

RSR in Focus

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

The majority of 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

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. Many EHRs don't 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 an [RSR/EHR data element crosswalk](#) that maps your EHR data elements to the RSR data elements and responses (see below screenshot).

Ryan White Services Report (RSR) Crosswalk						
RSR				Your System		
ID	Variable	Definition	Value	Variable	Value	Notes
Demographics						
2	Enrollment Status	The client's vital enrollment status at the end of the reporting period.	1. Active, continuing in program 2. Referred to another program or services, or			

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- Make note of the RSR data elements that are not captured at all or that are in a clinical notes or free text format. You can do this efficiently by using the “Notes” field in the RSR/EHR crosswalk.
- For these data elements, create flowsheets – or customized data entry screens – in your EHR. Some EHRs allow you to capture data as “Smart Phases.” When these 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 it may take some time! If flowsheets are not feasible, consider collecting these additional data in a separate application, such as an Access or Excel database.
- 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-Ready 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 is required by the RSR. Data within EHRs is 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 information 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, does your clinic regularly conduct drug lab screens? If so, you could use the presence of the lab as a yes for substance use screening. However, note that there is a tradeoff to using data elements in your EHRs that don’t exactly align with RSR data elements for RSR reporting. For example, you may underreport substance use screening because not everyone receives a drug lab screen.
- Use more than one EHR data element for a given RSR data element. Let’s use the screened for hepatitis B data element as an example. The RSR requires you to report whether the client was screened for hepatitis B since HIV diagnosis. Create programming code that pulls HIV diagnosis date and

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dates of lab results or procedure codes related to hepatitis B screenings, and compares these dates to diagnosis date to populate the data element.

- Encourage your clinicians and intake staff to use a limited set of service and lab codes to ensure the majority of data 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. Providers tend to underreport “[not medically indicated](#),” especially for PCP prophylaxis and Hepatitis B vaccinations. Your clinical staff can help you understand why a client would not receive a given service due to medical reasons. For example, a clinician may not prescribe PCP prophylaxis for a client with a CD4 count above 200. You can use these criteria for establishing your data extraction programming logic.

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.



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

TRAX

[TRAX](#) is a free tool developed by HAB that creates the compliant RSR client-level data XML file 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. On January 14, 2015, Community Medical Centers gave a presentation on its process to generate the RSR file from TRAX and Epic. Watch the [webinar](#) to learn more and/or contact the [DART team](#) if you would like to talk to a representative from Community Medical Centers directly.

CAREWare (or another RSR-Ready System)

You can also import data from your EHR into an [RSR-Ready System](#) and then generate the RSR client-level data XML file from there. This may be the best approach for providers that are required to use one of these systems by their grantees. [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 Office of the National Coordinator for Health Information

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Technology is promoting HL7 for nationwide use in order to improve interoperability across EHRs and health information systems generally. The CAREWare HL7 import allows for importing 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 pre-defined 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.

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 grantee or system representative to learn about import options.