

Creating the RSR Client-Level Data File

Ryan White HIV/AIDS Program (RWHAP) Services Report (RSR)
HIV/AIDS Bureau
January 27, 2021

Today's webinar is presented by Tiffany Smith. Today's webinar will help you choose the best software option for creating the RSR client-level data file given your organization's current data management system and resources. Tiffany, also from the DISQ team, will give us an introduction on the available options.

Now before we start, I'm going to answer one of the most commonly asked questions about the slides. The recording of today's webinar will be available on the TargetHIV website within one week of the webinar; the slides and written question and answer are usually available within two weeks.

Disclaimer

- Today's webinar is supported by the following agency and the contents are those of the author and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.
 - CAI and their partners Abt Associates and Mission Analytics, supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$4,000,000.

2

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Outline

Overview of Requirements

RSR Ready Systems

TRAX

Your Own Export Function

Questions

These slides and the webinar recording will be posted on the TARGETHIV website in about a week. But, if you feel overwhelmed by any of the content here, please feel free to contact DISQ.

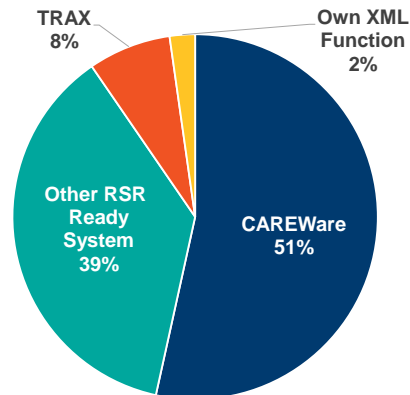
RSR Client-Level Data File

- One record for each RWHAP eligible client, including:
 - Demographics
 - Services
 - Clinical data
- Must be uploaded in specific XML format

As you may know, in the RSR, you are required to submit de-identified client-level demographic, service, and clinical data.

You must upload these data in a specific XML format.

Systems Used to Create the File



5

Let's take a step back. There are three main strategies for creating your client-level data file. The first is to use an RSR-Ready System. These are data management systems that create the XML file for you. As you can see by the blue on this pie chart, the vast majority of provider files created in 2019 were created with one of these systems. CAREWare is the most commonly used RSR-Ready System.

About 2% of files were created by providers that developed their own file generation functions. These are typically subrecipients of Part A or B recipients that developed their own data management systems and added the XML generation function. Finally, 8% of files in 2019 were created by TRAX.

RSR-Ready Systems



System	Sponsored by:				EHR
	HRSA HAB	Part A Recipient	Part B Recipient	Independent	
AIRS			▲		
ARIES			▲		
AWARDS				▲	
CAREWare	▲				
Casewatch Millennium		▲			
CHAMP		▲			
CPCDMS		▲			
eClinicalWorks				▲	▲
eCOMPAS		▲	▲		
Epic					▲
eSHARE		▲			
NextGen				▲	▲*
Provide Enterprise				▲	
SCOUT			▲		

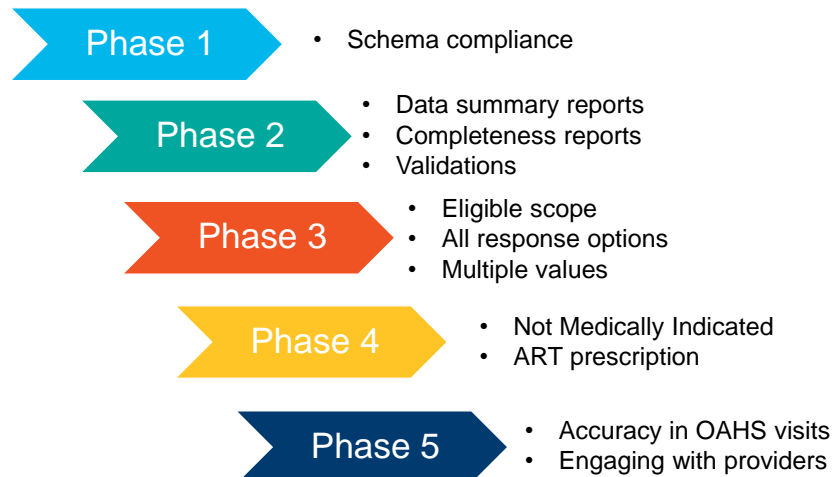
Here are the systems that are RSR-Ready. If you use one of these systems, the process for creating the RSR should be relatively straightforward, with minimal or one-time only data mapping and manipulation. This table shows who sponsors each system.

HAB provides CAREWare free of charge. As you can see, many of these software systems were developed by Part A recipients to manage their provider contracts. Part B recipients have also created systems to manage providers. Other RSR-Ready Systems are independent software vendors that offer their services for a fee. Most systems are HIV care case management systems; just three are full EHRs. We've had a hard time getting EHRs to become RSR-Ready because they are often so customizable, meaning that it's difficult to create a single report for all users that would include the right data.

For NextGen Users, the system has not been updated with the new 2020 RSR data elements and schema number. If you use NextGen, contact the DISQ team for assistance in getting your file ready for upload.

Also, Epic has developed an RSR functionality, but it has not yet been tested by DISQ. If you are interested in generating your RSR directly from Epic, please contact your agency's Epic representative to get the details. Epic will work with you to develop a process to map your data being captured through the system to the RSR fields.

What Does it Mean to Be “RSR-Ready”?



In order to be RSR-Ready, systems must be able to create files that continue to be compliant with the XML schema, meaning they are in the correct structure. As the RSR matured, we worked with the systems to build internal data quality reports to mirror those available in the RSR Web System to allow providers to check their data throughout the year.

With the 2014 change in schema and the onset of eligible scope reporting for 2015, HAB created a more extensive testing process that involved both schema compliance and data validity.

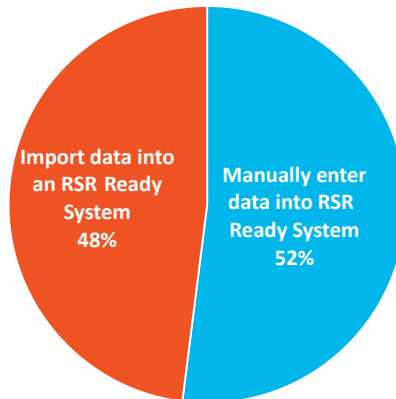
In recent years, we have continued to work with systems so they are aware of the reporting requirements and make adjustments. We have continued to support system vendors when changes are made to the RSR: for example, in 2019, DISQ conducted a test of XML files to incorporate changes to the RSR elements. We also hosted a webinar to address new RSR data elements and new data reporting requirements for the COVID-19 Data Report (CDR), Ending the HIV Epidemic Tri annual Report (EHE), and the new RSR data elements. Stay tuned for new updates to the RSR for next year.

EHR and RSR-Ready Systems Users

- Many of you use an electronic health record (EHR) and an RSR-Ready System
- Data across systems are shared through
 - Manual data entry
 - Electronic bridges

Most RSR-Ready System users also use an EHR for their regular clinical care. Of the 193 providers that took the survey, 90% use an EHR and 70% use an EHR and an RSR-Ready System. The EHR is really the source system and providers move data into the RSR-Ready System through manual entry or electronic bridges.

Most Providers Manually Enter Data



As you can see by the blue on the pie chart, most manually enter data into the RSR-Ready System however we did see a slight decrease in manual entry from last year to this year. This is great because we like to see people decrease manual data entry. About half of providers who enter data manually do so because they don't have the capacity to build an electronic bridge. About 30% feel that manual entry leads to more accurate and complete data. A smaller share simply don't have enough clients to warrant the bridge.

Electronic Bridges

- Can help you save time and have more accurate and complete data
- Must be monitored carefully
- CAREWare bridges
 - Provider Data Import Tool (PDI)/CAREWare Data Translation Module (DTM)
 - HL7 Interface
 - [Importing data into CAREWare](#)
- Contact DISQ for help with other systems

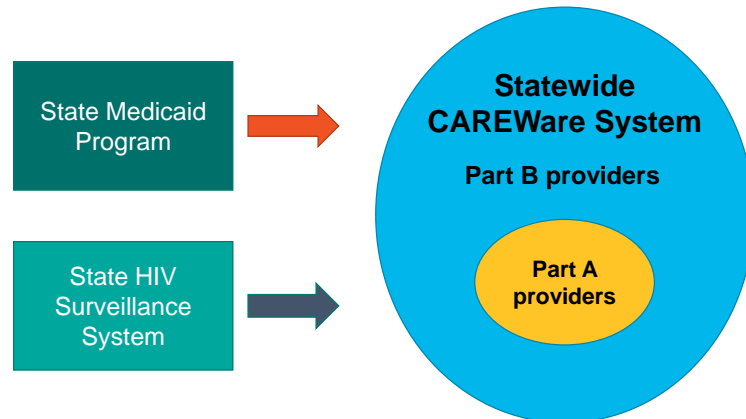
10

We do encourage providers to develop a bridge to save time and improve data completeness. However, they have to be monitored carefully and updated to reflect new service and medication codes.

For CAREWare, the Provider Data Import and HL7 interface are available. I have up here a link where you can access some great information on these tools, which you can access now through the resource document chatted out at the beginning.

If you use another RSR-Ready System, contact the DISQ team or your vendor and we can help you identify and bridge option for you. For example, I know that eClinicalWorks has been developing bridges with CAREWare and ARIES.

Profile from the Field: RSR-Ready System



11

This is a statewide networked CAREWare system that links all Part B and Part A providers. The system is also linked to Surveillance and Medicaid data, so providers see a complete client record with all the client's service and clinical data regardless of where the care was received.

Profile from the Field: RSR-Ready System (continued)








- Data capture:
 - Larger providers import data from their EHRs with recipient support
 - Smaller providers manually enter data
- Recipient monitors data quality on a monthly basis
- Providers generate and upload their own XML files

Larger medical providers worked with the state to develop imports into CAREWare from their EHRs. Smaller providers that don't have the capacity to maintain those bridges do manual data entry.

The Part B recipient monitors data quality on a monthly basis, letting providers know what data elements are missing.

Providers are still responsible for creating the client-level data from CAREWare and uploading it to the RSR Web System. This helps them take ownership of the quality of their data.

Find the Systems on the TargetHIV

System name	RSR-Ready System Version #	Providers in 2019	Contact	Info on the RSR	2020 Version Release Timeline	Ready for 2020
	AIRS  (9.0.20)	70	Larry Spiegel  212-417-4469	RSR  Data Quality Reports 	January 20, 2021	
# of providers	CA ARIES CA  version 6.8.0.2 (1))	134	CA ARIES Help Desk 	Contact the CA ARIES Help Desk 	January 2021	Web links
Contact						

[RSR-Ready Data Systems](#)

There is a list of RSR-Ready Systems available for you on TargetHIV if you are thinking about selecting a new system. TargetHIV will give you the name of the system, the number of providers that used it for the last year's RSR, contact information for the system vendor, information on using the system for the RSR, and the timeline for releasing the new version to complete the RSR. We just updated this page a few weeks ago and most builds needed to create the RSR are available.

Make Sure You... (Systems)

- Use the latest build
- Enter all required data
- Run the available data quality reports after creating your file
- Obtain or develop a crosswalk that maps data system fields to RSR data elements

14

If you are an RSR-Ready System user, make sure you are using the latest build, entering all required data, and running the quality reports in the system. Also, make sure you have a crosswalk that maps your system data elements to RSR data elements, you can know where to input and correct your data, and just generally feel more comfortable with your data and what you're reporting to HAB.

Example Crosswalk (CAREWare)

Field ID	Field Name	Coding	Location in CAREWare
SV4	Unique client ID (eUCI)-Encrypted	Encrypted using hash function	Auto-calculated by CAREWare from first and last name, date of birth, and gender of each client
4	Client's year of birth	YYYY	Demographic tab from the Date of Birth of Client
5	What is the client's ethnicity?	Hispanic/Latino Non-Hispanic/Latino	Demographics tab
	Demographics (Select one)	<ul style="list-style-type: none"> • Mexican, Mexican American, Chicano/a • Puerto Rican • Cuban • Other Hispanic, Latino/a or Spanish origin 	Demographics tab Activation

RSR data element

Where it lives in CAREWare

Here's what an example crosswalk looks like for CAREWare.

As you can see, the crosswalk will identify the responses that are required for the RSR client-level data, as well as where that information is housed in the system. These crosswalks will help you become familiar with where your RSR data is coming from.

If you use a system other than CAREWare, contact your vendor to receive your system's crosswalk.

TRAX

- HAB-sponsored tool that converts structured data into the XML file
- Why use TRAX?
 - You have an EHR that is not RSR-Ready
 - You are tired of moving data into an RSR-Ready System to create the file

The second option to generate your client-level data file is TRAX, a tool developed by HAB, which accepts data into a structured format and converts it to the correct XML file.

You might use TRAX because you have an EHR that is not RSR-Ready. Some of the big ones are Centricity. Or, maybe you use an RSR-Ready System, but you are tired of it and just want to generate the file from your EHR without doing the double data entry and electronic import.

For detailed, step-by-step instructions on using TRAX to create your XML file, I encourage you to review the RSR TRAX webinar that was hosted last December.

Make Sure You... (TRAX Process)

- Get your IT staff on board now
- Have all required fields within your system
 - Map current fields to RSR data elements
 - Create new fields

If you plan to use TRAX, get your IT staff on board now. They will do the work of getting the data out of your EHR and formatted correctly. This work will involve mapping data elements you are already collecting to those in the RSR. It's possible that you aren't collecting all of the RSR data elements. If that's the case, then you'll need to add the fields into your data collection process.

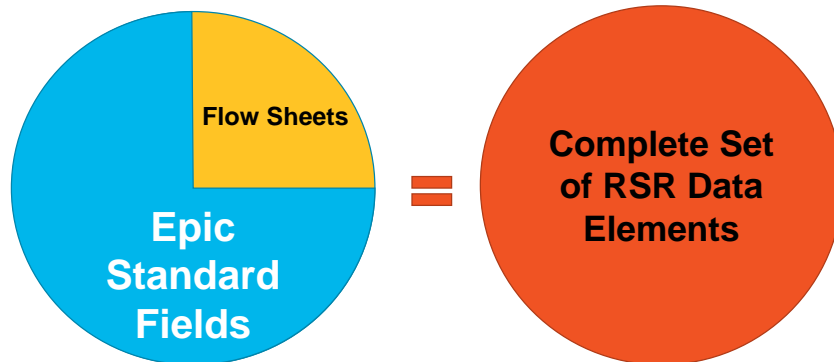
Additional Resources

- [TRAX download package](#)
- [TRAX webinar](#)
- [Previous webinar with recipient/provider presentations](#)

Here are some additional resources for TRAX and more information about generating your XML file. As a reminder, these slides will be posted online so you don't need to worry about copying down these links now. They're also available in the resource document chatted out earlier.

You can also find these materials on the TARGET Center website by searching for "TRAX" in the field at the top right. This will bring up all of the resources related to TRAX.

Profile from the Field: TRAX Part 1



In this example, this medical provider uses Epic as their EHR. Because the EHR does not capture all required data elements, the provider's IT staff created flow sheets.

Profile from the Field: TRAX

Part 2

- Clinicians must be trained and monitored on correct use of flow sheets
- Data monitored monthly to check for missing items
- Daily reports on clients with an appointment, highlighting missing items

The provider monitors the data entered into the follow sheet and trains clinicians on proper data entry.

The provider also runs a list the clients for the day and the data that might be missing. This is great for quality of care purposes too. If a client is missing data on a cervical cancer screen, maybe that client needs a cervical cancer screen!

Profile from the Field: TRAX

Part 3

- Initial effort:
 - SQL code to pull data
 - Crystal Reports to format data in correct .CSV file structure
- Ongoing effort: 1-2 hours to create and upload the RSR

The provider uses SQL code to pull data from the Epic database and Crystal Report to format the data in the correctly structured .CSV file template. While this initial programming took some time, not it takes him just an hour or two to create the XML file and upload it to the RSR Web System.

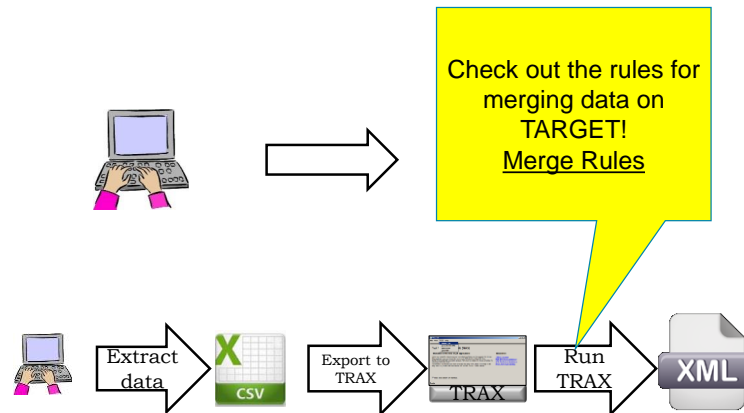
Your Own XML Export Function

- Requires the most programming expertise
- [Follow the XML schema](#)
- [Use the eUCI Application](#)

The final and most resource-intensive option for creating your XML is to build your own export function. This option definitely requires the most expertise. Typically, it's the Part A and B recipients that adopt this approach.

Make sure you follow the requirements defined by the XML schema and use the eUCI Application, which creates and encrypts the UCI from data elements in your system. You can download the resources on this slide from the TARGETHIV website, but they are also included in the resource chatted out earlier.

You Can Use Multiple Strategies

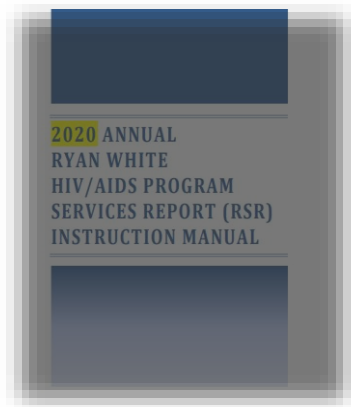


24

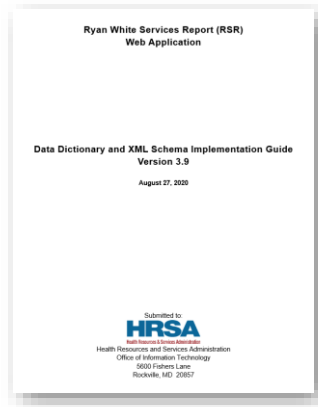
You can also submit multiple files, such as the one generated from your RSR-Ready System and one from your other, non RSR-Ready system. You can use TRAX to create the file from the non RSR-Ready System.

Once you've uploaded the files to HAB, HAB will merge client records in these files based on the eUCI. If this is your approach, make sure to check out the merge rules on TARGET. You'll want to know when and why data are overwritten or appended.

Key Documents



[RSR Instruction Manual](#)



[RSR Data Dictionary](#)

25

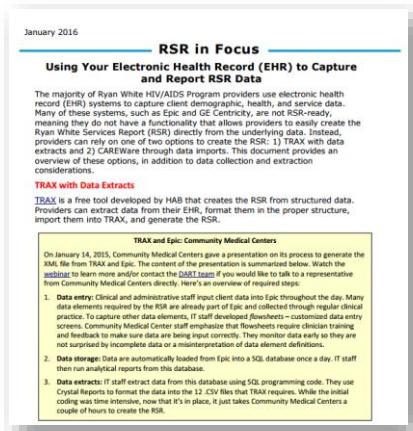
Now that you're experts in the options you can use to create your XML file, let's take a closer look at what an XML is and the process for uploading your data.

These 2 key documents will guide you in completing your RSR and getting your client-level data ready for upload. On the left is the RSR Instruction Manual, which gives detailed information about the reporting requirements and RSR data elements.

On the right is the RSR Data Dictionary and Schema Implementation Guide, which provides the assigned codes for the data elements and response options. These documents go hand in hand to create a complete picture of how to complete your report.

RSR In Focus on EHR Data

[Using Your Electronic Health Record \(EHR\) to Capture and Report RSR Data](#)



Furthermore, you might benefit from this resource on using your EHR for capturing and reporting data for the RSR. Available on the TARGETHIV website are short cheat sheets called “RSR in Focus,” which highlight different aspects of reporting.

Uploading Your File

- Completing the Provider Report: [Register now](#) for February 3 webinar!
- Schema errors
 - Help you identify problems with your XML
 - Must be resolved before you can upload
- Validation messages
 - Help you correct data that you have uploaded

27

For detailed instructions on how to upload your client-level data file, participate in a February webinar on how to complete the RSR Provider Report. That webinar walks you step-by-step through completing the report, including the process for uploading your data file.

Though we hope the process is relatively painless, it is not uncommon to experience some hurdles in uploading your XML file and ensuring your data are accurate. The RSR system has built-in checks to help you. One type are schema checks, which make sure that the XML tags correspond to the requirements outlined in the Data Dictionary. These messages are daunting when you first see them, but once you're familiar with the language of the XML files they will guide you to fix any issues you have in your file. If you see a schema message that you can't make heads or tails of, please contact the DISQ Team. We are happy to assist you in getting your file ready for upload, and we use your feedback to improve the system messages so that they best meet your needs.

Once you have successfully uploaded your file, you may receive validation messages related to your data. These point you toward potential issues that you may be able to resolve before your final submission.

RSR System Opens Soon!

- Important dates:
 - February 1: RSR Web System Provider Report opens
 - March 1: Target date for submission of Provider Reports
 - March 29, 6:00pm ET: Final RSR deadline!
- [Webinar series](#)
- Recordings, slides, and Q/A docs of previous webinars
 - Registration links to upcoming webinars

28

HAB strongly encourages you to upload your client-level data and submit your Provider Report no later than March 1st, 2021 to allow you and your recipients plenty of time to review your data prior to the final deadline, which is March 29, 2021. All reports must be in 'Submitted' status by 6pm ET on the 29th or they will be marked late by the system.

TA Resources

- The DISQ Team:
 - Data.TA@caiglobal.org
 - [Sign up for the DISQ listserv](#)
 - [Submit a DISQ TA request](#)
- EHBs Customer Support Center:
 - 877-464-4772
 - [Submit an EHBs TA Request](#)
- Ryan White HIV/AIDS Program Data Support:
 - RyanWhiteDataSupport@wrma.com
 - 888-640-9356
- CAREWare Help Desk:
 - cwhelp@jprog.com
 - 877-294-3571
 - [Join the CAREWare listserv](#)

The DISQ Team addresses questions for those needing significant assistance to meet data reporting requirements, such as helping recipients who do not know what to do or where to start; determining if recipient systems currently collect required data; assisting recipients in extracting data from their systems and reporting it using the required XML schema; and connecting recipients to others that use the same data system. The DISQ team also deals with data quality issues and provides TA on TRAX and the eUCI Application. The TARGETHIV website has a wealth of materials and links, including the RSR Instruction Manual and Data Dictionary, which are critical resources for preparing for the RSR. All the past webinars and links to future events are also found on TARGET.

Data Support addresses RSR-related content and submission questions. Topics include: Interpretation of the RSR Instruction Manual and HAB's reporting requirements; allowable responses to data elements of the RSR Recipient Report and client-level data file; policy questions related to the data reporting requirements; and data-related validation questions.

The HRSA Contact Center addresses RSR software-related questions, including the Electronic Handbook (or EHB) and the RSR Web System. They are your best resource for navigation, registration, access, and permissions in these systems. Finally, the CAREWare help desk is best able to assist you with any of your CAREWare-related questions.