Development of an HIV Data Management System with User Input

September 2021

Overview

On September 23, 70 participants attended a presentation by:

- Leslie Frank, Colorado Department of Public Health and Environment (CDPHE)(Leslie.Frank@state.co.us)
- Nick Roth, Denver Department of Public Health and Environment (DDPHE) (Nicholas.Roth@denvergov.org)

In the presentation, they described the evolution of their Ryan White HIV/AIDS Program (RWHAP) data management infrastructure and the development of the COHEART system. They outlined the implementation plan, training, data sharing, lessons learned, and next steps. This memo provides a description of the question-and-answer portion of the presentation. Contact the DISQ team for more information on upcoming office hours.

Question and Answer

How many Part A and B providers are in Colorado?

There are currently 15 Part B providers, 10 of which overlap with Part A.

What systems were you using before COHEART and why did you feel you needed to use your own system?

The previous system was ARIES. However, ARIES is managed by a private vendor, and Colorado's Office of IT had some requirements that made it difficult to work with external contractors on data systems. Otherwise, Colorado liked ARIES and would have maintained it. Colorado also didn't stay with REDCap because the way the data is structured on the backend makes it hard to share client data across providers.

What is the electronic health record (EHR) used by most providers that import data into COHEART?

Providers mostly use Epic although there are a few providers that have homegrown systems.

Did you work with an in-house developer or contract?
Colorado worked with an in-house developer who has since left. They recently closed out recruitment to hire a new person.

What are the pro and cons of hiring an independent contractor versus a business?
The pros to an in-house developer are having them dedicated to your program and easy access to ask questions. With external developers in a common pool, you may have to wait in line for a request that can take couple weeks. The con to having an in-house developer is if they leave, there is no one to do the work.

Are there any legal obstacles to sharing between RWHAP Parts and ADAP?
There was a preexisting data use agreement (DUA) between CDPHE and DDPHE to get ADAP data over to the Part A system. The ADAP data comes in on a monthly basis into the Part A CAREWare system. ADAP data can be used to complete data related to income, housing status, and insurance. Recently, they enhanced the DUA to include HIV surveillance data.

To develop data sharing, they brought in legal officers from both agencies, received existing templates on what the agreements should contain, and got informed consent from the clients to opt out of having their data shared.

What is your ADAP data system?
ADAP uses Ramsell Pharmacy Benefit Manager to manage client data and create the ADR.

Are there any issues with data mapping from the EHR for RSR data?
DDPHE had initial meetings with providers to see if they had elements in their source data (i.e., EHR) to pull into CAREWare through the Provider Data Import (PDI). DDPHE discussed with providers whether they had the internal capacity to use the PDI and make it sustainable. They had monthly meetings during the development process. After, they ran the PDI to identify and address any issues.

Does the system support HOPWA providers?
It does not currently. However, CDPHE and DDPHE have been working with HOPWA partners in another division to see what kind of data elements they are using for their own program. Providers that do HOPWA work are funded by Part A, so they are working towards integration.

What is the cost of the initial development and ongoing maintenance?
They built out the tables on the existing HIV surveillance system, so CDPHE already had the structure in place with a server, data systems, and log in.

Salary for the developer and overhead have been the main cost. For two years of development salary and overhead, the total cost might be between $400-500K. The ongoing maintenance is just one full time equivalent (FTE), and that individual supports the import process.

How helpful is the RSR data dictionary for this project?

The developer was not able to build the RSR export, so CDPHE recently started meetings with IT staff. They have been using the data dictionary to create the RSR XML file and will be ready to test in October.

Who built the architecture of the application?

It wasn't one person entirely. They started building it in REDCap to determine how the tables should look and what fields needed to repeat (e.g.., services) and expanded on that. The previous developer had worked with similar data systems and had a good knowledge base.

Are you using HIV surveillance data for data to care?

CDPHE is planning a quality improvement PSDA cycle to build out data to care plans. They will do a monthly pull of individuals who are not virally suppressed and prioritize certain populations (e.g., women of child-bearing age) and work through the list.

Did the case managers want to have the system be used for referrals for the day-to-day operations of the case management?

CDPHE wants COHEART to support tracking plans and case management tasks, but the system has limitations. They are working closely with their case managers to make the system better for them.