Using Your Electronic Health Record (EHR) to Capture and Report RSR Data

Most Ryan White HIV/AIDS Program providers use electronic health record (EHR) systems to capture client demographic, health and service data. However, these systems don't always have features that make creating the Ryan White Services Report (RSR) easy. This memo has tips for making the most out of your EHR data for RSR reporting. Tips are related to three major steps.

Step 1: Collect RSR data in your EHR	→	Step 2: Get data out of your EHR	→	Step 3: Move your data into a tool that creates the RSR
Your EHR system should capture all required data elements		You'll need to map EHR data to RSR data for extraction		Create a compliant file by importing your data into TRAX or an RSR-Ready System

Step 1: Collect RSR Data in Your EHR

The required RSR data elements must live within your EHR if you want to use the system for RSR reporting.

Challenge: This is not always the case. EHRs may not capture key support services, HIV-specific items (e.g., risk factor) and clinical markers, or demographic characteristics that may be important social determinants of health. These data elements are not only essential for you to manage client health, but also required for the RSR.

Solution:

- Use the RSR Instruction Manual, Data Dictionary and EHR screenshots or technical guidance to identify how your system captures RSR data. Create a data element crosswalk that maps your EHR data elements to the RSR data elements and responses.

Ryan White Services Report (RSR) Crosswalk

		RSR		Your System		
ID	Variable	Definition	Value	Variable	Value	Notes
Demographics						
2	Vital Status	The client's vital enrollment status at the end of the reporting period.	12. Alive 6. Deceased 7. Unknown			

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- Make note of the RSR data elements that are not captured or in a clinical notes or free text format. You can do this efficiently by using the "Notes" field in the RSR crosswalk.
- For these data elements, create flowsheets – or customized data entry screens – in your EHR. Some EHRs allow you to capture data as "Smart Phrases," so when specific phrases are used in clinic notes, they are interpreted as discrete variables for easy extraction. Put in a request to your IT staff now because this may take time! If flowsheets are not feasible, you can collect these additional data in a separate application, like Access or Excel.
- Train your staff on new flowsheets and closely monitor and provide regular feedback on data quality.

Step 2: Get Data Out of Your EHR

Next, you need to extract the RSR data from your EHR system. The format in which you extract your data depends on the tool you use to create the compliant RSR client-level data XML file: TRAX, or an RSR System such as CAREWare (see Step 3 below).

Challenge: Regardless of the tool you choose, you'll need to do some data mapping because it's likely that your EHR data are captured in a slightly different format than the RSR requires. Data within EHRs are often difficult to map to RSR data elements. Services, labs and medications are particularly tricky because codes change regularly. If a code is replaced with another, the data linked to the previous code will not be pulled into the mapping process.

Solution:

- Think about how you can use existing EHR data for RSR data elements to avoid additional data entry. For example, if you don't have a variable in your EHR for syphilis screening but you do have a variable indicating a full panel STD test was provided, you can use that data to populate the ScreenedSyphilisID variable.
- Use more than one EHR data element for a given RSR data element. Let's use HIV diagnosis year as an example. You are required to report this data element for "new" clients. You can use the first date of service or date of Ryan White HIV/AIDS Program (RWHAP) enrollment to identify new clients, and then pull the HIV diagnosis date for those clients.
- Encourage your clinicians and intake staff to use a limited set of service and lab codes to ensure the most data possible are mapped and extracted. Stay informed on any new codes that may be used so you can incorporate them into your mapping process.
- Work with your clinical staff to establish logic for the "not medically indicated" response option for syphilis screening, which is often underutilized.

Step 3: Move Your Data into a Tool that Creates the RSR

Finally, you need to move these data into a tool that creates the RSR client-level data XML file for you. You can use one of two options: 1) TRAX, or 2) CAREWare or another RSR-Ready System. The "Creating the Client-Level Data File" webinar reviews all three options.

Don't just import and run! The most common reason for missing data is import issues. Monitor your imports closely!

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TRAX: TRAX is a free tool developed by HAB that creates compliant RSR XML files from structured data. Providers can extract data from their EHR, format them in the proper structure (.CSV files), import them into TRAX, and generate the RSR client-level data XML file. The TRAX webinar outlines this step-by-step process.

CAREWare & Other RSR-Ready Systems: You can also import data from your EHR into an RSR-Ready System and generate the RSR client-level data XML file from there. This may be the best approach for providers required to use an RSR-Ready System already by their recipient(s).

CAREWare is the most common system and offers two options for importing your data.

- HL7 stands for Health Level 7 and is a well-recognized, standardized file format. The CAREWare HL7 import allows for the import of clinical data such as hospital admissions, diagnoses, tests, and appointments into CAREWare.

- The Provider Data Import (PDI) is a CAREWare-specific solution for importing data. It allows users to import their clinical data from other EHR applications into CAREWare using a predefined MS Access template. This is accomplished by using the Data Translation Module (DTM), which is a utility designed to parse flat text files in a .CSV format, or Excel files, and create an Access database template file that can be easily imported into CAREWare through the PDI.

- The Data Translation Module, also CAREWare specific, is a utility designed to parse flat text files in a CSV format, or Excel files, and create an Access database template file that can be easily imported into CAREWare through the PDI.

Unlike TRAX, CAREWare does require some set-up before importing data. Learn more through the CAREWare wiki, by contacting the CAREWare Helpdesk, or by posting your question on the CAREWare listserv.

If you use a different RSR-Ready System, contact your recipient or system representative to learn more about import options. If you aren't sure who to contact, the DISQ Team can help you get in touch with the right resource.

Contact the DISQ Team at Data.TA@caiglobal.org for individualized technical assistance to help you address your data quality issues!