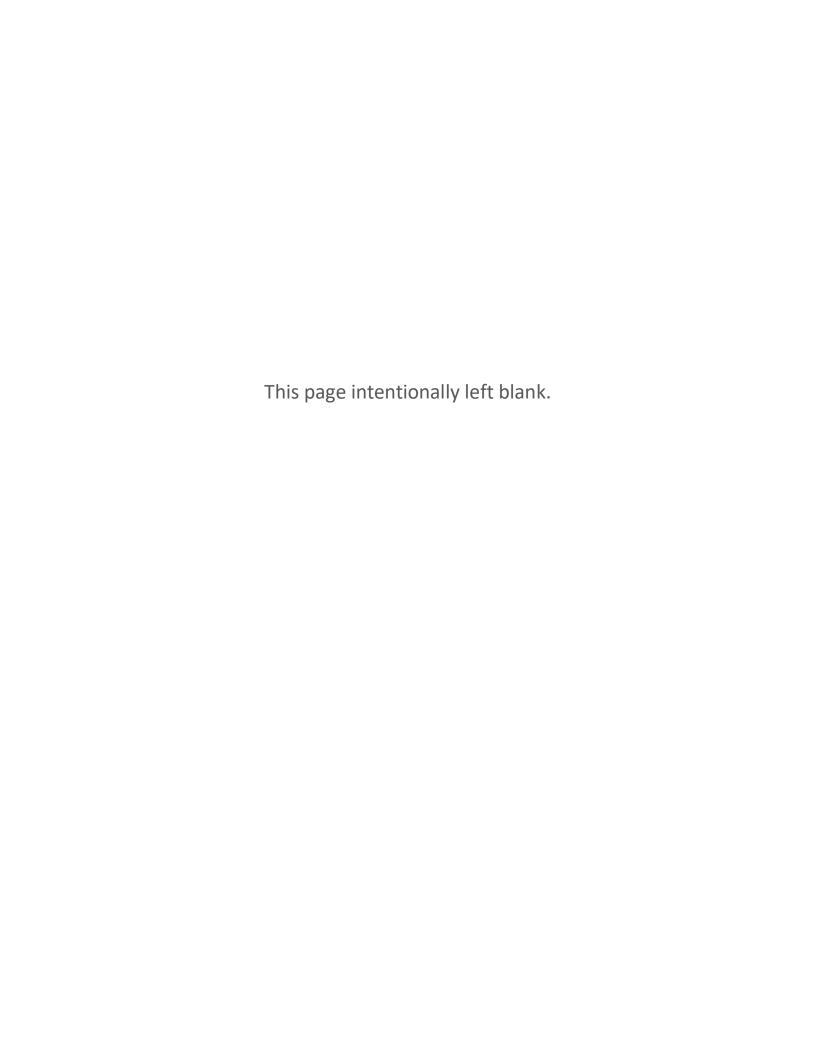# Chronic Conditions Warehouse

Your source for national CMS Medicare and Medicaid research data

Chronic Conditions Warehouse Virtual Research Data Center

Analytic Container Policy

MARCH 2024 | VERSION 1.1

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Revision Log

Date	Changed by	Revisions	Version
March 2024	A. Arens	Updated link to the VRDC Fee List	1.1
March 2024	CMS OEDA D. Taylor M. Lowry	Created initial document	1.0

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1.0 Policy Statement

This document provides the Centers for Medicare & Medicaid Services (CMS) analytic container use policies within the Chronic Conditions Warehouse (CCW) Virtual Research Data Center (VRDC) environment. It identifies the policies related to the purchases of analytic container access, describes the container size options, and provides information on requests for adding additional program libraries.

2.0 Analytic Container Purchases

CCW VRDC analytic containers provide a containerized solution for Stata, R (including RStudio), and Python. Accessing the analytic container is an "add on" option for conducting analytics in the CCW VRDC and is subject to additional fees. Analytic container access is assigned at the user level. When an analytic container is purchased for a user, they will be able to use the analytic container for all their DUAs.

Researchers and innovators may request CCW VRDC analytic container access by submitting a Data Use Agreement (DUA) request through the Research Data Assistance Center (ResDAC). Requests to change the size of an existing analytic container can only be made annually during the CCW VRDC seat fee renewal process. Users cannot request changes to their analytic container size during their one-year seat access period. The CCW team cannot grant analytic container access without confirmation that the access has been approved through the DUA process and that any associated fees have been received. Fees associated with analytic container access depend on the size of the container and can be found on the VRDC Fee List. Contact ResDAC at resdac@umn.edu or 1-888-973-7322 for assistance with submitting a DUA amendment request.

3.0 Analytic Container Options

The CCW VRDC offers three analytic container sizes. Table 1 below describes the three analytic container options with the CCW VRDC.

Analytic container requesters should estimate the needed analytic container size based on the analysis they are conducting. Stata recommends using one and a half times the size of the user's datasets as a basis for estimating memory needs. For example, if a user will be working with a 16 GB dataset, they will likely need an analytic container with at least 24 GB of memory, if not more, to meet their analytic needs. Users should split data files into manageable sizes within the compute and memory limits of their selected analytic container.

Table 1. CCW VRDC analytic container sizes

Container size	Container details
Medium container (standard)	4 vCPU and 24 GB memory
Large container	6 vCPU and 48 GB memory
Extra-large container	8 vCPU and 128 GB memory

4.0 Additional Library Requests

CCW VRDC users may request additional R, Python, or Stata packages. To request a software package, users must follow the CCW software request process and adhere to the *CCW Software Request End-User Guidelines*. Quarterly evaluations for new requests take place in January, April, July, and October. Software package requests should be submitted to the CCW Help Desk at ccwhelp@ccwdata.org.

Appendix A — List of Acronyms

Acronym	Definition
CCW	Chronic Conditions Warehouse
CMS	Centers for Medicare & Medicaid Services
DUA	Data Use Agreement
GB	Gigabyte
ResDAC	Research Data Assistance Center
vCPU	Virtual central processing unit
VRDC	Virtual Research Data Center