

🗄 DATABASE & METHODS CYBERSEMINAR SERIES

FY25 Session 1:

Meet VIREC: The Researcher's Guide to VA Data

October 7, 2024



Hosted by  VIREC

Maria Souden, PhD, MSI

Director, VA Information Resource Center (VIREC) and ORD Office for the Sustainment and Implementation of Research EHR Solutions (OSIRES)



DATABASE & METHODS CYBERSEMINAR SERIES

Informational seminars to help VA researchers access and use VA databases.

Sessions cover...

- Available VA data and resources to support VA data use
- Using CDW Data for SQL beginners and more experienced users
- Topic-specific data and their application to analytic questions
- Tools for viewing and using VA data

Be sure to check out our [full curriculum](#) and [special topics archive](#).



UPCOMING DATABASE & METHODS SESSIONS

First Monday of the month | 1:00pm-2:00pm ET

Date	Topic
11/4/24	An Introduction to Commonly Used VA Databases
12/2/24	VHA Corporate Data Warehouse (CDW): Using CDW Data to Conduct a Research Study for SQL Beginners

Additional topics TBA, including...

- State All Payer Claims Data
- VA Pharmacy Data
- Race & Ethnicity Data
- Using Joint Longitudinal Viewer for Research
- and more!

Visit the [VIReC Database & Methods Cyberseminar](#) page for more information & registration links.

Visit [VIReC Cyberseminar Archive page](#) to watch previous sessions.

Where can I
download a
copy of the
slides?



SAMPLE EMAIL

Host: HSR&D Cyberseminars (cyberseminar@va.gov)

Event number (access code): 199 009 5117

Event password: 3844

Registration ID: This event does not require an enrollment ID

[Join event](#)

To join the audio conference only

To receive a call back, provide your phone number when you join the event,
or call the number below and enter the access code.

USA Toll Number: 14043971596

Toll-free dialing restrictions:

https://www.webex.com/pdf/tollfree_restrictions.pdf

Access code: 199 009 5117

[Please download today's slides](#)

[Please click here for today's live captions](#)

Before we start...

Help us know more about you!

Three poll questions coming up – respond in the Webex pop-up window.

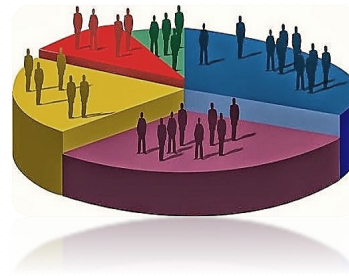
Thank you for helping us tailor and improve our cyberseminars!



Poll #1:

*What is your primary **role** in projects using VA data?*

- Investigator, PI, Co-I
- Statistician, methodologist, biostatistician
- Data manager, analyst, or programmer
- Project coordinator
- Other – please describe via the chat function



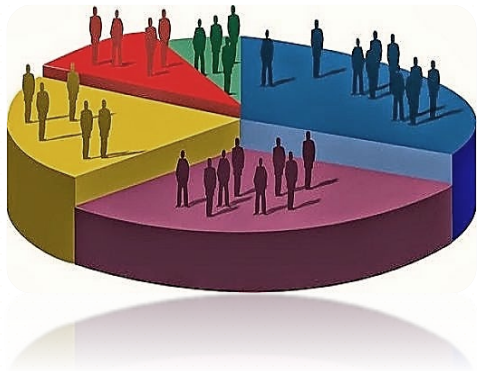
Poll #2:

How familiar are you with VIREC, its products, and services?

- Frequent user
- Familiar with, use sometimes
- Aware of, never used
- Not at all familiar until today

Poll #3:

How long have you been working with VA data?



- None – I'm brand new to this!
- One year or less
- More than 1, less than 3 years
- At least 3, less than 7 years
- At least 7, less than 10 years
- 10 years or more

🗄️ DATABASE & METHODS CYBERSEMINAR SERIES

FY25 Session 1:

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Director, VA Information Resource Center (VIREC) and ORD Office for the Sustainment and Implementation of Research EHR Solutions (OSIRES)

Provide an overview of the
VA Information Resource Center,
our products, and our services.

Session Objective



Session roadmap

- What is VIREC?
- How does VIREC support my research and data use?
- How can I collaborate with VIREC or provide feedback on VIREC products?





Support the effective use of data by VA's analytic community to transform Veteran health and health care as part of a learning health system.

A community of informed VA researchers empowered to use data effectively to improve Veteran health and health care.





FY 22-26 Strategic Goals



Provide **leadership and expertise** for HSR&D and ORD on data-related issues.



Strengthen **organizational capacity** for data use as an essential component of VA's learning health system.



Provide **factual and evaluative information about Veteran data** to inform its use across the project lifecycle.



Increase the **availability, visibility, and accessibility** of data for analytic use.



Steward VA/CMS data to support its use in VA research.



VIReC Functions and Expertise

Continuum of initiatives supporting research data needs



Data Availability & Access Policy



Data Knowledge & Documentation



Education & Dissemination



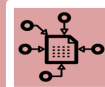
HelpDesk & Knowledge-Sharing



Liaisons within Data Ecosystem



Provisioning & Oversight of CMS Data



VA REDCap Data Collection & Management

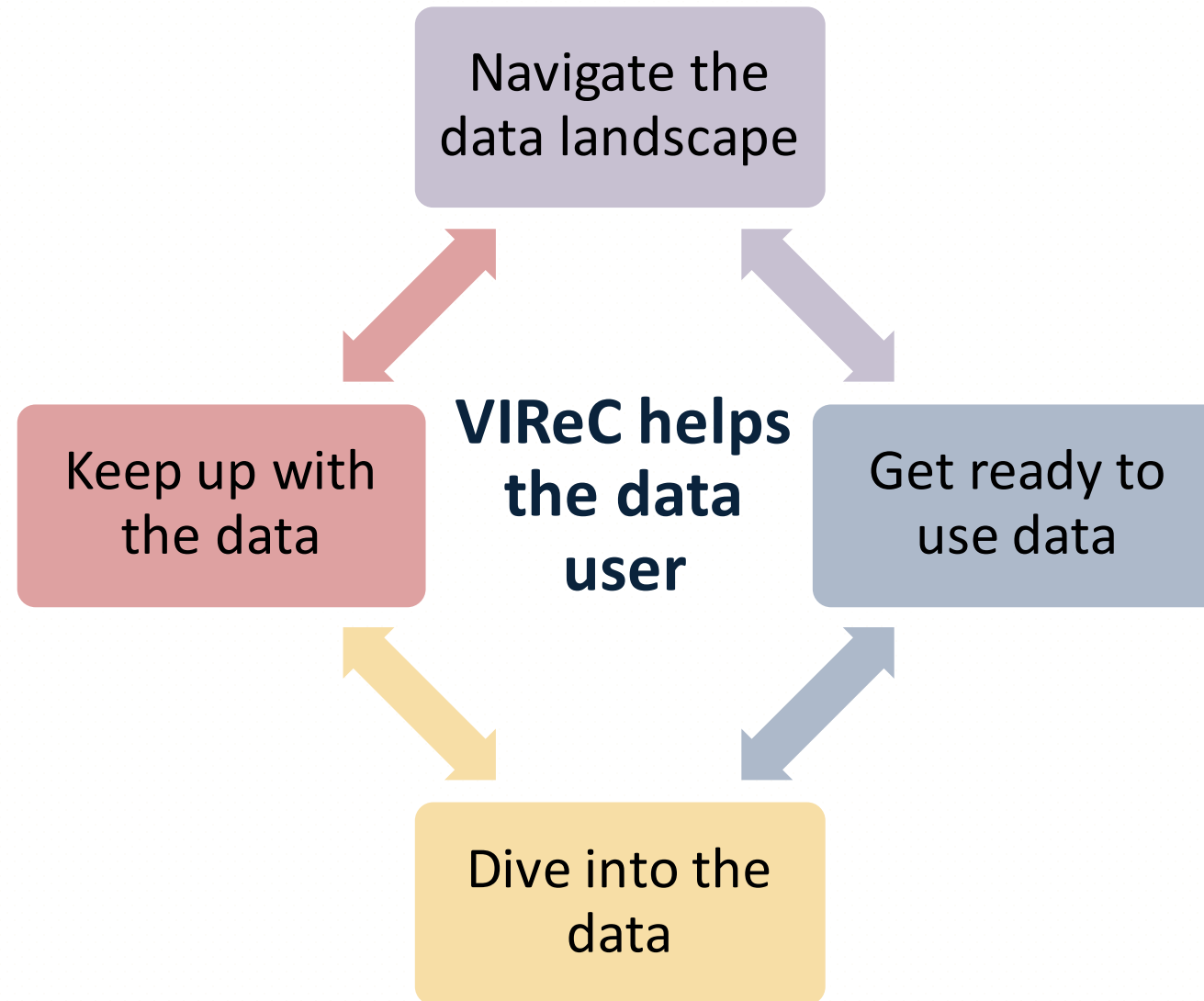


Session roadmap

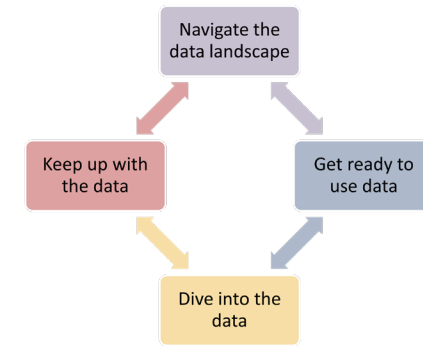
- What is VIREC?
- How does VIREC support my research and data use?
- How can I collaborate with VIREC or provide feedback on VIREC products?



How does VIREC support my research and data use?



Navigate the Data Landscape



Where do I go for VA data information?

What data are available to me as a VA analyst?

How do I approach a specific topic using VA data?

Are there presentations about VA data and its use?

VIReC Supported Websites

www.virec.research.va.gov

- Public-facing
- VIReC overview
- Publications, Cyberseminars & events

vaww.vhadatportal.med.va.gov

- VA network only
- Collaborative with NDS, VINCI, & HERC
- Data source & access information

vaww.virec.research.va.gov

- VA network only
- VIReC products & resources for understanding the data
- News & new resources – home

Where do I go for VA data information?

Coming soon!

VHA Data Portal makeover



The DKH brings information, resources, and community generated knowledge together in a **central, searchable, and easy to access** location.



Descriptions of commonly used VA data sources, their content, and structure



Information about the utility of available data and processes for requesting data access



Data documentation and methodological reports on approaches for working with VA data



Information on tools for using VA data and how to access them



A section on data policy, administration, and governance



Robust search and filter to maximize finding information quickly and easily



Knowledge sharing forums for connecting, collaborating, and sharing experiences with VA data



What data are available to me as a VA analyst?



vaww.vhadataportal.med.va.gov/DataSources/DataSourcesOverview.aspx
(VA Intranet)

The screenshot shows the VHA Data Portal interface. The top navigation bar includes 'Data Sources', 'Data Access', 'Tools & Applications', 'Resources', 'Training', 'Policy & Admin', and 'Support'. The 'Data Sources' menu is expanded, listing various data sources such as ADUSH Enrollment File, Bereaved Family Survey, CAN Scores, and COVID-19 Shared Data Resource. The main content area displays the 'Data Sources Overview' page, which includes an introduction to data sources and a list of available data sources with links to their respective pages.

Data Sources Overview

Overview

HA, the term data sources is often used to describe specific bodies of data such as, inpatient data, electronic health record, mainframe SAS data sets, and the Corporate Data Warehouse (CDW).

VHA Data Portal defines a data source as where the data comes from or a place to access data for a project or study. These data sources include data reports, data sets, data files, databases, data warehouses, and data repositories.

Data Sources

Select a data source from the list below to view a brief description and link to more information about each source. Use the "Expand All" button to view all data sources and links to their pages.

- Assistant Deputy Under Secretary for Health (ADUSH) Enrollment Files
- Austin Information Technology Center (AITC) Mainframe
- Beneficiary Identification & Records Locator System (BIRLS) Death File
- Bereaved Family Survey (BFS) Database
- Care Assessment Need (CAN) Scores
- Clinical Assessment, Reporting, and Tracking (CART) Program Data
- Corporate Data Warehouse (CDW)
- COVID-19 Shared Data Resource
- DAVINCI (DoD-VA Health Data)
- Health Economics Resource Center (HERC) Cost Data
- Homeless Registry



How do I approach a specific topic using VA data?

VIREC INTRANET

Search All VA Web Pages [Search] [Open Advanced Search]

VA INFORMATION RESOURCE CENTER (VIREC)

VIREC Home
About Us
VA/CMS Data for Research
VHA Data Portal
New Users of VA Data
FAQs
Acronym Lookup
HelpDesk
Report Broken Link
How are we doing?

Learn more about VIREC Cyberseminars and register for upcoming presentations.

Data Issues Brief
Upcoming Cyberseminars
Real SSN Data Request Process
VA REDCap Project
Data Tip of the Month

New from VIREC

EHRM Resources
Learn about VA's Cerner transition process and its impacts on VA data users with these new resources:

- Research & EHR Synergy Cyberseminar Series
- EHRM & Implications for Data Users web page

Data Issues Brief
The Fall Edition delivers the most recent data news, including EHRM in action, data updates, and more.

Upcoming Cyberseminars

- Jan 27: [Using VA data and information systems \(including Cerner data from Spokane\) to support the ORH TeleSleep Enterprise-Wide Initiative](#)
- Feb 1: [Meet VIREC: The Researcher's Guide to VA Data](#)

VIREC Resources

[Meet VIREC, The Researcher's Guide to VA Data:](#)
Learn about us, our products, and how to navigate our web environments.

[Learn about VA data:](#)

- [Data Sources](#)
- [Data Topics](#)
- [Data Tools](#)

[VA/CMS Data for Research Project:](#) Data custodian for CMS and USRDS data for VA research.

[Factbooks:](#) Describe tables, columns, and values in select CDW Domains.

[Research User Guides:](#) Detailed information on select data sources, including variable descriptions.

[New & Updated VIREC Products](#)

vaww.virec.research.va.gov/Intro/Working-with-VA-Data.htm
(VA Intranet)

Data Topics

VIREC provides information and guidance on using data to address various topics related to research. Select a data topic from the list below to view a brief description and link to information about each topic.

+ Expand All

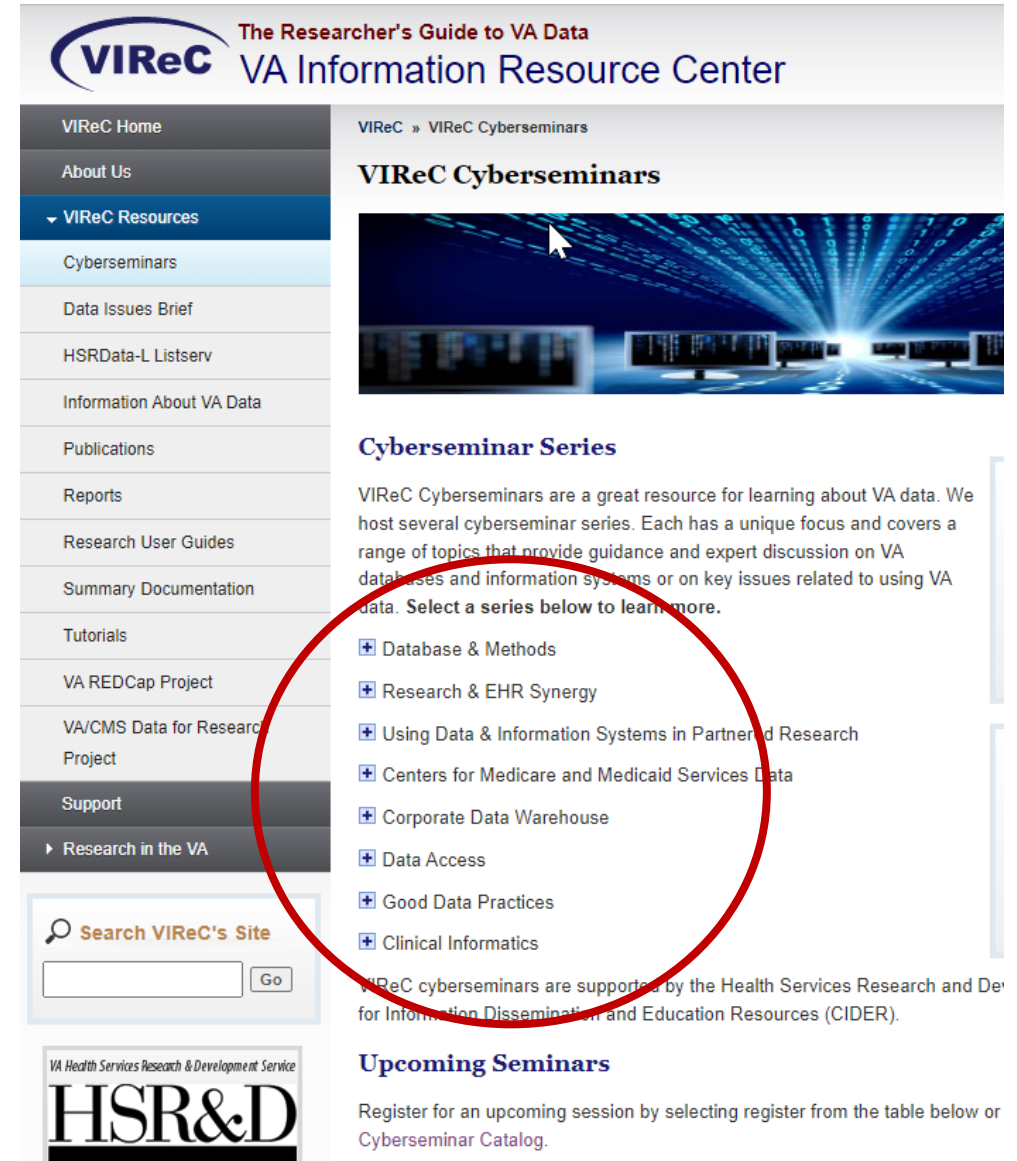
- + Accuracy of Death Dates
- + Cause of Death
- + Comorbidity
- + Cost of Care
- + Data Quality
- + Emergency Department & Urgent Care Encounters
- + Electronic Health Record Modernization (EHRM) & Implications for Data
- + Geocoded Data
- + VA-Health and Retirement Study (HRS) Data
- + Home Telehealth
- + ICD-10 Implementation
- + Laboratory
- + Long Term Care
- + Mortality Data
- + Nursing
- + Patient Satisfaction
- + Pharmacy
- + Polytrauma
- + Preparatory to Research
- + Priority Groups
- + Race & Ethnicity
- + VA Care in the Community
- + Veteran Homelessness
- + Veteran Income Data
- + Veteran Statistics
- + Vista
- + Vital Status Ascertainment
- + Women Veterans' Health Data



Are there presentations about VA data and its use?

VIReC's Cyberseminar Series

1. Database & Methods
2. Data Access Miniseries
3. Corporate Data Warehouse
4. Using Data & Information Systems in Partnered Research
5. Research & EHR Synergy
6. Good Data Practices Miniseries
7. VIReC CMS Data Miniseries



The screenshot shows the VIReC website interface. The header includes the VIReC logo and the text "The Researcher's Guide to VA Data VA Information Resource Center". A navigation menu on the left lists various resources, with "VIReC Resources" expanded to show "Cyberseminars" as the selected item. The main content area is titled "VIReC Cyberseminars" and features a banner image of a server room. Below the banner, the "Cyberseminar Series" section is highlighted with a red circle. It contains a list of seminar series with expandable icons (+) next to each item:

- + Database & Methods
- + Research & EHR Synergy
- + Using Data & Information Systems in Partnered Research
- + Centers for Medicare and Medicaid Services Data
- + Corporate Data Warehouse
- + Data Access
- + Good Data Practices
- + Clinical Informatics

Below the list, there is a search bar and a "Go" button. At the bottom, the HSR&D logo is visible. The text below the list states: "VIReC cyberseminars are supported by the Health Services Research and Development Information Dissemination and Education Resources (CIDER)." and "Upcoming Seminars" section with instructions to register for a session.

<https://www.virec.research.va.gov/Resources/Cyberseminars.asp>

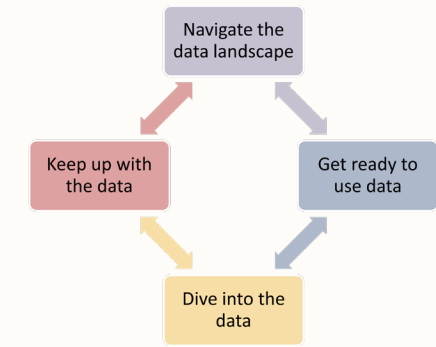


Upcoming VIREC-Hosted Cyberseminars

Date/Time*	Presentation	Series	Presenter(s)	Register
10/7/2024 1:00 pm	Meet VIREC: The Researcher's Guide to VA Data	Database and Methods	Maria Souden	Register
10/9/2024 12:00 pm	User Experience and Lessons from the Latest EHR Modernization Site	Research & EHR Synergy	Julian Brunner, Sippo Rinne	Register
10/10/2024 2:00 pm	VA Data Access Preparatory to Research Requirements	Data Access Miniseries	Angela Jannotta	Register
10/22/2024 3:00 pm	Using Medicare data in VA research: Part 1	CMS Data Miniseries	Kristin de Groot	Register
10/23/2024 12:00 pm	Optimizing Support for VA Nurses During the EHR Transition: Assessment of Non-VA Nursing Experiences	Research & EHR Synergy	Alexi Amano Lauren Gauntlett	Register
11/6/2024 3:00 pm	Preparatory to Research Project	Data Access Miniseries	Olga Efimova	Register
11/14/2024 2:00 pm	VA Data Access Requirements for Operations	Data Access Miniseries	Angela Janotta	Register



Get Ready to Use Data



What do I need to do to access VA data?

How do I get Veteran Medicare & Medicaid Data for my project?

How can I get started using the VA Corporate Data Warehouse (CDW)?

What if I need to collect and manage primary data?



What do I need to do to access VA data?

Department of Veterans Affairs
VHA Data Portal

Home About Us Contact Us FAQ Report Broken Link

Data Sources **Data Access** Tools & Applications Resources Training Policy & Admin Support

Data Access Overview
Operations Access
Preparatory to Research Access
Research Access
Veterans Service Officers Access

Quick View
VHA grants access to data and information systems based on how the data is going to be used.

Data Access

Overview
VHA grants access to data and information systems based on how the data will be used. Types of data access granted (e.g., direct access, data extracts, read-only views) depend on the type of data access requested.

How do I request data for research and operations purposes?
VHA maintains patient health information and other data used for a variety of purposes, including healthcare quality improvement, program evaluation, and research. Select a category below to learn more about data access or consult the [Research vs Operations Decision Tool](#) for additional guidance.

- Operations Access:** VHA employees and contractors require access to data and information systems for assessments, operational reporting, auditing, planning, forecasting, and general administrative purposes.
- Research Access:** VHA researchers with VA approved research protocols require access to data to conduct research.
- Preparatory to Research Access:** VHA researchers preparing research proposals require access to data to determine the feasibility of a proposed study and to demonstrate its significance.

How do I request data access for Veteran Service Organization (VSO) representatives?
Authorized VSO representatives require read-only access to electronic health records to determine eligibility for benefits for Veterans whom they hold a current Power of Attorney (POA). Visit the [Veterans Service Officers Access](#) page for instructions for submitting a data access request.

Resources

- The following resources provide information on determining whether a VHA operation is research or operations.
- [Research vs Operations Decision Tool](#)
- [Program Guide 1200.21: VHA Operations Activities That May Constitute Research](#) (Jan 2019)

s/DataAccessOverview.aspx

vaww.vhadataportal.med.va.gov/DataAccess/DataAccessOverview.aspx
(VA Intranet)

Department of Veterans Affairs
VHA Data Portal

Data Sources Data Access Tools & Applications Resources Training Policy & Admin Support

Data Access > DART Request Process

What is DART?
Launch DART
DART is an online application for requesting permission to access VHA data.

Did you know?
Only one DART request is submitted per protocol. Any changes to this request, such as adding data or changing staff, are made through amending the initial DART request.

Quick Links
DART User Guide
Creating a DART IRB Research Request

DART Research Request Process

Overview Submitting a Request Documents & Forms Request Metrics Resources

Overview
The Data Access Request Tracker (DART) Research Request Process is for requesting permission to access VHA data for approved research projects. Visit the [Preparatory to Research Access](#) page to learn about requesting data when preparing a research funding application or protocol.

Which data sources can I request?
Many, but not all data sources and tools can be requested through DART. Here is a list of those that are available for request. Select a data source for a description of its contents and tips for requesting access.

- ADUSH Enrollment Files
- Bereaved Family Survey (BFS) Database
- BIRLS Death File
- Care Assessment Need Score (CAN Score)
- Corporate Data Warehouse (CDW)



Session 1: Wednesday, September 4, 3pm ET

Data Access Miniseries

VA Data Access Requirements for Research

This presentation provides an overview of the essentials, regulatory requirements, resources, and processes specific to requesting research access to VA data.

by Angela Jannotta, BA

[register](#)
Session 2: Wednesday, October 2, 3pm ET

Data Access Miniseries

Requesting Research Data Access Using DART

This presentation will include a demonstration of how to request access to VA data for research projects using the Data Access Request Tracker (DART), how to amend a DART request, and post-DART approval data provisioning.

by Tim Trautman, BSD

[register](#)
Session 3: Thursday, October 10, 2pm ET

Data Access Miniseries

VA Data Access Preparatory to Research Requirements

This presentation provides an overview of request processes, regulatory requirements, and online resources specific to requesting access to VA data for preparatory to research purposes.

by Angela Jannotta, BA

[register](#)
Session 4: Wednesday, November 6, 3pm ET

Data Access Miniseries

Preparatory to Research Project

This presentation will discuss Data Access Request Tracker (DART) preparatory to research as well as VINCI services provided at this stage (e.g., data need assessment and feasibility).

by Olga Efimova, MD, PhD

[register](#)
Session 5: Thursday, November 14, 2pm ET

Data Access Miniseries

VA Data Access Requirements for Operations

This presentation provides an overview of request processes, regulatory requirements, and online resources specific to requesting access to VA data for operational purposes, such as quality improvement, program assessment, etc.

by Angela Jannotta, BA

[register](#)

New miniseries for Data Access



Join **data access and policy experts from VIREC, VINCI, and others in the field** for a miniseries on access to VA data. Sessions provide an overview of **data access request processes**, insight on **regulatory requirements**, and where to find related **resources**. This miniseries is geared toward new and established VA employees who are interested in **VA data access and regulatory policy**.

[register for multiple sessions at one time](#)

[recently archived sessions](#)



How do I get Veteran Medicare & Medicaid Data for my project?



VIReC Home

About Us

VA/CMS Data for Research

VHA Data Portal

New Users of VA Data

FAQs

Acronym Lookup

HelpDesk

Report Broken Link

How are we doing?

The screenshot shows the VIReC INTRANET website. At the top, there is a search bar with the text "Search All VA Web Pages" and a "Search" button. Below the search bar, the main heading is "VA/CMS Data for Research". On the left side, there is a navigation menu with links: "VA/CMS Data Home", "About Us", "Updates", "Publications", "Education", "FAQs", and "Help". The main content area is divided into three columns. The first column is titled "What is VA/CMS Data?" and contains a paragraph explaining that VA acquires data from the Centers for Medicare and Medicaid Services (CMS) and the United States Renal Data System (USRDS). It also includes a link for "What's new?". The second column is titled "CMS & USRDS Data for VA Research" and contains several sub-sections: "Learn About the Data" (with a link to "View file descriptions and documentation"), a list of data types (Medicare, Medicaid, USRDS, Patient Assessment, HEDIS, MCBS, Provider, and VA/CMS Match Indicator File), "Data Currently Available from VIReC" (with a link to "Check out dataset names, calendar years, and cohorts currently available."), "Cohorts & Identifiers" (with a link to "Explore cohorts and identifiers available for Veterans and Non-Veterans, including the VHA Cohort."), and "Online Education" (with a link to "Find links to cyberseminars, training, and more.>"). The third column is titled "Data Requests & Requirements" and contains sub-sections: "Pre-Request Consultations" (with a link to "A recommended step for researchers who are planning on submitting a request."), "Request Process" (with a link to "Information on requesting data from VIReC, including an overview of the process, forms, and timeline."), "Continuing Use" (with a link to "Outlines requirements for projects that have an active VA/CMS Data Use Agreement."), "Terminating Use" (with a link to "Provides VA/CMS data retention policy and required steps for terminating data use."), and "Regulations" (with a link to "Lists regulatory requirements for research use of VA/CMS data.>").



How can I get started using the VA Corporate Data Warehouse (CDW)?

Data Documentation

Expand each type of documentation below to view these resources.

+ Expand All

+ Getting Started with CDW

+ Factbooks

+ The Researcher's Notebook

+ Statistical Snapshot








+ Domain Layout & Descriptions

+ Data Contents, Discrete Frequencies

vawww.virec.research.va.gov/CDW/Documentation.htm (VA Intranet)

Getting Started with CDW

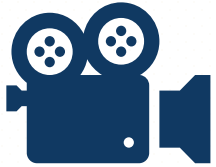
These cyberseminars are designed to help new CDW users with understanding the nature of relational data, becoming familiar with CDW structure and logic, finding documentation of CDW content, and knowing what to expect when first viewing CDW data in SQL Server Management Studio (SSMS) software.

Resources	Resource
CDW: A Conceptual Overview	
CDW: Locating Its Documentation	
Getting the Information You Need From CDW: SQL Starter Language	
Querying CDW Metadata Views	
Building Your Dataset in CDW: Joining Tables within a Domain	
Getting CDW Back Together: Joining CDW Tables (Continued)	
Data Management in SQL: Selected Intermediate SQL Skills	

New to
using
CDW?

To be notified of new CDW products, submit a VIREC HelpDesk request: varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK (VA Intranet)

How can I get started using the VA Corporate Data Warehouse (CDW)?



Quick tutorials/videos on using data in the CDW
<https://vaww.virec.research.va.gov/QPV/Overview.htm>
 (VA Intranet)

Quick Peek Videos

Overview

VIREC Quick Peek Videos (QPVs) provide a short demonstration that helps users learn various aspects of VA data or VA data resources. These tutorial-like videos provide a close-up and practical look at specific resources, tasks, or processes that support effective navigation of the VA data landscape.

A QPV subscription delivers the most recent videos right to your inbox. E-mail virec@va.gov to subscribe.

Current Videos

How are we doing? Take our [short survey](#) to share your thoughts about Quick Peek Videos below. We value your feedback.

Title	Description	View Video
NEW! Using the CDW Metadata Report	Learn how to look up CDW source details using the CDW metadata report.	
Use of the MetaData Domain	Learn how to locate VistA source details using the metadata views in the Corporate Data Warehouse (CDW).	
CDW Foreign Keys	Learn how to find SQL logic that can be used to locate descriptions of the VistA pointers that source CDW foreign keys.	
Use of the VEAR Website	Learn how to locate VistA source details using the VA Enterprise Architecture Repository (VEAR). These details will help data users gain a better understanding of CDW data.	

To be notified of new CDW products, submit a VIREC HelpDesk request:
varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK
 (VA Intranet)

What if I need to collect and manage primary data?



REDCap™

Log In

Ask for Help | Learning Resources | **FAQs** | About VA REDCap

You are invited to join us Thursdays from 3-4pm ET for the VA REDCap Hour

VA REDCap Hour is an open question and answer time with members of the VA REDCap support team. We meet every Thursday from 3-4pm Eastern Time. Attendees can use their computer's speakers and microphone or dial into our VANTS line at 1-800-767-1750 Code 89026# for audio access. Join us online at <http://va-eerc-ees.adobeconnect.com/redcap/>

Please log in with your user name and password. If you are having trouble logging in, please contact [VIREC REDCap Helpdesk](#).

Username:

Password:

Learn More:

vaww.virec.research.va.gov/REDCap/Overview.htm

(VA Intranet)

VIREC INTRANET

Search All VA Web Pages Search [Open Advanced Search](#)

VA INFORMATION RESOURCE CENTER (VIREC)

VIREC Home
About Us
VA/CMS Data for Research
VHA Data Portal
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FAQs
Acronym Lookup
HelpDesk
Report Broken Link
How are we doing?

VA Research Electronic Data Capture (REDCap)

[Launch VA REDCap Application](#)

Overview: Getting Started with VA REDCap

Request an account by filling out a [VA REDCap Ticket](#).

Benefits: Review the VA REDCap Guidelines to learn about the responsibilities of VA REDCap account holders.

Watch these introductory webinars.

- [VA REDCap 101](#) provides examples of how VA REDCap is being used to support research, quality improvement, and operations projects.
- [Survey Data Collection Using VA REDCap](#) focuses on how VA REDCap can be used to support surveys that are administered on paper, verbally, or electronically.

Limitations: Still not sure where to start? Contact VIRECREDCapSupport@va.gov for more information about using VA REDCap.

VA REDCap Learning Resources

- VIREC's [VA REDCap Learning Resources](#) include links to self-paced learning materials and information on upcoming training events.
- VA REDCap Hour is an open question and answer time with members of the VA REDCap support team. We meet every Thursday from 3-4pm Eastern Time on Microsoft Teams. [Click here to join the meeting.](#)
- Visit our ["FAQs page"](#) for answers to commonly asked questions about using VA REDCap.
- Visit Vanderbilt's [Project REDCap website](#) to learn more about the software, including [online tutorials](#) on getting started and guidance on using the application and its functionality. Note: Some of the functionality described, such as the REDCap Mobile App, is not available for use at the VA.

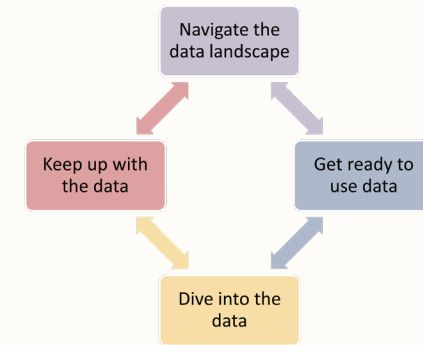
VA REDCap Support Team

VIREC's VA REDCap Support Team grants new accounts and helps VA REDCap users troubleshoot any issues with their projects. Here are a few ways to contact the team.

- Submit a [Request Ticket](#) online.
- Email us at VIRECREDCapSupport@va.gov.
- Call us at (708) 202-2413.



Dive Into the Data



Where is CDW data documented?

What are some technical or methodological approaches to VA data?

What if I need more help?

Where is CDW data documented?

VIREC INTRANET

Search All VA Web Pages [Search] [Open Advanced Search]

VA INFORMATION RESOURCE CENTER (VIREC)

VIREC Home
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New Users of VA Data
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Acronym Lookup
HelpDesk
Report Broken Link
How are we doing?

CDW Documentation

Overview

VIREC provides documentation on select Corporate Data Warehouse (CDW) production domains. CDW documentation is designed to help new and seasoned users better understand the structure and contents of the CDW. It might be necessary to review a combination of resources to fully understand the complexities of the CDW and data use environment.

Sign-up for VIREC product news and updates. Email the VIREC [HelpDesk](#) to receive notification of VIREC's new CDW products and product updates.

How are we doing? Take our [short survey](#) to share your thoughts about the CDW resources below. We value your feedback.

Data Documentation

Expand each type of documentation below to view these resources.

[+ Expand All](#)

- Getting Started with CDW
- Factbooks**
- The Researcher's Notebook
- Statistical Snapshot
- Domain Layout & Descriptions
- Data Contents, Discrete Frequencies, Record & Null Counts

Learn About CDW

- [Overview](#)
- [Data Transition to CDW](#)
- [Documentation](#)
- [FAQs](#)

General Resources

- [Data Access](#)
- [Data Sources](#)
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Reviewed/Updated Date: January 12, 2021

vaww.virec.research.va.gov/CDW/Documentation.htm

(VA Intranet)

Factbooks

CDW Factbooks provide descriptions of tables, columns, and values in select CDW Domains sourced from VistA and include domain-specific SQL "starter language" and sample SQL code.

Note: Factbooks with CDW Millennium after the domain include the most up-to-date information for VistA data as well as associated data from the VA Millennium EHR. Visit the [Electronic Health Record Modernization \(EHRM\) & Implications for Data Users](#) page to learn more about the Cerner data environment, Millennium data, and how to access and use these data.

Domain	Factbook
ADR Enrollment	
Allergy	
Appointment	
NEW! Bene Travel	
Consult	
CPRS Orders	
Health Benefits Request	
Health Factor	
Immunization - CDW Millennium	
Immunization	
Inpatient	
Inpatient Fee Lodger	
LabChem	
Mental Health	
MVI	
Non-VA Meds	
Outpatient	
Patient	
Patient Associated	
Patient Enrollment (with EWL)	
Pharmacy Patient	
Purchased Care Authorized	
Purchased Care Service	
Purchased Care Unauthorized	
Staff Release	
Vital Sign	





VIReC Product Spotlight

Documentation,
EHRM

[CDW Factbooks](#)
provide detailed
descriptions of
tables, columns,
and values in
select CDW
domains

Factbook

VIReC Factbook

*Corporate Data Warehouse (CDW)
Immunization 2.1 Domain*

Factbook

VIReC Factbook

*Corporate Data Warehouse (CDW)
VA Millennium
Immunization 2.1 Domain
April 2021*

VIReC

Part 2. Introduction to Immunization 2.1 Domain

VistA-based Data

CDW is a relational database organized into a collection of data domains. Domains represent logically or conceptually related sets of data tables. Domain themes generally indicate the application in the VistA

Part 3. Clinical and Technical Context

VistA Data Management/Security

According to the VistA Metadata Repository [3], a VHA Directive mandates the lock down of the Immunization Dimension File using Data Standardization (DS). Additions, edits or deletions will only be completed by

Part 4. Table and Column Descriptions

Part 4 provides descriptions of tables and selected columns in the Immunization Domain. The name of each table is presented in large font with a description of its general content immediately following. After each table description, selected columns within that table are described as indicated below.

Content of Column Descriptions

Part 5. Primary and Foreign Key Connections Query

Once you have been granted access to CDW data, this query can be used to generate an up-to-date list of primary and foreign keys associated with this domain.

```
SELECT [FKSchemaName]
, [FKViewName]
, [FKViewFieldName]
, [FKViewVersion]
```

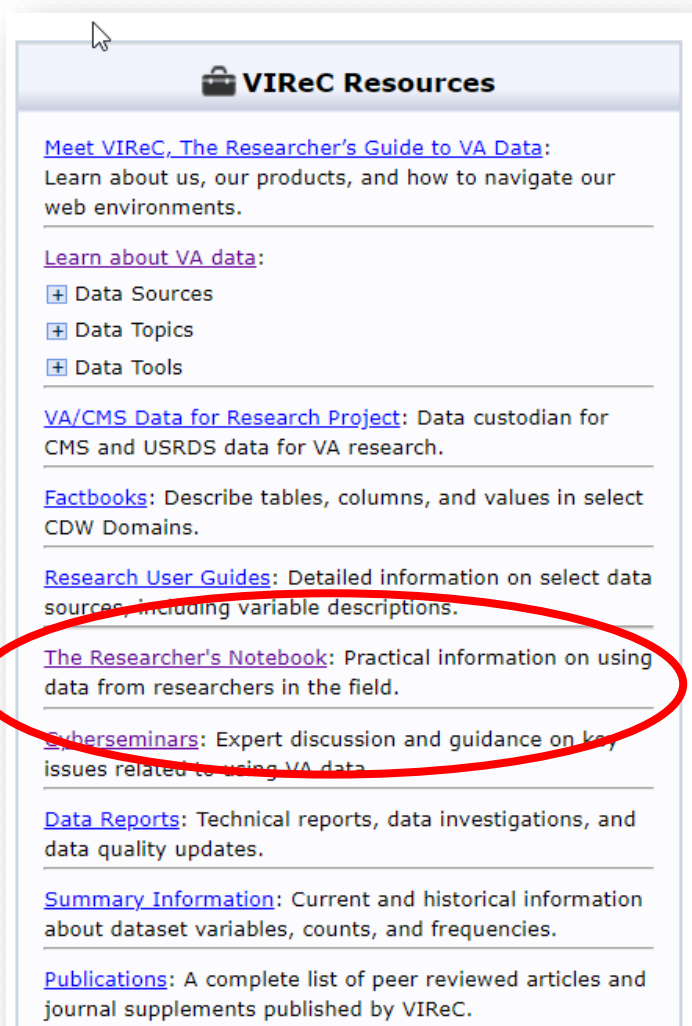
Part 6. Example SQL Code for Data Exploration

This section contains a simple question that may be answered by applying basic SQL queries to the data in this domain; it does not involve other domains.

1. How many immunizations were given at Mann-Grandstaff VA Medical Center for Hepatitis B in the past year?
2. What are the most commonly reported reactions to a COVID-19 vaccine in the VA?



Where can I see examples of methods for working with VA data?



VIREC Resources

[Meet VIREC, The Researcher's Guide to VA Data:](#)
Learn about us, our products, and how to navigate our web environments.

[Learn about VA data:](#)

- [+ Data Sources](#)
- [+ Data Topics](#)
- [+ Data Tools](#)

[VA/CMS Data for Research Project:](#) Data custodian for CMS and USRDS data for VA research.

[Factbooks:](#) Describe tables, columns, and values in select CDW Domains.

[Research User Guides:](#) Detailed information on select data sources, including variable descriptions.

[The Researcher's Notebook:](#) Practical information on using data from researchers in the field.

[Webseminars:](#) Expert discussion and guidance on key issues related to using VA data.

[Data Reports:](#) Technical reports, data investigations, and data quality updates.

[Summary Information:](#) Current and historical information about dataset variables, counts, and frequencies.

[Publications:](#) A complete list of peer reviewed articles and journal supplements published by VIREC.

vaww.virec.research.va.gov/Notebook/Overview.htm (VA Intranet)

The Researcher's Notebook

Overview

The Researcher's Notebook lays out methodological approaches to working with VA data. Each issue elaborates on a nuance of data use for a specific topic or research question and conveys practical information from the perspective of data users in the field.

This free publication is produced by VIREC and authored by researchers in the field. The material in each issue represents one potential set of logic that was appropriate to the context in which the author(s) were working at that point in time. Each reader should assess the appropriateness of this logic for their specific context, question, and time of study.

A *Researcher's Notebook* subscription delivers current issues right to your inbox. Contact the [VIREC HelpDesk](#) to subscribe.

Current Issues

How are we doing? Take our [short survey](#) to share your thoughts about *The Researcher's Notebooks* below. We value your feedback.

Note: *Notebooks* that use Millennium data include an "M" in the issue number.

Title	#	Author	View PDF
UPDATED! How do I identify a resistant organism in CDW Lab Microbiology?	2	Evans, C Poggensee, L Ramanathan, S	
UPDATED! How do I identify the causative organism in CDW Lab Microbiology?	1	Evans, C Poggensee, L Ramanathan, S Rich, K Culbreath, C Hines, A	
UPDATED! Defining a Cohort with a Diagnosis & Medication (Part I)	13-1	Gonsoulin, M Joseph, AM Culbreath, C Rich, K Hines, A	
NEW! Defining a Cohort with a Lab Outcome and Related Prescription	26	Rich, K Culbreath, C Hines, A	
Exploring and Identifying Veteran Patients in VA Millennium	25M	Jones, L Culbreath, C Gonsoulin, M Arnold, N	
Exploring Social History Data in Millennium	24M	Culbreath, C Jones, L Gonsoulin, M	
Identifying Transgender and Gender Diverse Veterans in the CDW	23	Culbreath, C Jones, L Gonsoulin, M Matza, L	
Identifying Immunizations Administered Pre-and Post-Cerner EHR Transition	22M	Jones, L Culbreath, C Gonsoulin, M	
Using PowerForms to Explore Cerner Millennium Data (Part II)	21-2M	Jones, L Culbreath, C	





VIReC Product Spotlight

Methods

[The Researcher's Notebook](#) lays out methodological approaches to working with CDW data

The Researcher's Notebook

The Researcher's Notebook series describes methodological approaches to working with VA data. Co-authored with researchers from the VA, the series provides a potential set of logic appropriate for that point in time. Readers should assess the appropriateness of the data use, representing a potential set of logic appropriate for that point in time. Readers should assess the appropriateness of the data use, representing a potential set of logic appropriate for that point in time.

Exploring Relationships between Procedure and Data in the CDW Outpatient Domain

Introduction

This notebook is the first of a series that explores relationships between procedure and data in the CDW Outpatient Domain. In Part I of this series, we aim to broadly characterize the types of data patterns we observe while working with records from the Output.VProcedure, Output.VDiagnosis and Output.VProcedureDiagnosis tables. These tables store records linked to procedures performed during patient encounters, and diagnoses related to the procedures, respectively [6]. Each procedure record can be connected to an encounter in the Output.Visit table. Future notebooks in this series will further delineate and clarify the data patterns identified in this notebook (e.g. ICD/CPT codes).

For encounter records in the Output.Visit table, there are eight potential data patterns that can be associated with the associated procedures and diagnoses found in the Output.VDiagnosis, Output.VProcedure and Output.VProcedureDiagnosis tables (see Table 1). Using a sample of encounters from the Output.Visit table, we determine the number of diagnosis, procedure and procedure diagnosis records that link to each encounter to identify which data patterns exist in our sample. In Table 1, a "0" indicates that no records were found, and a "# Di" indicates that at least one record was populated. For example, encounters that link to at least one procedure record, and zero procedure diagnosis records have a data pattern of "# Di 0 Procedure Diagnoses".

Table 1. Potential Patterns of Diagnosis and Procedure Data for Encounter Records in the Output.Visit Table

1.	0 Diagnoses, # Procedures, # Procedure Diagnoses
2.	# Diagnoses, 0 Procedures, # Procedure Diagnoses
3.	# Diagnoses, # Procedures, 0 Procedure Diagnoses
4.	0 Diagnoses, 0 Procedures, # Procedure Diagnoses
5.	0 Diagnoses, # Procedures, 0 Procedure Diagnoses
6.	# Diagnoses, 0 Procedures, 0 Procedure Diagnoses
7.	# Diagnoses, # Procedures, # Procedure Diagnoses

Step 1 | Identify Tables and Columns of Interest

Table 3 contains a list of tables and columns used to capture the topic of interest. The primary keys from Output.VDiagnosis, Output.VProcedure and Output.VProcedureDiagnosis will be used to determine the number of diagnosis, procedure and procedure diagnosis records that are populated for encounter records pulled from Output.Visit. The need to link diagnosis, procedure and procedure diagnosis records to encounter records requires the inclusion of the VisitSID column from each of these tables. The VisitDateTime column from these tables will be used to filter the data to a selected timeframe. Additionally, ServiceCategory and EncounterType from Output.Visit will be used to filter the data to a selected service category and encounter type.

Step 2 | SQL Code

Note, the SQL code for this notebook excluding text and results can be found in Appendix A.

Step 2.1 Reducing Large Fact Tables and Creating a Cohort of Encounters

This step has two main purposes:

1. Reduce large fact tables containing patient encounter records (Output.Visit), diagnosis records

```
The Patient.Patient table is joined to Output.Visit (specified in the FROM clause) by linking the PatientSID foreign key from Output.Visit to the PatientSID primary key from Patient.Patient. The WHERE clause filters records from Output.Visit to exclude Historical Events (ServiceCategory 'E') and to exclude encounter records that link to test patients (as indicated by the Patient.Patient table's CDWPossibleTestPatientFlag column). The WHERE clause also filters records from Output.Visit to only include those within a specified encounter VisitDateTime range.
```

Step 2.3 Identifying Patterns of Procedure and Diagnosis Data

Using the tallied data from Step 2.2 above, this step determines the number of encounters (if any) from the #Encounters temp table that display each of the 8 procedure/diagnosis data patterns shown in Table 1 above.

```
/*
In the SELECT statement, using the #Tallies temp table specified in the FROM clause, CASE is used to re-
```

Conclusion

This notebook identifies broad patterns of encounter-related procedure and diagnostic data that users may observe when working with the Output.VProcedure, Output.VDiagnosis and Output.VProcedureDiagnosis tables in the Outpatient Domain. Using a sample of VA encounters from Output.Visit with VisitDateTime entries between 09/01/2019 and 09/07/2019, we identified five of eight potential data patterns. Encounters with at least one diagnosis, at least one procedure, and zero procedure diagnoses were most prevalent in our sample, whereas encounters with at least one diagnosis, and zero procedures and procedure diagnoses were least prevalent. There were no encounters with a procedure diagnosis that did not also have at least one procedure performed. There were also no encounters with zero diagnoses and at least one procedure diagnosis. Excluding ancillary services/occasions of service decreased the frequency of encounters in all identified data patterns. The highest frequency of ancillary services was among encounters with zero diagnoses and procedure diagnoses, and at least one procedure performed.





Methods, EHRM

Researcher's Notebook: Millennium Data Discovery series provides guides to data collected in the new Federal EHR

The Researcher's Notebook: Millennium Data Discovery

The Researcher's Notebook: Millennium Data Discovery series provides a guide to data electronic health record (EHR). As VA transitions to this new EHR, the series introduces datasets. It also provides more advanced descriptions of methodological approaches, elaborates on a nuance of data use, representing a potential set of logic appropriate to adapt the logic and steps provided to their specific context and use of the data.

Identifying Immunizations Administered in Cerner EHR Transition

Introduction

This notebook provides two potential methods for identifying immunization records in the CDW Warehouse (CDW) Immunization domain that were administered before and after a Cerner EHR transition. The methods applied use data from a station that was transitioned.

In the first method, pre-transition immunization records are pulled from CDW Millennium data. CDW Millennium data is a data warehouse which contains data collected in the Millennium EHR at Cerner-transitioned sites. CDW Millennium data model structure with the exception of light transformation conventions (e.g. addition of surrogate IDs (SIDs), addition of display labels to camel case, etc.).

In the second method, both pre-transition and post-transition immunization records are pulled from CDW Converged data model. CDWWork3 consists of all CDW VistA data, stored alongside CDWWork2 Millennium data, which is mapped to the CDW data model. Hence, it is often referred to as the "converged data model."

Additional information about immunization data in the CDW VistA, CDW Millennium and converged data model environments is available in VIREC's VA Millennium Immunization Factbook [1].

CDWork and CDWork2 Method

Step 1 | Tables and Columns of Interest

Tables 1 and 2 contain lists of CDWork and CDWork2 tables and columns used in the demonstration that follows. Main columns include those that appear in the query SELECT statement, linking keys include primary and foreign key columns that are used for joining tables together, and filtering columns are those that appear in query filtering logic.

Step 2 | SQL Code

CDW VistA Data

The query below pulls immunizations from CDWork that were administered at station 668 during VisitDateTime range 9/1/20 to 1/31/21. The output from the query is stored in a temporary table called #ImmunizationsVista.

CDWork3 Method

Step 1 | Identify Tables and Columns of Interest

Table 1 contains a list of tables and columns used in the demonstration that follows. Main columns include those that appear in the query SELECT statement, linking keys include primary and foreign key columns that are used for joining tables together, and filtering columns are those that appear in query filtering logic.

Step 2 | SQL Code

The query below pulls immunizations from CDWork3 that were administered at station 668 during VisitDateTime range 9/1/20 to 1/31/21. The output from the query is stored in a temporary table called #ImmunizationsConverged. Note, to prepare for a site's transition to Cerner, historical VistA data from that site are migrated into the Millennium EHR. These records are in CDWork2 and have RegistrationDateTime values set to year 1900. These records are also carried over into CDWork3 with VisitDateTime values set to year 1900. The VisitDateTime filter used in this query removes these historical records.

DROP TABLE if exists #ImmunizationsConverged

Conclusion

In this notebook, we provide two potential methods for identifying immunizations administered before and after the Cerner EHR transition using, 1) CDW VistA data and CDW Millennium data, and 2) converged VistA-Millennium data. Immunizations administered post-Cerner transition (i.e., those recorded in Millennium EHR) have a Sta3n = 200. The parent station number (StaPa) can be used to identify the station where these immunizations were administered. Note that at the time of publication, StaPa was sometimes missing or NULL for records originating from VistA.

Appendix A: SQL Code

Use of the methods in this appendix require access privileges for CDWork2 and/or CDWork3.

```
/*Pulling immunizations from CDW VistA data*/
DROP TABLE if exists #ImmunizationsVista
SELECT b.ImmunizationSID
      ,c.ImmunizationName
      ,a.VisitSID
      ,a.VisitDateTime
      ,b.Sta3n
      ,e.StaPa
INTO #ImmunizationsVista
FROM CDWork.Output.Visit as a
INNER JOIN CDWork.Immun.Immunization as b ON
  a.VisitSID = b.VisitSID
  AND (b.VisitDateTime >= CONVERT (DATETIME2(0), '2020-09-01') AND b.VisitDateTime <= CONVERT (DATETIME2(0), '2021-01-31'))
  AND b.Sta3n IN('668')
INNER JOIN CDWork.Dim.ImmunizationName as c ON
  c.ImmunizationNameSID = b.ImmunizationNameSID
INNER JOIN CDWork.Patient.Patient as d ON
  a.PatientSID = d.PatientSID
INNER JOIN CDWork.Dim.Institution as e ON
  a.InstitutionSID = e.InstitutionSID
WHERE (a.VisitDateTime >= CONVERT (DATETIME2(0), '2020-09-01') AND a.VisitDateTime <= CONVERT (DATETIME2(0), '2021-01-31'))
```



VIReC Product Spotlight

Technical

[VIReC Data Reviews](#) examine VA-relevant data to support their use in VA research, evaluation, and quality improvement analyses.



Data Review

VIReC Data Reviews examine VA-relevant data improvement analyses. Each issue explores a topic located, and addresses topics such as data quality

Laboratory Tests in Millennium

Introduction

This review looks at laboratory tests in Millennium Corporate Data Warehouse (CDW). Analysis of laboratory tests are presented. These tests are commonly modified to obtain data on other laboratory tests.

Background

Laboratory tests begin with an order in Millennium. Laboratory tests recorded as clinical events and are associated with an encounter. Laboratory tests may be associated with an encounter, and each will have a unique ID. Laboratory tests may be associated with an encounter, and each will have a unique ID to the same encounter. Further information on Millennium lab results is available in the [Millennium Lab Results](#) report.

Clinical events may be linked together via an event hierarchy in Millennium. Laboratory tests are linked to parent event sets, and event sets link together one to many events. Laboratory tests are linked to parent event set. The event sets linked to the 'Lab View' parent event set on

- Allergy Testing
- AP Specimens
- Blood Bank

Table 1. Laboratory Events Most Commonly Recorded in Millennium for Station 668 June 29, 2021

Parent Event Description	Event Set Description	Event
Lab View	Chemistry	Creatinine Level
Lab View	Chemistry	eGFR Non-AA

HDL and LDL Tests

The 'Lab View' event hierarchy included 95 laboratory tests containing the character strings 'HDL', 'LDL' or 'lipoprotein'. Only 10 of these tests had values recorded in Millennium on June 29, 2021. Table 2 contains these tests with the Logical Observation Identifiers Names and Codes (LOINC) code, normal low, normal high, result units, topography, and number of the tests. Code for the analyses of the HDL and LDL tests is in [Appendix B](#).

LOINC is a

The code 98

At [LOINC.org](#)

LOINC code.

It was also n

and normal

mappe

HbA1c Tests

The 'Lab View' event hierarchy contained 11 laboratory tests containing the character strings 'A1c', and two of these tests had values recorded in Millennium on June 29, 2021. Table 9 contains these tests with the LOINC code, normal low, normal high, result units, topography, and number of the tests. The 'QSTV' in the name of the 'Hemoglobin A1c QSTV' test references an external lab, Quest, that performed the test. Code for the analyses of the HbA1c tests is in [Appendix C](#).

Table 10 contains the minimum, maximum, and average result values for HbA1c tests. The American Diabetes Association provides the following criteria in interpreting the results of an HbA1c test [6]:

• Appendix A: SQL Code to List Lab View Event Hierarchy and Identify Commonly Recorded Events

```

/*****
List Event Sets Connected to Lab View Parent Event
*****/

select EventSet
from CDWork2.NDimMill.EventSet
where ParentEventSet = 'Lab View'
order by 1;

/*****
List Lab View Event Set Hierarchy
*****/

select distinct
cv.CodeValueDescription as [Parent Event Description],

```



What if I need more help?

VIReC HelpDesk assists researchers with understanding VA data and information systems within the context of their specific projects.

- VIReC subject matter experts respond directly to HD questions
- Use organizational knowledge and liaison relationships to connect requestors with the expertise they need

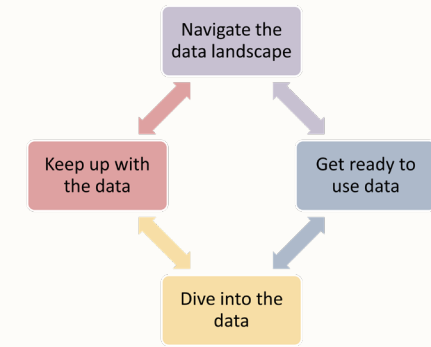
Submit a VIReC HelpDesk Request

varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK

(VA Intranet)



Keep Up With the Data



Where do I find news about VA data and information systems?

How do I connect with other users of VA data?

How does the EHR modernization affect VA data?

Where do I find news about VA data and information systems?



- Quarterly updates on clinical and administrative data resources, VA databases, clinical informatics, electronic health record modernization
- Timely topics, spotlight tips, and training opportunities

Current and archived issues:

vaww.virec.research.va.gov/DIB/Overview.htm

(VA Intranet)



Data Issues Brief

Summer Issue 2023

The *Data Issues Brief* delivers current news and updates regarding health data, databases, and medical informatics right to your inbox.

In This Issue...

VIREC News & Updates

Meet VIREC's New Associate Directors
Come Work with VIREC!
New IVC CDS Data Review
New Cyberseminar Miniseries on Access to VA Data
Updated VIREC Factbook on CDW MVI Domain
Updated Historical Information for MCA Stop Codes
VIREC HelpDesk Transitions to Online Request Form

Data & Information Systems News

VA REDCap Breaking News!
New CMS Data Available from VIREC
New IVC CDS Community Care Data Sets
PIT Data Update
Vital Status File is Retiring
Now Available: HERC FY22 Inpatient and Outpatient Average Cost Data
DART Updates

Visit the VHA Data Portal

New Resource on Spinal Cord Injuries & Disorders Registry
New Resource on National Precision Oncology Program Database

Cyberseminars

Upcoming Presentations
Archived Presentations
Call for Cyberseminar Presenters

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New CIPHER Online Website
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Conference on the Science of Dissemination and Implementation in Health

Calls for Participation

Call for Submissions: VIREC Data Issues Brief
Call for Papers on the Effects of War on



How do I connect with other users of VA data?



- HSRData Listserv is an email-based tool for VA staff to **ask and answer questions** about using VA data
- **1,800+ members**
- Multiple perspectives from across the **VA data ecosystem**: PIs, fellows, analysts, data managers, statisticians, operations and program staff, data stewards, resource center experts, data architects
- Share hands-on experience and tacit knowledge about **historical and nuanced aspects of VA data** and their application to research questions

Re: [HSRDATA-L] Question about CDW fee data and non-VA ED use

Health services research data discussion list <HSRDATA-L@VAWW.LISTSERV.VA.GOV> on behalf of [redacted]
To: HSRDATA-L@VAWW.LISTSERV.VA.GOV Thu 4/11/2024 1:22 PM

Hi [redacted]

I second [redacted] suggestion that it is best to use data from only one dataset when possible.

RESDAC has some good guidance on identifying ER visits: [How to Identify Hospital Claims for Emergency Room Visits in the Medicare Claims Data | ResDAC](#)
VIREC also has some suggestions: [Emergency Department & Urgent Care Encounters \(va.gov\)](#)

[redacted]

From: Health services research data discussion list <HSRDATA-L@VAWW.LISTSERV.VA.GOV> On Behalf Of [redacted]
Sent: Thursday, April 11, 2024 2:13 PM
To: HSRDATA-L@VAWW.LISTSERV.VA.GOV
Subject: Re: Question about CDW fee data and non-VA ED use

Welcome, [redacted].

There are a lot of folks on the listserv with expertise in VA purchased care. Historically, that was referred to as Fee Basis and HERC has a guidebook on our webpage describing that. [HERC: Fee Basis Data: A Guide for Researchers \(va.gov\)](#)

The Fee data were incomplete starting in 2015 with the implementation of the Choice Program and the use of the PIT system to manage some of the purchase care. HERC, CREEK and VIREC have documented the PIT data.

Starting in June 2019, VA moved to a consolidated dataset, sometimes known as IVC-CDS as the single repository for VA community care. We've been using the IVC-CDS data a lot recently.

In my experience, it is best/easiest if researchers use data from one system preferably the IVC-CDS. If you can avoid mixing that data with earlier data, then I think would be ideal.

Hope this helps.

[redacted]

From: Health services research data discussion list <HSRDATA-L@VAWW.LISTSERV.VA.GOV> On Behalf Of [redacted]
Sent: Thursday, April 11, 2024 10:08 AM
To: HSRDATA-L@VAWW.LISTSERV.VA.GOV
Subject: Question about CDW fee data and non-VA ED use

Hello everyone, I am new to this listserv and using VA data.
I am conducting a study and hoping to identify data for patients who used non-VA emergency room care from the fee basis tables in CDW. I am having some trouble identifying the correct tables and variables to identify this in SQL. Does anybody have experience with this type of data and can help point me in the right direction?
Many thanks in advance.

[redacted]

More information about HSRData
vaww.virec.research.va.gov/Support/HSRData-L.htm
 (VA Intranet)



Coming soon! HSRData Forums on the Data Knowledge Hub (aka HSRData 2.0)

The screenshot shows the HSRData Forums interface with several callouts highlighting key features:

- Conversations:** User friendly interface, Threads stay together. An orange arrow points to the first question post.
- Voting/Rating:** Measure of quality, Reputation. A green arrow with a thumbs-up icon points to the 'Upvote' button of the first question.
- User Profiles:** Experts self-identify, Supports collaboration. A green arrow points to a user profile icon in the top right.
- Notifications:** Awareness in forum. A blue arrow with a bell icon points to a notification icon in the top right.
- Concept Tagging:** Topical knowledge organization, Filter & follow topics. A red arrow with a tag icon points to the 'Popular Tags' and 'Your Favorite Tags' sections.

The interface includes a search bar, a 'Post a Question' button, navigation tabs (Home, Questions, Tags, Users), and a list of questions with voting options (Upvote, Downvote, Follow, Share). The 'Popular Tags' section lists various technical topics like Algorithms, Data Structures, and Matrix. The 'Your Favorite Tags' section shows tags like Data-Sorting and Algorithms. The 'Related Tags' section shows tags like Numpy and LIX.

How does the EHR modernization affect VA data?

VIREC Resources

EHRM Resources:

- [Guidance on Addressing EHRM in Applications](#)
[released: Nov 2021]
- Web page: [EHRM & Implications for Data Users](#)
- [VA Millennium EHR Data Documentation & Resources](#)

Electronic Health Record Modernization (EHRM) & Implications for Data Users

Overview

This web page is intended to support a general understanding of [VA's Cerner transition process](#) and its impact on researchers and other VA data users. It provides a high level summary of the Cerner transition, the availability of enterprise data, and the [Electronic Health Record SharePoint site](#) for information on transition activities.

Introduction to EHRM

The VA signed a contract with Cerner Corporation over a period of several years to modernize the [Veterans Health Information Systems and Patient Reporting System](#) and facilitate seamless data exchange between the VA and the Agency by enabling the use of a single data source.

As the nation's largest provider of care (VHA) provides care to over 26 million patients, VA EHR and data integration, improve clinical care information operations, improve research projects for VA.

Understanding EHRM

Millennium is Cerner's new administrative data environment. It also includes a back-end system for Health Information Management data for VA's 130 medical centers. The change in data structures in the Millennium environment will affect the way data is accessed and used.

Training

Data managers, programmers, analysts and other data users who require data from transitioned sites should attend the weekly Syndicated Data Bits sessions provided by OEHRM. These sessions introduce users to the Cerner Millennium data environment, data syndication processes, and data mapping concepts.

Users interested in attending the sessions should click the [DMM Knowledge Share](#) link to accept the calendar invitation for the series.

[View resources related to accessing and using Syndicated Data.](#)

General EHRM Resources

- [Office of Electronic Health Record Modernization](#)
- [Office of Electronic Health Record Modernization](#)
- [Cerner Wiki](#) (access requires [Cerner Connect](#))
- [Cerner eLearning Video Library](#) (access requires [Cerner Connect](#))

Key EHRM Terms

Understanding language used in the Cerner Millennium environment.

[View key EHRM terms](#)

Frequently Asked Questions

[+ Expand All](#)

- [+ Where can I find detailed information about the transition?](#)
- [+ When will my VA site Go-Live?](#)
- [+ What VA data will be populated initially?](#)
- [+ How are VA data mapped during the transition?](#)
- [+ How will I access historical data once the transition is complete?](#)
- [+ What are the differences between CDW databases?](#)
- [+ How do I gain access to CDWWork2 and CDWWork3?](#)
- [+ Where can I learn more about common data elements?](#)
- [+ What training presentations are available?](#)
- [+ Where can I send research related questions?](#)
- [+ Where can I send research related questions about Millennium, and data originating from VA?](#)

On This Page

- [Overview](#)
- [Introduction to the EHRM](#)
- [Understanding the Cerner Millennium Data Environment](#)
- [Initial VA Data Migration to the Cerner Environment](#)

VA Millennium EHR Data Documentation & Resources

Overview

VA Millennium electronic health record (EHR) data documentation and resources help new and seasoned data users with understanding the structure and contents of CDW Millennium data and provide information on VA's transition to the Cerner Millennium electronic health record (EHR).

Sign-up for VIREC product news and updates. Email the VIREC [HelpDesk](#) to receive notification of VIREC's new Millennium Data products and product updates.

How are we doing? Take our [short survey](#) to share your thoughts about the Millennium resources below. We value your feedback.

Data Documentation

Expand each type of documentation below to view these resources.

[+ Expand All](#)

+ Getting Started with Millennium Data

- [+ !\[\]\(137ee27e66fef68cc41e9a65080023c9_img.jpg\) Millennium Factbooks](#)
- [+ !\[\]\(f980dcbd4dbb7b66fd5867e0998d5b96_img.jpg\) The Researcher's Notebook: Millennium Data Discovery Series](#)
- [+ !\[\]\(4af284843543aedc7fb7190fc5590f2b_img.jpg\) Millennium Data Reviews](#)
- [+ Data Layout & Descriptions](#)
- [+ Crosswalks & Data Mappings](#)

vaww.virec.research.va.gov/EHRM/Overview-and-Implications.htm

vaww.virec.research.va.gov/EHRM/Documentation-and-Resources.htm

(VA Intranet)



Questions about research use of the new FEHR?

Hosted by: **VIReC**

Series Partners: **OSIRES™** **PROVEN** 9/24 | 1

RESEARCH & EHR SYNERGY CYBERSEMINAR SERIES

FY24 Session 8:

Conducting Research with the New Federal EHR:
An Update from the National Research Council and the ORD Office for the Sustainment and Implementation of Research EHR Solutions (OSIRES)

September 25, 2024

Maria Souden, MSI, PhD Director, VA Information Resource Center (VIReC) ORD Office for Sustainment and Implementation of Research EHR Solutions (OSIRES)	Hannah Gelman, PhD Program Strategy & Integration Lead ORD Office for Sustainment and Implementation of Research EHR Solutions (OSIRES)	Bharathi Swaminathan, MD Assistant Chief Medical Executive, Research James A. Lovell Federal Health Care Center
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[Archived cyberseminar](#) from EHRM Research Council and the ORD Office for the Sustainment and Implementation of Research EHR Solutions (OSIRES)

ResearchEHRMHelp@va.gov

virec@va.gov



Session roadmap

- What is VIREC?
- How does VIREC support my research and data use?
- How can I collaborate with VIREC or provide feedback on VIREC products?



Help us be better! Opportunities for feedback and collaboration

VIREc INTRANET

Search All VA Web Pages

VA INFORMATION RESOURCE CENTER (VIREc)

VIREc Home
About Us
VA/CMS Data for Research
VHA Data Portal
New Users of VA Data
FAQs
Acronym Lookup
HelpDesk
Report Brok
How are we

Quick tips on popular topics related to using VA data for

- Data Issues Brief
- Upcoming Cyberseminars
- Real SSN Data Request Process
- VA REDCap Project

VIREc INTRANET

VA INFORMATION RESOURCE CENTER (VIREc)

VIREc Home
About Us
VA/CMS Data for Research
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FAQs

HelpDesk

Overview

VIREc supports VA researchers through HelpDesk services by providing individualized responses to inquiries on select databases and information systems used for VA research. We provide information, resources, and referrals to experts.

[Contact the VIREc Help Desk](#)

Share your expertise

- VIREc Researcher's Notebook
- VIREc Cyberseminars

Data Reviews

And more....



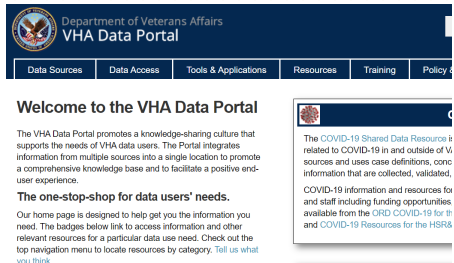


Database & Methods
BONUS SLIDES

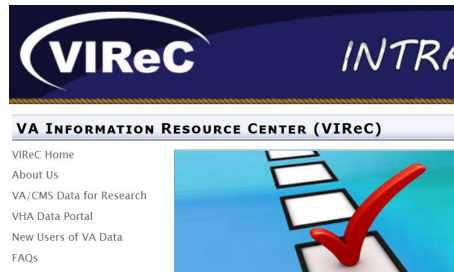


Resources for VA Data Users

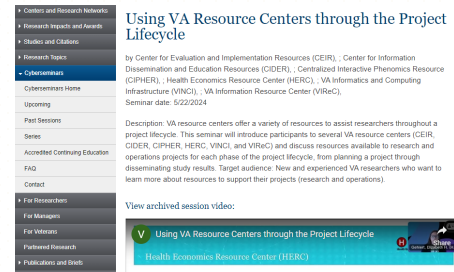
Select image to visit page



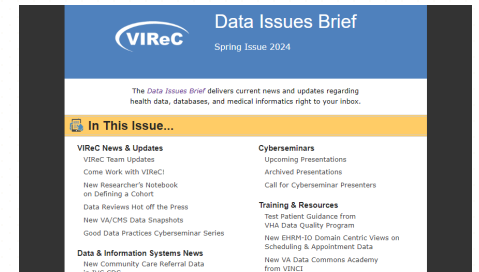
VHA Data Portal (VA Intranet)



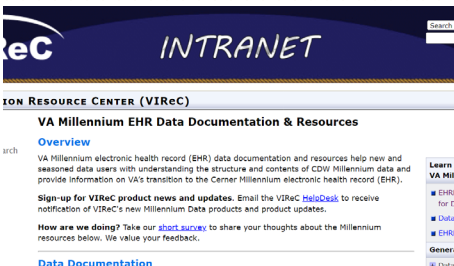
VA Information Resource Center (VIREC) (VA Intranet)



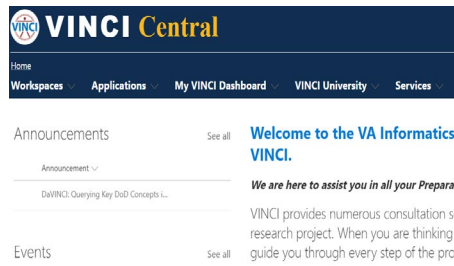
Video: Using VA Resource Centers through the Project Lifecycle



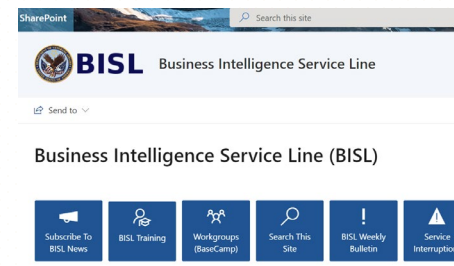
VIREC Data Issues Brief



VA Millennium EHR Data Documentation (VA Intranet)



VA Informatics and Computing Infrastructure (VINCI) (VA Intranet)



BISL/CDW (VA Intranet)



Health Economics Resource Center (HERC) (VA Intranet)

VIReC Cyberseminar Series

Select series for more information

Database & Methods



Introduces VA data sources and information systems and their use in research.

Good Data Practices



Provides practical guidance on using data throughout the research project lifecycle.

Data Access



Reviews data access request processes and provides insight on regulatory requirements.

CMS Data



Focuses on CMS and USRDS data and methods for using these data in VA research.

Research & EHR Synergy



Helps VA researchers understand VA's transition to the Federal EHR and its impacts on VA data.

Partnered Research



Explores VA data use in evaluation, implementation, and research-operations partnerships.

Interested in presenting a Cyberseminar? Contact virecseminars@va.gov





Questions about using VA Data?

HSRData Listserv

- Community knowledge sharing
- ~1,800 VA data users
- Researchers, operations, data stewards, managers
- Subscribe by visiting
vaww.virec.research.va.gov/Support/HSRData-L.htm (VA Intranet)

VIReC HelpDesk

- Individualized support
- Request Form:
varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK (VA Intranet)

Additional EHRM information

OSIRES contact information

- ORDResearchApplicationAnalyst@va.gov - For questions, concerns, and assistance with study builds or EHRM deployment activities
- ResearchEHRMHelp@va.gov – For other questions about EHRM’s impact on research

EHRM Resource Portal

- Digital Health Office site with VHA EHRM updates and resources, including council information and issue management progress (<https://dvagov.sharepoint.com/sites/VHAOHIEHRMRR/>)

Electronic Health Record Modernization Sharepoint

- Internal VA Sharepoint sharing information about EHRM IO program office and EHRM program updates (<https://dvagov.sharepoint.com/sites/vaehrmio/SitePages/About-EHRM.aspx>) including information on the Reset
- Public facing site with EHRM IO program information: <https://digital.va.gov/ehr-modernization/>

ORD Support for transitioning to the new Federal EHR

OSIRES

*Office for Sustainment and
Implementation of Research
EHR Solutions*

- ~\$10 mill ORD investment since 2019
- 11 dedicated FTE
- Exec champion: Dr Molly Klote, DCRADO - ePROS

Supports **the National Research Council (NRC)**, comprising and contributes to its workgroups

STATEMENT OF PURPOSE (*Working*)

*To contribute to the VA Research Enterprise mission of improving Veterans lives through research by supporting the **safe, compliant, and scientifically reliable conduct of research** in the electronic health record (EHR). We do this through **advocating** for research EHR needs; **developing and testing technical solutions** to meet research functional requirements; assessing, mitigating, and escalating **EHR risks and issues**; addressing sociotechnical aspects of **EHR implementation and sustainment.***



FEHR - implications for data use

- As sites transition over the rollout, CPRS is de-activated and data at transitioned sites is generated from the Oracle EHR
- Data from the Oracle EHR is modeled differently from VistA/CPRS data, impacting existing data sources used for research, including CDW and other CDW-derived data sources (VSSC, MCAO, etc.)
- During the transition period and beyond, VHA will need to incorporate data generated from both systems.
- Currently ~248 research projects and 54 MVP projects are approved to use data from the new EHR *via* VINCI. Other program offices (e.g., PERC) have been using it for their data and reporting for the last few years.
- Knowledge regarding data quality and comparability will build across the organization over time. Many stakeholders, including EHRM-IO Data Management team, VIREC, and VINCI, are contributing to continuous understanding and improvement of the FEHR data through use.

VA data from VAMCs using the new Federal EHR

- Syndicated back to CDW using a location-based approach to include all information for VA episodes of care and exclude DOD encounters
 - **CDW Work2** (closer to Oracle EHR data model)
 - **CDW Work3** (new data converged into legacy CDW VistA model)
 - **OMOP-transformed** into Common Data Model
- Data requested through current processes - DART (for research use) and ePAS (for operations)
 - Provisioned by VINCI IT Data Managers along with a VINCI Data Services team consultation to jumpstart use
- Documentation and resources available from EHRM-IO, VIREC, and VINCI *(resource links on next slide)*

EHRM Data Resources for Researchers

VA Millennium EHR Data Portal Page

<https://vaww.vhadataportal.med.va.gov/Data-Sources/Millennium-EHR>

Data Management and Migration Knowledgebase” on the Data Migration, Management, and Syndication SharePoint

<https://dvagov.sharepoint.com/sites/VACO.OEHRMoffice/DMM/Pages/DIRAKnowledgeShareHome.aspx>

Syndicated Data Bits – Bi-weekly Webinars

[Education and Training](#)

CONTACT INFORMATION

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THANK YOU!
Questions?

Submit Questions to VIREC HelpDesk:

varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK

(VA Intranet)

Hot off the press to your inbox!

Submit a VIREC HelpDesk request to receive new product updates

varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK (VA Intranet)



 DATABASE & METHODS CYBERSEMINAR SERIES



Next session:

November 4, 2024, 1 pm Eastern

An Introduction to Commonly Used VA Databases
Maria Souden, PhD

<https://www.virec.research.va.gov/Resources/Cyberseminars.asp>