Certified Community Behavioral Health Clinic – Expansion (CCBHC-E) Evaluation: Instructions for Grantees to Submit Electronic Health Record (EHR) Data

Contents

Overview of EHR data abstraction

SAMHSA is requesting that CCBHC-E grantees submit existing data, including item and scale scores, from select screeners for behavioral health and substance use concerns that all CCBHC-E clients may complete at each visit. This document provides instructions for CCBHC-E grantees to export and submit this de-identified client-level data from their electronic health record (EHR), clinical registry, or other electronic systems (this document refers to these data sources as EHR data for brevity), put the requested data into a file, and then upload this data to a SharePoint site created by the Evaluation Team. Grantees should report the data that is already available from their existing EHR systems. SAMHSA does not expect grantees to adopt new screening tools or modify their systems to report additional data.

What data are we asking for?

SAMHSA is requesting that CCBHC-IA and CCBHC-PDI grantees awarded in 2022 submit de-identified client-level data. Grantees are asked to submit data that they already routinely collect and store in their EHR. We are asking for client-level data from the following screeners:

- Patient Health Questionnaire-9 (PHQ-9),
- Generalized Anxiety Disorder-7 (GAD-7),
- Columbia-Suicide Severity Rating Scale (C-SSR),
- Drug Abuse Screening Test-10 (DAST-10), and
- Alcohol Use Disorders Identification Test (AUDIT).

Grantees should submit this data for all clients served by the clinic.

SAMHSA will use this data to learn about CCBHC clients' symptoms and functioning. SAMSHA will not use this data to monitor compliance with CCBHC certification criteria or otherwise assess the performance of individual grantees or clinics.

How do grantees share this data with the Evaluation Team?

Below is a general overview of the activities to allow grantees to share their EHR data:

Prepare data for submission

1. Use the provided template spreadsheet to understand the data being requested.
2. Export the existing select data from the EHR system.
3. Use the provided workbook (**EHR Data Codebook and Template**) to structure and deidentify the data submission. This workbook contains two spreadsheets. The first spreadsheet, entitled Codebook, defines the variables to be included in your data upload and the values required. The second, Template, provides an excel or CSV template you can use to structure your data file.

Data Submission

1. Name the data file using the requested naming convention described in our data instructions.
2. Upload the submission(s) in the designated SharePoint location in one of the compatible formats (Excel (.xls, .xlsx, .csv), SAS, Stata, SPSS, Parquet)

When is the data due?

At the time of submission, grantees will submit **all** available data collected from **all** clients who received CCBHC services and have data for the requested screeners beginning September 30, 2022. The Evaluation Team will provide training and work with grantees to submit their data beginning [DATE].

What staff should be involved in EHR data submission?

Dedicated IT or analytics staff are likely best suited to handle this task and complete the required upload. Grantees may consider designating one person to serve as the EHR point person to lead these efforts and coordinate this process. Please contact your Evaluation Liaison (EL) for assistance directly or use the general help email of: ccbhceval@ahpnet.org to reach the EL team. Note that ELs may not be familiar with the clinic's electronic systems.

What is needed to Plan for EHR Data Submission

Grantees have been provided with an **EHR Data Codebook and Template** to follow along with these instructions. The EHR Data Codebook and Template is an Excel document with 2 bottom tabs:

1. The first tab to the far left is for the **Codebook**, which is like a key for how the data are formatted,
2. The second tab is the **Template** which will be the format to use when data are submitted.

Grantees should review the **EHR Data Codebook and Template** to use as a guide to understand which select data elements/fields/variables are to be exported from an EHR, clinical registry, or other electronic system(s). Understanding the data requested will aid in locating where the needed data are stored, as some clinics may store data in multiple EHRs. This request is not limited to data stored in one EHR system. If the clinic uses multiple systems to collect or store these data elements (e.g., PHQ-9 data in one system and DAST-10 data in another), grantees should export the data from the most reliable and complete sources. Should this task require exporting data from one or more EHR sources, grantees will continue to follow the formatting according to the provided codebook and template, and eventual uploading of the file(s) to SharePoint. Grantees will export the requested data from the EHR after reviewing the template.

Items to consider prior to exporting the EHR data:	Additional details
1. Does the EHR currently store the select data being requested?	Review the five screeners to ensure they exist in the EHR: • **PHQ-9** • **C-SSRS** • **GAD-7** • **AUDIT** • **DAST-10**
2. Where is the EHR data stored?	Consider if the data requested is stored in one or multiple EHRs.
3. Are the answers for each screener question (AKA item level) documented in the EHR, or is only the total score (AKA scale level) documented?	Grantees should submit data the way it is stored in the EHR.
4. How will data be exported?	Consider the file format and file type, how variables can be selected for the report, processing time, etc. Compatible formatting includes Excel

	(.xls, .xlsx, .csv), SAS, STATA, SPSS, and Parquet. Identify the screener questions (variables) and what they are called in the export (variable names). Identify the screener answer choices (values) and what they are called in the export (value labels).
5. How will the client-level data be reported?	For example, will repeat instances of the PHQ-9 be reported in one row? Each instance of the screener should be on a separate row – one client may have multiple rows of data, each row collected at a different time

What to Know to Structure Data for Submission Using the Template:

Grantees will refer to the **EHR Data Codebook and Template** provided as a guide to **structure the EHR data** for submission. Grantees may use the Template (Tab 2) to structure the EHR data. Here are the column and row definitions:

1. **Columns** represent the requested data elements/variables.
2. **Rows** represent the item-level responses or summary scale scores for an individual client on a specific date. Please ensure that each client has a unique identifier.

Key points:

Each client's data will be in a separate row.

- A client may have data in multiple rows.
- Multiple clients' data *cannot* be in the same row.

Different screeners conducted for the same client on the same date should be listed in the same row.

If a client completed the screener(s) multiple times on more than one date (e.g., baseline and follow-up), screener data for each date available for the reporting period should be placed in a separate row, with the same ID number.

Level of data in the Template

Clinics store screening tool data in the EHR either at an item level or a scale level. Knowing this in advance will help prepare for structuring the data. Item level data refers to the individual questions that are asked in each screening tool. Scale level data refers to the total score of each screening tool. The Template includes columns for both item-level responses and summary scores for most scales allowing grantees to use either column depending on how the data are gathered in the EHR.

- **If item-level data, or each individual question, are unavailable**, and only the scale level (total score), is available, then enter the data into the summary score columns. Be sure to Indicate missing data as described in the **EHR Data Codebook and Template, under spreadsheet Tab 1 Codebook, that provides specific instructions for each screener**.
- **If some but not all item-level data are available**, provide item-level data where possible and scale level scores for the rest.

- Submit all PHQ-9, GAD-7, CCSR, DAST-10, and AUDIT data, even if no services were provided at the time of data collection (i.e. the client completed the instrument online or by phone but did not have a visit).

Use and creation of unique client identifiers (ID numbers)

Unique client identifiers allow the submitted EHR data to be de-identified prior to submission. This must occur with all submitted data to protect client information so that it remains private and confidential. **Grantees should use the same unique client identifiers that was created for clients' National Outcome Measures (NOMs) interview.**

If clients did not have a NOMs interview (e.g., the approved sampling method only requires 10% of the grantee's CCBHC-E clients to require a NOMs interview and ID number), a unique client identifier should be created for all other CCBHC-E clients using the same process used for the NOMs interviews, if possible. For creating new unique client identifiers, please use at least six alphanumeric (no special characters, i.e., @, #, ^, /) characters. Please ensure that each **client identifier matches for clients across each of their data** collection timepoints (e.g., intake/baseline, reassessments, and discharge).

Data stored in multiple EHRs or other data storage locations:

If combining data from multiple EHR sources into a single file is challenging, grantees may submit multiple files. Ensure all files use consistent unique identifiers for clients.

Missing data

Please provide as complete of a dataset as possible. If some data elements are unavailable, include all collected data. The codebook provides indicators to use when data are missing or where not applicable for a given client.

Variable Names

Universal variable names for both item-level and screener score-level data are available in the **EHR Data Codebook and Template**. You are required to align your data to this codebook prior to submission.

What to know for Data Submission

What and Where to Submit

Data files must be submitted in one of the following compatible formats:

- Excel (.xls, .xlsx, .csv)
- SAS
- Stata
- SPSS
- Parquet

Note: Some clinics conduct the screening tools on paper and store them as a PDF in the EHR. The data collection repository is unable to accept PDF data and may not be submitted.

Grantees will access the Grantee Shared Workspace on SharePoint to submit the EHR data using this link: https://ahpnet.sharepoint.com/CCBHCE-EHR-Data.

EHR Data Report Creation & Upload Steps

Step 1: Access template and prepare staff

1. Your site or organization should designate one person to serve as the EHR point person. This person will have access to the SharePoint folder for uploading EHR data. For assistance, please contact your Evaluation Liaison (EL).
2. Review the template in the **EHR Data Codebook and Template** to understand the select data requested and locate where the clinic's data are stored.
3. The EHR point person should coordinate with their colleagues, as needed, to access and export EHR data into one of the following formats: CSV (preferred), Excel, SAS, Stata, SPSS, or Parquet. See the Terms to Know for EHR Data Upload section for more information on file types.

Step 2: Create your data file

Data to include in the file

4. Include the following data elements as outlined in the **Codebook** tab of the **EHR Codebook and Template**.
    a. Client ID
        i. A unique identifier for each client which corresponds to the SPARS-generated ID.
    b. Interview Date
        i. The date the screening tool was administered. Please include data from every date on which the screening tool as administered (one interview/screening per row).
    c. Grantee Identifier
        i. The Grant Number provided by SAMHSA. This row will help identify grantees following data submission.
    d. Site Identifier
        i. A unique identifier for each site covered by the same Grant Number. Grantees with only one site should generate a single Site ID.
    e. Client Demographics
        i. Include year of birth, sex, race, and ethnicity. This data only is only reported once per client but can be reported for every row/date of screening if easier.
    f. Patient Health Questionnaire (PHQ-9)
        i. Nine-item screener assessing mental health over the previous 30 days.
        ii. This screener may include a tenth item related to difficulty with role duties. This is included in the codebook and can be reported but may not be applicable for all grantees or sites.
    g. Columbia-Suicide Severity Rating Scale (C-SSRS)
        i. Up to 19-item screener assessing suicidal ideation and attempts. Please refer to the codebook for specific variables to include.

h. Generalized Anxiety Disorder-7 (GAD-7)

   i. Seven-item screener assessing anxiety over the last two weeks.

   ii. This screener may include an eighth item related to difficulty with role duties. This is included in the codebook and can be reported but may not be applicable for all grantees or sites.

i. Alcohol Use Disorders Identification Test (AUDIT)

   i. Ten-item screener assessing problematic alcohol use and disordered drinking behaviors.

j. Drug Abuse Screening Test (DAST)

   i. Ten-item screener assessing problematic substance use behaviors over the previous twelve months.

Provide a unique identifier

5. Ensure each client has a unique identifier. Each row should represent item-level responses or scale-level scores for an individual client on a specific date. Demographic data is required only at the first date of data collection and not for subsequent visits.

Match data to existing templates

6. Verify that exported data matches the structure in the **EHR Data Codebook and Template**. Ensure variable names conform to the valid options specified in the codebook.

Step 3: Name your data file

7. Name files using the sequence below. Separate each element with an underscore ('_').

   a. Date of upload in YYYYMMDD format (e.g., '20240905')

   b. Grant Number provided by SAMHSA (e.g., 'XX039289')

   c. Site ID for multi-sites grantees (e.g., 'AHP'). If your organization has only a single site, you should include a single ID for all data.

   d. File number if uploading multiple data files (e.g., '03')

   e. File type indicating whether contents are client-level data or crosswalk information (i.e. 'client-data' or 'crosswalk')

   Full file name example: *20240905_ XX039289_AHP_03_Client-Data.csv*

Step 4: Upload your data file

8. Use the SharePoint link provided for EHR data upload to log in and upload file(s). **Note:** *Once uploaded, files cannot be modified or removed. Contact your EL if you have uploaded a file that needs correction*.

9. The data upload deadline is **[DATE].**

10. Include **all data collected since September 30, 2022.**

Terms to Know for EHR Data Upload

- **Electronic Health Record (EHR):** Any electronic system used to enter, store, and manage client-level medical records and data collection (e.g., Allscripts, Epic, Netsmart, eClincialWorks).
- **File Types**
    - **Excel Files:** Includes .xls, .xlsx, and .csv formats, commonly used for tabular data, in which contents are contained in rows and columns.
    - **SAS, Stata, and SPSS Files:** Formats compatible with common statistical software. These may require specific export methods from your EHR.
    - **Parquet Files:** A database-specific file format often used in data engineering contexts. These may be more easily exported and uploaded by those familiar with database construction.
- **Crosswalk:** A file mapping identifiers between datasets. For example, a Client ID crosswalk may consist of two columns, one containing SPARS or medical record IDs, and another containing corresponding unique client IDs for evaluation-specific purposes.
- **Item-level data:** Responses provided for individual questions within a tool/instrument. For example, item-level data for the PHQ-9 includes individual responses to each of its 9 items.
- **Scale-level data:** The total scale for an individual screener. For example, the PHQ-9 assigns a numerical value to each item based on client's responses. These values are then summed to create an overall score for the client on this scale.

For Additional Help

If you need assistance, please contact the grant's assigned Evaluation Liaison (EL).

EL assignments can be found in the Grantee SharePoint workspace. Alternatively, email the Evaluation Team at ccbhceval@ahpnet.com for information on the assigned EL.