Data User Tip Sheet

Healthy Start Monitoring and Evaluation Data (HSMED) System

1. **Tool 1- Demographic Healthy Start (HS) Screening Tool.**
   a. For any client, successful Tool 1 submission is required before HSMED users can submit additional tools for a Client Unique Identification (Client ID).
   b. Tool 1 data is used to generate a client record, which is identified by the Client ID. Thus, once a Client ID is generated by a Tool 1 upload, it cannot be deleted by HSMED users. However, the Client ID's demographic record can be updated by a subsequent Tool 1 upload (see **Exhibit 1: Client-level update example**).
   c. Tool 1 is not associated with any month or year; thus, each Client ID is only associated with one set of Tool 1 data. Although users are required to choose a reporting month and year from the drop-down menu prior to the upload, the Tool 1 data stored in the database are not associated with that selected month and year. A more recent Tool 1 submission to any reporting month and year will update the existing record and become the "final" record for a Client ID (see **Exhibit 1: Client-level update example**).

Exhibit 1: Client-level update example (Tools 1 and 2)

A more recent upload to <u>any reporting month</u> should: (1) Update existing client records if a Client ID already exists in the HSMED; (2) Insert new client records if a new Client ID is in the XML upload.

Submission #1: Tool 1, submitted March 2017 to reporting month Feb 2017, contains:

Client ID	ConsentFlag	Birthdate	IsUsBornId	RaceList
C0001	1	07/21/1988	1	1,2
C0002	1	03/02/1992	2	6, 14

Submission #2: Tool 1, submitted Aug 2017 to reporting month July 2017, contains:

Client ID	ConsentFlag	Birthdate	IsUsBornId	RaceList
C0002	2	03/02/1992	2	6
C0003	1	09/20/1980	1	1

If these are the only two Tool 1 XML files submitted, the database will contain the following data (note that Client ID C0002's record is the same as the submission #2 and C0001 from the submission #1 remains the same in the database):

Client ID	ConsentFlag	Birthdate	IsUsBornId	RaceList
C0001	1	07/21/1988	1	1,2
C0002	2	03/02/1992	2	6
C0003	1	09/20/1980	1	1

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2. Tool 2 – Pregnancy History HS Screening Tool.
   a. Similar to Tool 1, Tool 2 is not associated with any month or year, which means that each Client ID is only associated with one set of Tool 2 data. Although HSMED users are required to choose a reporting month and year from the drop-down menu prior to the upload, the Tool 2 data stored in the database are not associated with that selected month and year. A more recent Tool 2 submission to any reporting month and year will update the existing record and become the "final" record for a Client ID (See **Exhibit 1: Client-level update example**).

3. Tools 3, 4, 5, and 6 – Prenatal, Preconception, Postpartum, and Interconception/Parenting HS Screening Tools.
   a. Data for Tools 3 – 6 are associated with the reporting month and year, unlike Tools 1 and 2. Each reporting month has only one set of data per tool, which will be overwritten completely by any subsequent upload. This means that if there is already an existing upload to a particular tool and reporting month, a more recent upload will completely overwrite and replace all client records, from that previous upload for that month (see **Exhibit 2: File-level overwrite example**).
   b. An update to a particular reporting month should not affect data submitted to other reporting months. This allows a Client ID to be associated with different sets of data over time. For example, a client could have two sets of prenatal data, associated with different pregnancies; or two sets of postpartum data, as long as these sets of data are in different reporting months.
   c. Due to the file-level overwrite rule, applicable to Tools 3 – 6, HSMED users can delete client records for Tools 3 – 6 by submitting new uploads to the same month. Please note that the Client ID itself will not be deleted; only the client's Tool 3 – 6 data will be deleted.
   d. To update values in a client record for Tools 3 – 6 in a reporting month, HSMED users should re-submit a complete set of data (including fields that require updates and all other fields and client records that remain the same) to the same month. This approach will not generate another set of Tools 3 - 6 data for the Client ID and should be used if the value updates are corrections. For different approaches on updating data, for Tools 3 - 6, please refer to Tip #4 and its scenarios, below.

Exhibit 2: File-level overwrite example (Tools 3 – 6)

A more recent upload to a reporting month will completely overwrite client records from the previous upload <u>to the same reporting month</u>.

Submission #1: Tool 4, submitted March 2017 to reporting month Feb 2017, contains:

Client ID	BabyDueDate	TryToPregnantId	DeliveryPlaceId	FirstVisitWeeks
C0001	04/12/2017	1		6
C0002	06/23/2017	2	3	12

Submission #2: Tool 4, submitted Aug 2017 to reporting month Feb 2017, contains:

Client ID	BabyDueDate	TryToPregnantId	DeliveryPlaceId	FirstVisitWeeks
C0003	09/12/2017	3	2	8

The final Tool 4 data for reporting month Feb 2017 will be the same as the data for the second submission in Aug 2017 (note that Tool 4 records for Feb 2017 for clients C0001 and C0002 are removed as a result of the second submission).

Client ID	BabyDueDate	TryToPregnantId	DeliveryPlaceId	FirstVisitWeeks
C0003	09/12/2017	3	2	8

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4. Implications of submitting cumulative data every month vs. submitting only the new data

    a. **Cumulative data submission:** Using Tool 3 as an example, a HSMED user may export all Tool 3 data every month to submit to HSMED, with the same client records submitted each time without changes. This means Client IDs will have many copies of the same data, each associated with a different month. It is possible updates/revisions occur for some records, but it may not be obvious which months' data contain the updates unless a field-by-field data comparison is conducted.

    b. **Submitting only the new data; scenario #1**: Using Tool 3 as an example, an organization may export the client data that are modified in a certain month (e.g., June 2017) and submit to HSMED for the same month (e.g., June 2017). The June 2017 export includes new screenings completed in June 2017 and client records with values updated in June 2017 (these client records have been submitted before, such as in Jan 2017). The updated Client IDs will have at least two sets of Tool 3 data; one associated with the initial completion month (e.g., Jan 2017), and the other associated with June 2017.

    c. **Submitting only the new data; scenario #2**: Using Tool 3 as an example, in June 2017, an organization has completed new screenings and value updates to a few existing Tool 3 client records. There are multiple June exports, one includes new screenings

completed in June 2017; and others include client records with values updated in June 2017. The updated client records were submitted to the initial completion month, <u>combined with other unchanged client records submitted to the same initial completion month</u>, so that the submissions with updated records do not overwrite other records that are intended to remain the same in the initial completion month (see **Exhibit 3: Erroneous client deletion, example scenario)**.

d. **Recommendations:** the HSMED system does not enforce a single data submission approach, as this may vary according to an organization's data management system design. Approach 4.a (Cumulative data submission) creates duplicate copies of client records every month, and thus may not be the most efficient approach (and may require de-duplication in data analysis) and may make data changes hard to trace. Approach 4.b (Submitting only the new data, scenario #1) is easier to manage but may <u>not</u> be the best if the value updates are corrections or not intended to create a separate record. In Approach 4.c (Submitting only the new data, scenario #2), users may easily overlook the need to combine and upload the unchanged records again, which could lead to data loss (the unchanged client records will be removed from the reporting month if the new XML file contains only the updated records). **Thus, it is advised that HSMED users use Approach 4.b (Submitting only the new data, scenario #1) for rescreening or update screening, and Approach 4.c (Submitting only the new data, scenario #2) for value corrections/revisions.** HSMED reports query the latest set of data for each client, thus all three approaches are acceptable and should not affect the counts in the standardized reports. HSMED users that have questions on choosing an appropriate submission approach should contact hssupport@DSFederal.com for more information.

Exhibit 3: Erroneous client deletion, example scenario

In June 2017, my organization has 35 new postpartum screenings completed, and corrections to two postpartum screenings that had been previously submitted in March 2017. I am first submitting my new screenings to reporting period June 2017.

File name	Form name	# of clients	Status	Processed Date
Precon_201706.xml	Postpartum	35	Success	06/30/2017 12:10:34 pm

Then, I want to submit the two corrected postpartum screenings to update existing data associated with March 2017. There are two ways to do this:

Incorrect approach: I am submitting the corrected records containing two clients to the initial completion month, March 2017. These two client records were initially submitted 03/28/2017 in an XML file containing data on 28 clients, so I will need to submit to the same month in order to update existing data.

File name	Form name	# of clients	Status	Processed Date
Precon_20170328.xml	Postpartum	28	Success	3/28/2017 4:16:54 pm
Precon_201706corrected1.xml	Postpartum	2	Success	06/30/2017 2:10:34 pm

The final number of client records for the postpartum tool in March 2017 is two. The 28 clients in the first submission are deleted erroneously as a result of the second submission.

Correct approach: Submit an XML file that includes the two corrected records and the 26 unchanged records to March 2017.

File name	Form name	# of clients	Status	Processed Date
Precon_20170328.xml	Postpartum	28	Success	3/28/2017 4:16:54 pm
Precon_201706corrected2.xml	Postpartum	28	Success	06/30/2017 2:10:34 pm