of their grant awards. Data will be submitted monthly through the Healthy Start Monitoring and Evaluation Data System (HSMED). The screening tool is a client-level survey that provides data on the characteristics of Healthy Start Program clients and their children.

To submit the screening tool data successfully, each grantee must collect data from women that they served during the reporting month and create and upload the Extensible Markup Language (XML) files containing client-level data to the HSMED Web application. The structure, sequence, values, and format of the data elements in the XML files must conform to the definitions specified in this document. Once the client-level data XML file is uploaded, HSMED validates the file for conformance to the data schema and business rules outlined in this document.

NOTE: This document does not contain instructions on how to upload the client-level data XML files to the HSMED application. Instructions on using the HSMED will be in the User Guide.

Purpose

The purpose of this document is to provide reference information on the allowable structure, sequence, values, and format of the Healthy Start client-level data XML files to grantees, providers and software vendors. This document includes data definitions that describe the meaning of each element in the Healthy Start client-level 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. Ultimately, the goal of this document is to help grantees reduce any errors that may result when they generate and submit client-level data XML files to the HSMED.

Audience

This document is intended for Healthy Start technical and/or administrative staff that must collect and report Healthy Start client-level data elements in an XML file format to the HRSA/MCHB. Such staff may include developers, data quality specialists, administrators, or other individuals who are responsible for generating and submitting the monthly report.

Updates

This document will be revised as variables and value options are updated or when other global changes are made.

2. Main Components of the Client-Level XML File

The Healthy Start client-level data XML file consists of three components: 1) the file header, 2) the root element, and 3) the body elements, which consist of complex and simple data elements.

File Header

The file header is the first line of text in the XML file. It is static text and does not change, and it contains the XML declaration—the version of XML—and encoding being used. A sample file header is shown below:

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

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. In the case of the Healthy Start client-level data XML file, the root element is < mstns:ROOT>, and it appears as follows:

```
<mstns:ROOT xmlns:mstns="urn:hsNamespace" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="urn:hsNamespace HsDemographicSchema.xsd">
```

The <mstns:ROOT> element contains extra information—called “attributes”—about the file. Each of the attributes has a name and value. The meanings of the attribute names are shown in Table 1.

Table 1: Root Element Attributes

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

Body: Simple and Complex Elements

The body of the client-level data XML file contains all the elements under the root element. It contains simple and complex elements. Complex elements contain child elements. Simple elements do not contain any child elements. In the Healthy Start client-level data XML file, the complex data elements must contain child data elements and the child elements must appear in a specific order to pass the validation check. The data they contain must conform to the specific rules defined in this data definition document to pass the schema check.

Healthy Start Client-Level Data XML Data Elements

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

Element Name: The descriptive and brief name of the variable to provide information about what is being collected. This corresponds to the data element name in the Healthy Start Client-Level Data XML Schema Definitions.

Definitions: A brief description of the variable and a reference to the question number in the screening tools.

Required field: Whether an element is required to submit the XML file successfully.

Lookup table if available: The name of lookup table which hosts the allowed values and corresponding codes.

Allowed Values: The type or list of values allowed for the data element. If the acceptable values are codes, the meaning of each code is also provided. Note HSMED takes the numeric code if the value and description are provided such as “1 = Yes” (1 should be submitted instead of “Yes”). For Boolean fields (field accepting true, false, 1 or 0), the value is not case-sensitive.

Allow multiple values: Whether this variable accepts multiple values. It corresponds to “choose-all-that-apply” questions in the screening tool. Normally only complex elements can accept multiple values. These element names have “List” as a suffix. The first “list element” of each implementation guide shows how multiple values are presented in the XML file.

Occurrence: The minimum and maximum number of times the element may appear in a single record within the client-level data XML file. For required elements, the minimal occurrence is 1.

XML example: Sample XML that indicates the use of the element within the context of the client-level data XML file.

Child/Previous pregnancy elements: Elements relating to multiple children or multiple pregnancy are listed at the end of each implementation guide document.

3. Common section

These elements appear in the beginning of each XML body.

Element name: [ClientUniqueIdentification](#)

Field	Description
Definition	Unique identifier of client
Required field	Yes
Lookup table if available	N/A
Allowed values	Alphanumeric text string that allows a minimum of 1 character and a maximum of 50 characters
Allow multiple values	No
Occurrence	1 unique value per client
XML example	<pre><ClientInfo> <ClientUniqueIdentification>aaaaa</ClientUniqueIdentification> </ClientInfo></pre>

Element name: [ConsentFlag](#)

Field	Description
Definition	Indicator of a client's consent to share data for HRSA's national evaluation.
Required field	Yes (Only required in tool 1) ¹
Lookup table if available	N/A
Allowed values	true (or 1) = consented; false (or 0) = not consented
Allow multiple values	No
Occurrence	1 unique value per client
XML example	<pre><ClientInfo> <ClientUniqueIdentification>aaaaa</ClientUniqueIdentification> <ConsentFlag>true</ConsentFlag> </ClientInfo></pre>

 Element name: [HsSchemaVersion](#)

Field	Description
Definition	Version of this schema
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<pre><HsSchemaVersion>2.0.0</HsSchemaVersion></pre>

¹ Note ConsentFlag may be included in any XML file as a child element for ClientInfo. It is not required in tools 2-6. If this element is included in an XML upload and a compliant value is provided (true, false, 1, 0) for a client, it will replace the previously submitted value for the client. Each client is either consented or not consented (for all data submitted).

Element name: [Vendor](#)

Field	Description
Definition	Vendor name
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<Vendor>String</Vendor>

 Element name: [VendorVersionNumber](#)

Field	Description
Definition	Vendor version number
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<VendorVersionNumber>String</VendorVersionNumber>

 Element name: [VendorTechnicalContactName](#)

Field	Description
Definition	Vendor's contact person name
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<VendorTechnicalContactName>String</VendorTechnicalContactName>

Element name: [VendorTechnicalContactEmail](#)

Field	Description
Definition	Vendor's contact person email address
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<VendorTechnicalContactEmail>\$\$\$@\$\$</VendorTechnicalContactEmail>

 Element name: [VendorTechnicalContactPhone](#)

Field	Description
Definition	Vendor's contact person phone number
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<VendorTechnicalContactPhone>000,000,0000</VendorTechnicalContactPhone>

4. Tool 1: Demographics

 Element name: [AdminDate](#)

Field	Description
Definition	Date of Administration (F1)
Required field	No
Lookup table if available	N/A
Allowed values	Date with a format of mm/dd/yyyy
Allow multiple values	No
Occurrence	0-1 per client
XML example	<AdminDate>10/1/2016</AdminDate>

Element name: [Birthdate](#)

Field	Description
Definition	Client's Date of birth (F1.1)
Required field	Yes
Lookup table if available	N/A
Allowed values	Date with a format of mm/dd/yyyy
Allow multiple values	No
Occurrence	1 per client
XML example	<Birthdate>10/1/2016</Birthdate>

 Element name: [Zipcode](#)

Field	Description
Definition	Zip Code (F1.2)
Required field	No
Lookup table if available	N/A
Allowed values	A 5-digit integer
Allow multiple values	No
Occurrence	0-1 per client
XML example	<Zipcode>20850</Zipcode>

 Element name: [HighestGradeSchoolId](#)

Field	Description
Definition	Answer provided by the client in response to the question: "What is the highest grade or year of school you have completed?" (F1.5)
Required field	Yes
Lookup table if available	HighestGradeSchool_Lkup
Allowed values	1=Less than high school 2=High school graduate or GED completed 3=Some college/vocational school 4=College graduate 5=More than college 6=Don't know 7=Declined to answer
Allow multiple values	No
Occurrence	1 per client
XML example	<HighestGradeSchoolId>5</HighestGradeSchoolId>

Element name: [EthnicityList](#)

Field	Description
Definition	Answer provided by the client in response to the question: "Are you of Hispanic, Latino, or Spanish origin?" (F1.6)
Required field	Yes
Lookup table if available	Ethnicity_Lkup
Allowed values	1=No, not of Hispanic, Latino, or Spanish origin 2=Yes, Mexican, Mexican Am., Chicano 3=Yes, Puerto Rican 4=Yes, Cuban 5=Yes, another Hispanic, Latino, or Spanish origin — Print origin, for example, Argentinean, Colombian, Dominican, Nicaraguan, Salva 6=Don't know 7= Declined to answer
Allow multiple values	Yes
Occurrence	1 per client
XML example	<pre> <EthnicityList> <Ethnicity> <EthnicityId>1</EthnicityId> </Ethnicity> <Ethnicity> <EthnicityId>2</EthnicityId> </Ethnicity> <Ethnicity> <EthnicityId>3</EthnicityId> </Ethnicity> </EthnicityList> </pre>



Element name: [EthnicityOther](#)

Field	Description
Definition	For clients who selected "Yes - Other" in response to Question 6 (Ethnicity) on the demographic form, the detail provided in the entry box. (F1.6)
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<EthnicityOther>a</EthnicityOther>



Element name: [RaceList](#)

Field	Description
Definition	Answer provided by the client in response to the question: "What is your race?" (F1.7)
Required field	Yes
Lookup table if available	Race_Lkup
Allowed values	1 = White 2 = Black or African American 3 = American Indian or Alaska Native 4 = Asian Indian 5 = Chinese 6 = Filipino 7 = Japanese 8 = Korean 9 = Vietnamese 10 = Other Asian 11 = Native Hawaiian 12 = Guamanian or Chamorro 13 = Samoan 14 = Other Pacific Islander 15 = Don't know 16 = Declined to answer
Allow multiple values	Yes
Occurrence	1 per client
XML example	<pre> <RaceList> <Race> <RaceId>1</RaceId> </Race> <Race> <RaceId>2</RaceId> </Race> <Race> <RaceId>3</RaceId> </Race> </RaceList> </pre>

Element name: [IsUsbornId](#)

Field	Description
Definition	Answer provided by the client in response to the question: "Were you born in the United States, including the Virgin Islands?"(F1.8)
Required field	Yes
Lookup table if available	YesNoUS_Lkup
Allowed values	1=Yes, born in the United States (Go to Question 9) 2=No, not born in the United States (Go to Question 8.1) 3=Don't know (Go to Question 9) 4=Declined to answer (Go to Question 9)
Allow multiple values	No
Occurrence	1 per client
XML example	<IsUsbornId>2</IsUsbornId>

 Element name: [CountryBorn](#)

Field	Description
Definition	Answer provided by the client in response to the question: "What country were you born in?" (F1.8.1)
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	1 per client
XML example	<CountryBorn>a</CountryBorn>



Element name: [CountryBornDRId](#)

Field	Description
Definition	Answer provided by the client in response to the question: "Were you born in the United States, including the Virgin Islands?" if either "Don't Know" or "Refused" were indicated. (F1.8.1)
Required field	No
Lookup table if available	DontknowRefused_Lkup
Allowed values	1=Don't know 2=Declined to answer
Allow multiple values	No
Occurrence	0-1 per client
XML example	<CountryBornDRId>2</CountryBornDRId>

Element name: [WhenToUS](#)

Field	Description
Definition	Answer provided by the client in response to the question: "When did you come to live in the United States?" (F1.8.2)
Required field	No
Lookup table if available	N/A
Allowed values	A 4-digit integer
Allow multiple values	No
Occurrence	0-1 per client
XML example	<WhenToUS>1900</WhenToUS>



Element name: [EnglishLevelId](#)

Field	Description
Definition	Answer provided by the client in response to the question: "How well do you speak English?" (F1.9)
Required field	Yes
Lookup table if available	EnglishLevel_Lkup
Allowed values	1=Very well 2=Well 3=Not well 4=Not at all 5=Don't know 6 =Declined to answer
Allow multiple values	No
Occurrence	1 per client
XML example	<EnglishLevelId>5</EnglishLevelId>

Element name: [OtherLanguageSpokenId](#)

Field	Description
Definition	Answer provided by the client in response to the question: "Do you speak a language other than English at home?" (F1.10)
Required field	Yes
Lookup table if available	YesNo_Lkup
Allowed values	1=Yes 2=No 3=Don't know 4=Declined to answer
Allow multiple values	No
Occurrence	1 per client
XML example	<OtherLanguageSpokenId>3</OtherLanguageSpokenId>

Element name: [LanguageAtHomeId](#)

Field	Description
Definition	Answer provided by the client in response to the question: "What is this language [that you speak at home other than English]?" (F1.10.1)
Required field	No
Lookup table if available	LanguageAtHome_Lkup
Allowed values	1 = African language 2 = Arabic 3 = Chinese 4 = Cape Verdean Creole 6 = English 7 = French 8 = German 9 = Greek 10 = Haitian Creole 11 = Hebrew 12 = Hindi 13 = Italian 14 = Japanese 15 = Korean 16 = Persian 17 = Polish 18 = Portuguese 19 = Russian 20 = Spanish 21 = Tagalog 22 = Vietnamese 23 = Urdu 24 = Other language 25 = Declined to answer
Allow multiple values	No
Occurrence	0-1 per client
XML example	<LanguageAtHomeId>20</LanguageAtHomeId>

Element name: [AfricanLanguage](#)

Field	Description
Definition	Detail provided by the client in the text entry field if "African language" was selected in response to question 10.1 (What is the language spoken at home other than English). (F1.10.1)
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	0-1 per client
XML example	<AfricanLanguage>a</AfricanLanguage>

 Element name: [ChineseLanguage](#)

Field	Description
Definition	Detail provided by the client in the text entry field if "Chinese language" was selected in response to question 10.1 (What is the language spoken at home other than English). (F1.10.1)
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	0-1 per client
XML example	<ChineseLanguage>a</ChineseLanguage>

 Element name: [OtherLanguage](#)

Field	Description
Definition	Detail provided by the client in the text entry field if "Other language" was selected in response to question 10.1 (What is the language spoken at home other than English). (F1.10.1)
Required field	No
Lookup table if available	N/A
Allowed values	Text string that allows a maximum of 250 characters
Allow multiple values	No
Occurrence	0-1 per client
XML example	<OtherLanguage>a</OtherLanguage>