DATABASE & METHODS CYBERSEMINAR SERIES

FY24 Session 2:

Navigating VA Data Sources: An Overview of Commonly Used Databases

November 6, 2023

Hosted by VIReC

Maria Souden, PhD, MSI
Director, VA Information Resource Center

DATABASE & METHODS CYBERSEMINAR SERIES

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

Database & Methods sessions cover…

- VA data sources & data access systems
- Application of VA data to research and quality improvement questions
- Limitations of secondary data use
- Resources to support VA data use

NEXT DATABASE & METHODS SESSION

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

Date	Topic
12/4/23	Navigating VA Data Access: Overview of VA Data Access Request Processes presented by Linda Kok, MA VIReC Senior Analyst for Data Access and Policy

Visit the VIReC Database & Methods Cyberseminar page for more information & registration links.

Visit HSR&D's VIReC Cyberseminar Archive page to watch previous sessions.

Where can I download a copy of the slides?

SAMPLE EMAIL

A Practical Approach to Working with VA-Purchased Community Care Data

Thursday, October 13, 2022
2:00 PM | (UTC-04:00) Eastern Time (US & Canada) | 1 hr

Please download today's slides
Please click here for today's live captions

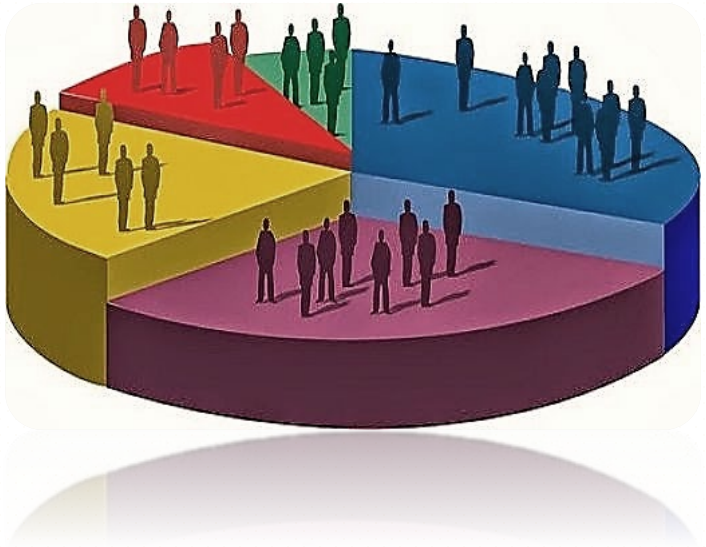
Join webinar

More ways to join:

Join from the webinar link
https://veteransaffairs.webex.com/veteransaffairs/j.php?

Before we begin…

- Two poll questions coming up that will help us get to know you.
- Respond in the Webex pop-up window.
  - You may need to scroll down to see the second poll question.

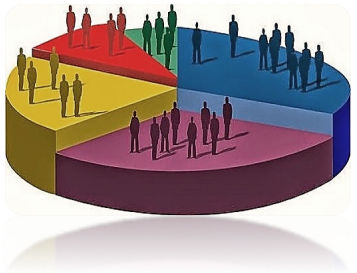


Thank you for helping us tailor and improve our cyberseminars!

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 many years of experience 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

FY24 Session 2:

Navigating VA Data Sources: An Overview of Commonly Used Databases

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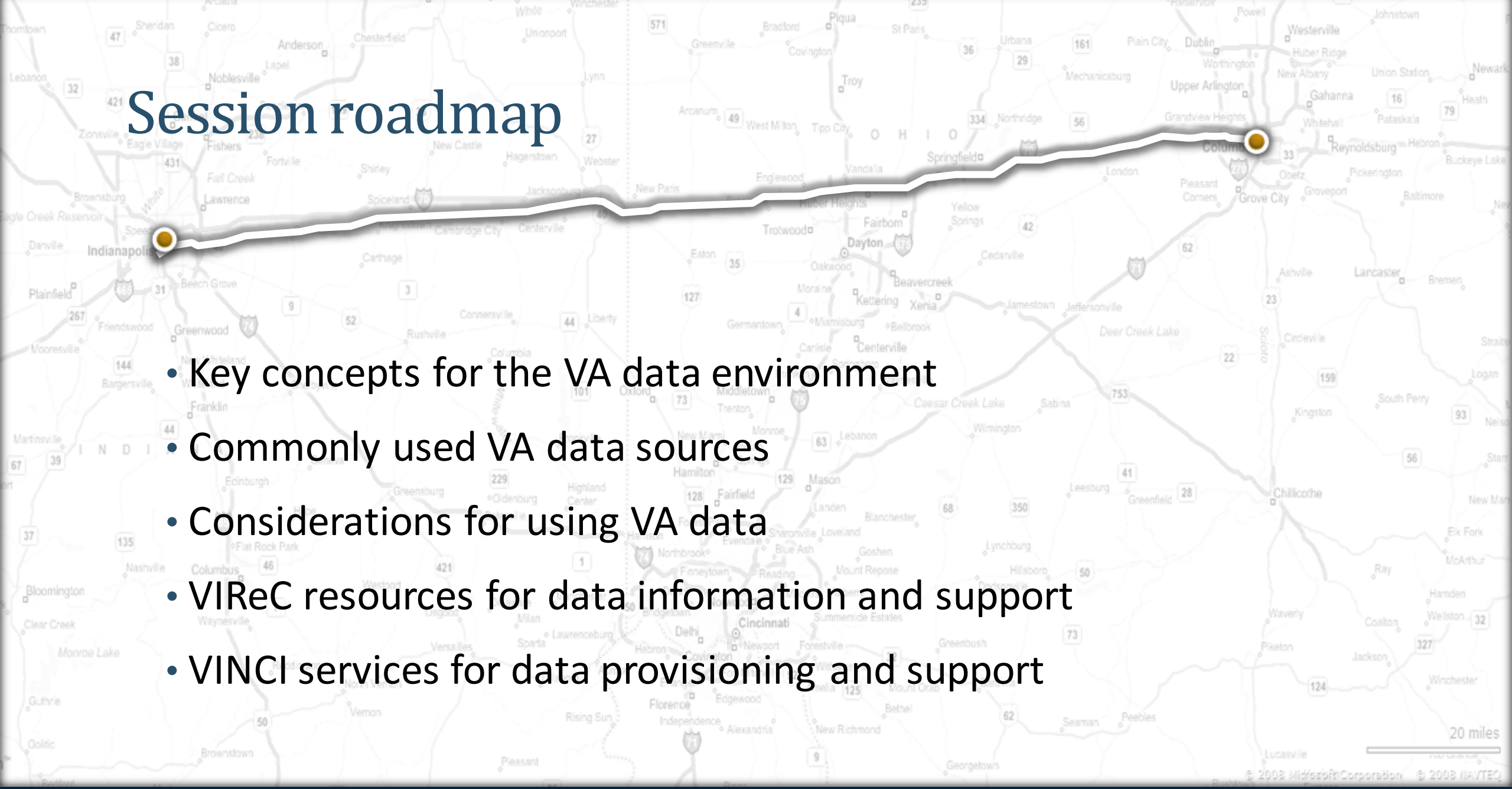
The purpose of this cyberseminar is to ***introduce*** VA data and resources for using it effectively.

By the session's end, you should be able to…

1. Identify **VA data sources commonly** used in research and quality improvement inquiry.
2. Describe the primary **differences in the origin and use** of various data sources.
3. *Begin to conceptualize* how VA data can be **applied to specific research questions** or areas of study.
4. Understand how to use VIReC and VINCI for **additional data resources and support**.

Session roadmap



- Key concepts for the VA data environment
- Commonly used VA data sources
- Considerations for using VA data
- VIReC resources for data information and support
- VINCI services for data provisioning and support

BISL
VINCI
Enrollment Data
EHR
Claims Data
HERC
Operations
Information Systems
JLV
Data
DaVINCI
Administrative Data
DART
CDW
VA/CMS
PSSG
Healthcare
Research
My HealtheVet
CAPRI
CPRS
Vital Status File
Survey Data
Community Care
Corporate Data Warehouse
DoD
VASQIP
VIReC
Millennium
PBM
Utilization
Longitudinal Data
Pharmacy Benefits Management
Defense Health Administration
EHRM
Quality Improvement
Managerial Cost Accounting
Joint Longitudinal Viewer
Electronic Health Record Modernization
ADUSH enrollment
Electronic Health Record
VistA
Chart Review
QUERIVHA Data Portal
Patient Generated Data
VBA
MedSAS

Research and quality improvement (QI) collected data (primary data)

- Generated during scientific inquiry
- Collected to address specific question(s)
- Can include clinical outcomes, survey data, qualitative data, EHR or administrative data analyses to address novel information needs

VA Data is typically collected in the context of healthcare operations and delivery (research is a secondary use)

Clinical care (Electronic Health Record – EHR data)

Patient generated data

VA-paid Care in the Community

Non-VA (external) Data

Healthcare operations, costs, enrollment, utilization

Research and Quality Improvement Data

LEGACY

Clinical Care/Electronic Health Record (EHR) data

CPRS/VistA system has been used in the VA since the 1980s and has evolved to suit Veteran-specific care with heavy local customization.

CPRS

Computerized Patient Record System

- Front end for most data collected in clinical care
- Provides an interface for data entry and viewing of EHR
- Patient demographics, diagnoses, procedures, clinical notes

VistA

Veterans Health Information Systems & Technology Architecture

- Integrated system of software applications
- Captures patient care, clinical results, patient data, plus provider & workload information
- VistA “system” is actually 130 separate instances

NEW FEDERAL EHR

Clinical Care/Electronic Health Record (EHR) data

- In 2017, VA began the process of transitioning from CPRS to a new Federal EHR based on a commercial product from Oracle Health (formerly known as Cerner).
- First instance of new EHR (Spokane, WA) went live in October 2020. **As of today, it is live at 5 sites.**
  - Reset: Since April 2023, future deployments are paused in order to assess and address challenges with the system.

ELECTRONIC HEALTH RECORD MODERNIZATION

VA-Paid Care in the Community Data

- Information from VA care provided by non-VA hospitals, doctors' offices, physical therapy, labs, etc.
- Paid for by VA through contracts, affiliate agreements, Veterans Choice and MISSION acts
- Representative of same care processes, but is actual claims data (like what you see in other "payor" data such as CMS)
  - Includes procedures, diagnoses, problems, but not necessarily EHR granularity

https://vaww.virec.research.va.gov/CommunityCare/Overview.htm (VA network only)

Administrative Data

Veteran-level

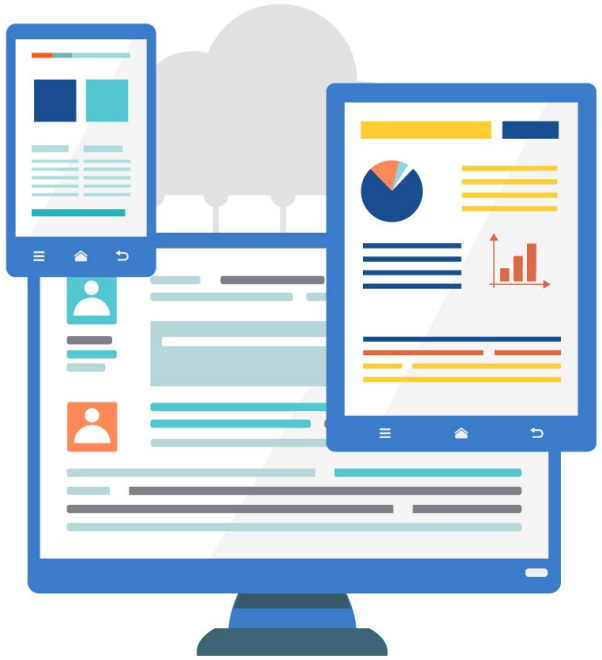
- Veteran benefits & care eligibility
- Service-connected disability ratings (Priority Groups)
- VHA enrollment
- Veterans Benefit Administration (VBA) data

Healthcare operations

- Enrollment & utilization statistics
- Workload, cost of care
- Data about facility size, complexity, services, performance measures
- Used for resource allocation & management

Patient-Generated Health Data

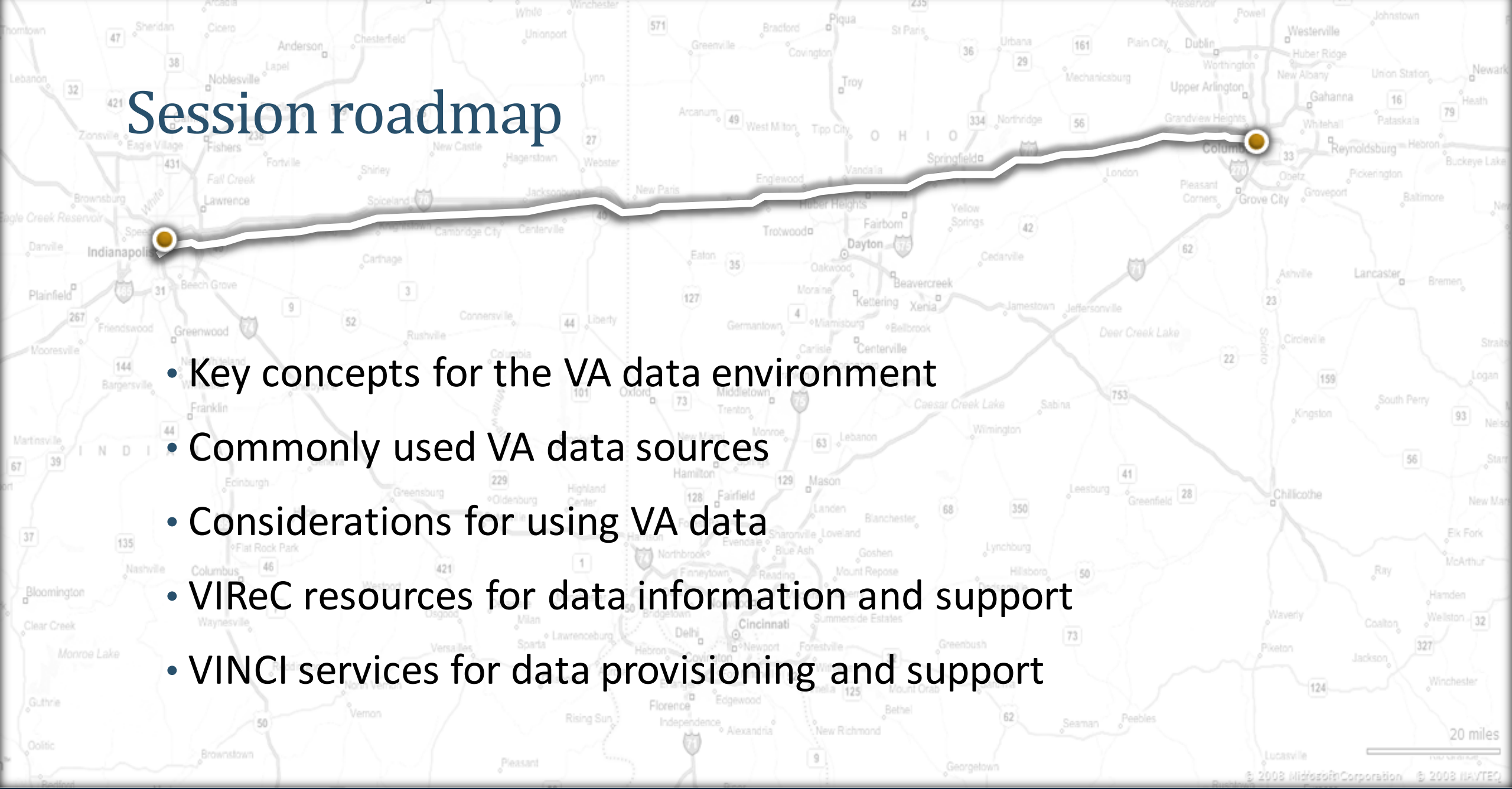
- Created, recorded, or gathered by or from patients (or family members or other caregivers)
- Includes screenings and patient assessments
- Patient portal activity such as provider messaging, prescription refills
- Home health devices and mobile apps



Programs and offices supporting the use of VA data

Business Intelligence Service Line (BISL) Office of Information Technology (OIT)	• Data Architects • Construct the data warehouse that organizes most VA data for re-use
National Data Systems (NDS) Office of Health Informatics - Health Information Governance	• Data Steward • Grants access to most national data
VA Informatics & Computing Infrastructure (VINCI) Office of Research & Development ***and*** Office of Information Technology	• Data Provisioning, Curation, Technical Support • Creates subsets of CDW data for users who have been granted access • Specialized data curation and education • Data consultation, education, and services
VA Information Resource Center (VIReC) Office of Research & Development	• Data Education, Knowledge Resources, Advocacy • Provides documentation to help understand and use the data • Education and HelpDesk
Other ORD-funded data curators Office of Research & Development	• **Health Economics Resource Center** - costs, risk scores, labor, wages • **Million Veteran Program** - clinical, behavioral, genomic data • **CIPHER** - phenomics and code for data constructs and analytics

Session roadmap



- Key concepts for the VA data environment
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Speed Dating - Commonly Used Data Sources

- Corporate Data Warehouse
  - Clinical and administrative patient record
  - Primarily from Electronic Health Record (EHR) systems (VistA and new Oracle)
- Derived, Augmented, or Value-Added Data (VistA Data +)
  - EHR/clinical data curated and augmented by program offices
  - Administrative data augmented by operations/programs
  - Non-VA care paid for by the VA (aka Community Care data)
- Veteran data outside of VistA/EHR
  - Patient generated data collected outside of care setting
  - VA data (beyond VHA)
  - Significant sources of non-VA data

Corporate Data Warehouse (CDW) – key concepts

Largest integrated VA data source	Most VistA data ends up here, including clinical care, EHR, care in the community, some healthcare operations data
Structured Query Language (SQL) database	Architected and maintained by Office of Information & Technology (OI&T) Business Intelligence Service Line (BISL)
Relational data	Domains organized into tables; linking keys between tables used to create analytic dataset for a cohort
Production Domains	Architected for easier querying and updated nightly
Raw Domains	Pre-production, unchanged from source system, less well-documented

CDW by the numbers

Data across 23 years for
25.8 million patients

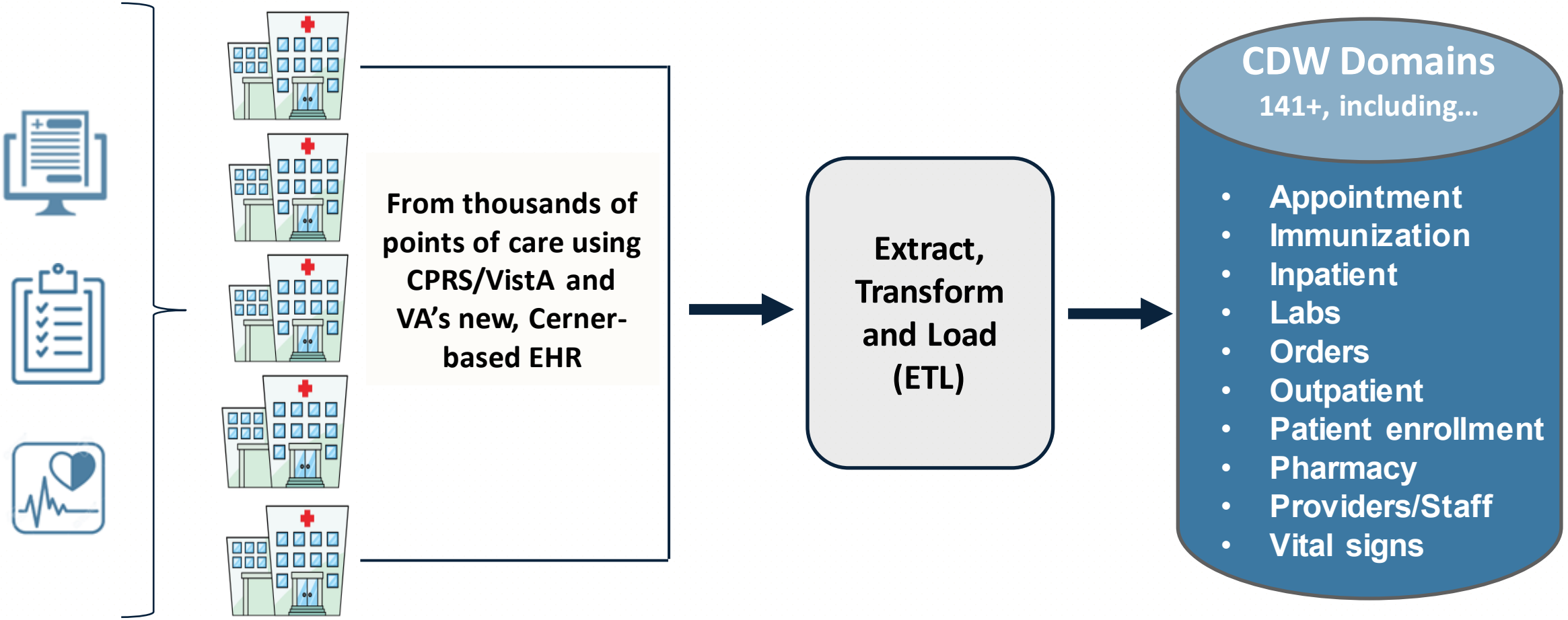
141+ domains
2,480+ tables
28,600+ columns

Outpatient visits
4.4 billion

Outpatient prescription fills
3.3 billion

Procedures
5.3 billion

Populating VA's Corporate Data Warehouse (CDW)



More about CDW domains: vaww.virec.research.va.gov/CDW/Domain-Descriptions/CDW-Domain-Descriptions.pdf

New to CDW? Start here.

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

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

Data Documentation

Expand each type of documentation below to view these resources.

+ Expand All

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 **NEW- UPDATED 5/23**	
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	
Using CDW Data to Conduct a Research Study **NEW 9/23**	

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

New EHR Data ("Millennium") in the CDW

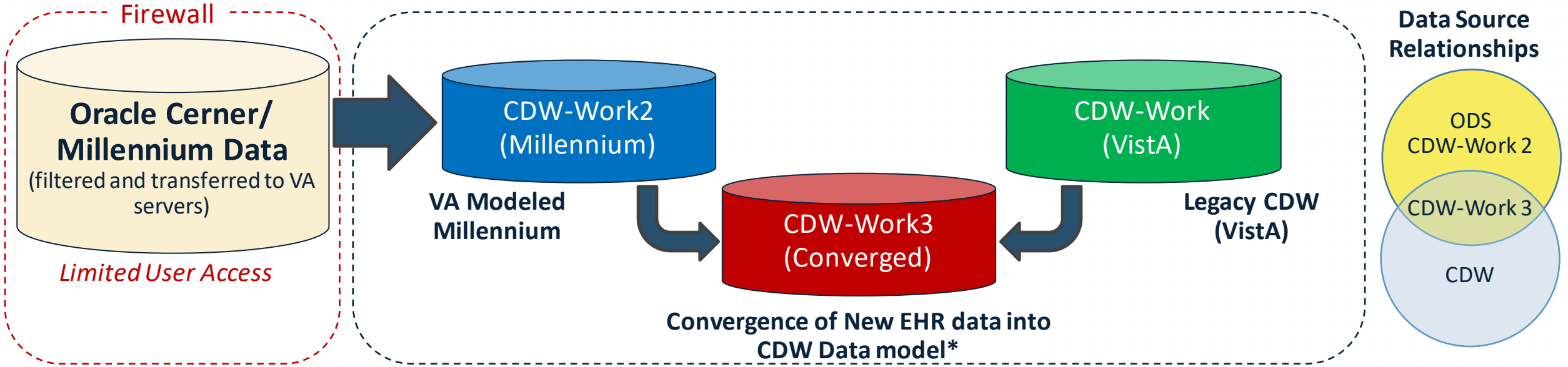
As sites transition to the new Federal EHR, their data no longer flows into VistA; some national datasets become incomplete.

"Millennium" data is generated by a different interface, has a different model than VistA data, with its own logic

- Learning curve for new data structures, formats, and content

Oracle Cerner Millennium data in the VA analytic environment is syndicated into new data sources - CDW Work2 and CDW Work3.

- Development of data knowledge and guidance for use of Cerner-generated data alongside of VistA-generated data.



Adapted from OEHRM DMM Data Syndication: Angie Turano/Beth Gibson – *Syndicated Data Bits*, July 7, 2021

Other data in the CDW environment

Centralized platform for commonly used national data sources, including CDW production and raw domains

Servers also host other datasets that may include elements generated by VA administrative and program offices

Learn more: CDW Introduction & Policies (BISL SharePoint)

Derived, Augmented, or Value-Added Data (VistA Data +)

- Many additional datasets are centrally available from CDW servers
- Typically comprised of a VistA extract that has been augmented with additional administrative or program office data to serve VA reporting or tracking needs.
- Often made available for research and QI use
  - Data is generally well-cleaned; “business rules” already applied
  - Obscures some detail present in source data

EHR/clinical data curated and augmented by program offices

Managerial Cost Accounting Office (MCAO) National Data Extracts

- Labs, pharmacy, radiology + other clinical, financial, administrative functions
- Incorporates cost information
- Curated by MCAO Program office

Health Economics Resource Center (HERC) Cost Data

- Cost of care, cost effectiveness, efficiency of programs & providers
- Datasets: Average Cost, Nosos Risk Scores, Wage Index, Discharge Data, Labor Costs
- Curated by HERC

Pharmacy Benefits Management (PBM) Database

- VistA medication data across settings
- Incorporates prescription and dispensing details
- Curated by PBM program office

VA Observational Medical Outcomes Partnership (OMOP)

- Standardizes VA data into OMOP Common Data Model (CDM)
- Person-centric relational data model relying on standardized vocabularies.
- Curated by VINCI

Administrative data augmented by operations/programs

Death Ascertainment File (DAF)
[replaces Vital Status File]

- Master Person Index (MPI) and SSA Death Master File (DMF)
- MPI Primary View (PV): uses data from multiple sources - selects most authoritative
- SSA DMF can supplement deaths not in the MPI PV

Assistant Deputy Undersecretary for Health (ADUSH) Enrollment Files

- Monthly and annual static data with VHA enrollment, eligibility, patient zip code

Planning Systems Support Group (PSSG) Geocoded Enrollee Files

- Quarterly data with enrollee address, geolocation, rurality and market
- Drive time and distance to VA facilities

VA Surgical Quality Improvement Program (VASQIP) Data

- Information about surgical procedures and outcomes
- Performed in an operating room and deemed eligible for assessment

Non-VA care paid for by the VA (aka Community Care data)

Fee Basis Claims System (FBCS)

Includes authorized and non-authorized care, authorization data where applicable

Data goes back to ~2012, **discontinued in ~FY20**

VistA Fee Data

Extracted from the Fee Basis Claims system (hand entered prior to the existence of FBCS)

Goes back to FY00; only PAID claims included; contract nursing home data since FY20

NEW! Integrated Veteran Care – Consolidated Data Sets (IVC CDS)

Combines data from VistA Fee, FBCS, eCAMS, CCRS, and Plexis Claims manager

Data from FY19 to present

Program Integrity Tool (PIT) - archived

Created to monitor fraud, waste, and abuse; replaced by IIVC CDS in FY23

Database was archived in Feb. 2023; has some data quality issues

Veteran data from sources outside of the EHR

- Collected in other ways (e.g., surveys, devices, patient generated)
- VHA non-EHR, VBA, “Big VA”
- Veteran-specific data from other organizations

Examples of patient generated data collected outside of care setting

Bereaved Family Survey (BFS) Database

- Families' perceptions of care Veterans received during the last month of life
- VA inpatient facilities

Survey of Healthcare Experiences of Patients (SHEP) Data

- From patient satisfaction surveys
- Inpatient, outpatient, and Primary Centered Medical Home (PCMH) care

Examples of VA Data (beyond VHA)

Veterans Services Network (VETSNET) Corporate Mini Master File

- Information about Veterans and their beneficiaries who receive VA benefits
- Including those whose benefits have been terminated

United States Veterans Eligibility Trends and Statistics (USVETS)

- Individual Veteran data, including those who are not in contact with VHA or VBA
- Utilization of VA services and benefits, military history
- Geography, demographics, and socioeconomic information

Significant sources of non-VA data

Centers for Medicare & Medicaid (CMS)

- VIReC managed and provisioned data for Medicaid & Medicare claims
- Includes other data such as US Renal Data System, Medicare Current Beneficiary survey, long-term care patient assessment data

DoD-VA Infrastructure for Clinical Intelligence (DAVINCI)

- Clinical, administrative, and demographic data from DoD's Military Health System Data
- VINCI-transformed to OMOP common data model to map VA CDW and DoD MDR data into standard terminology

Mortality Data Repository

- All deceased Veterans (VHA or not)
- Mortality dates and causes
- National Death Index (NDI) data

EHR viewer – read-only access to patient EHR

CAPRI
Compensation and Pension Record Interchange

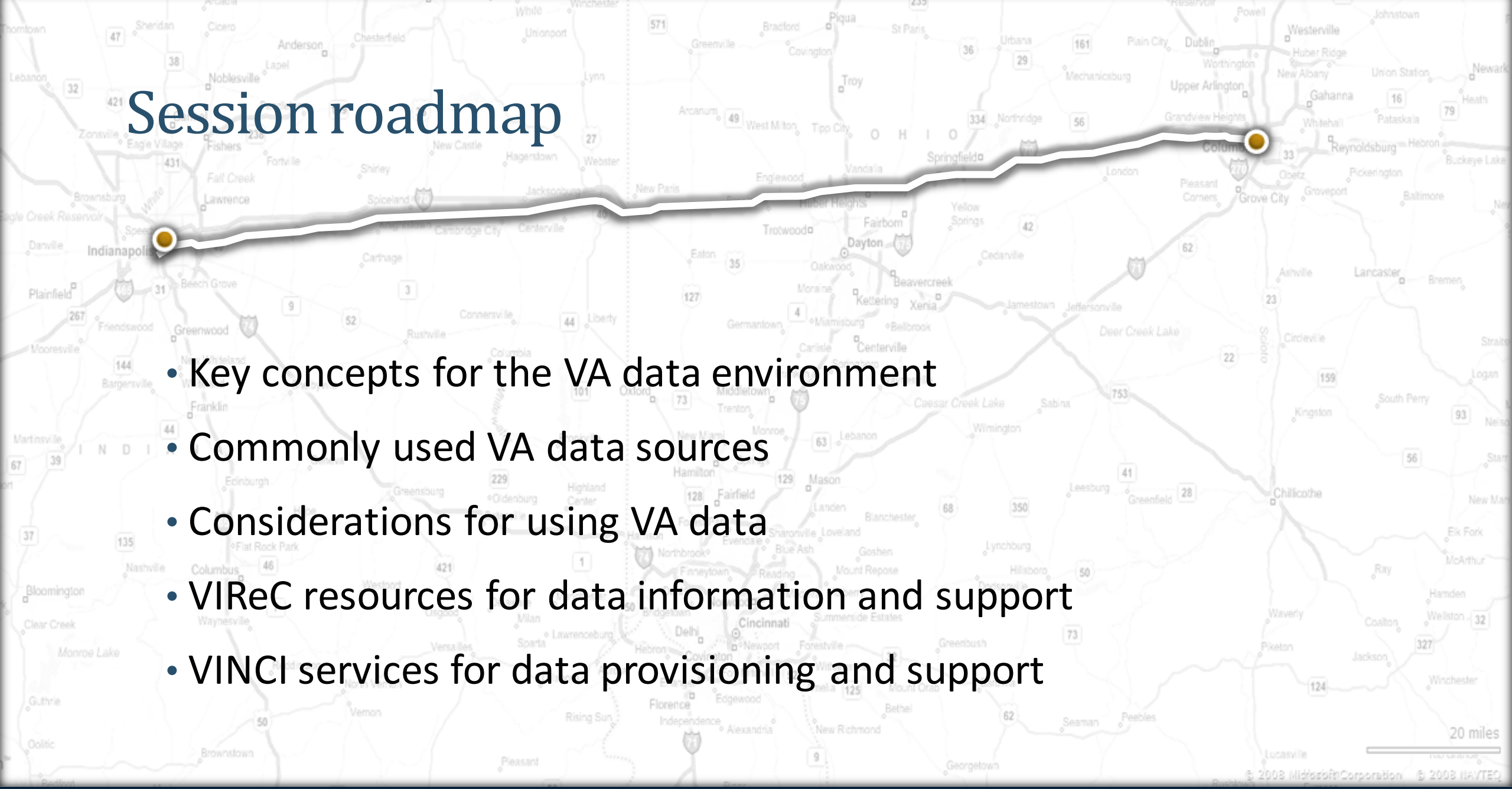
- Can see patient record *one site at a time*
- Includes search function
- Uses desktop computer software application
- Looks most like CPRS
- Direct access to JLV

JLV
Joint Longitudinal Viewer

- Records across multiple systems: VA CPRS, VA Millennium, DoD, Community Care
- National level patient search from any VA Medical Center or Office
- Configurable display for creating and saving customized data views
- VistA Imaging available

Learn more: vaww.vhadataportal.med.va.gov/ToolsApplications/JLV.aspx

Session roadmap



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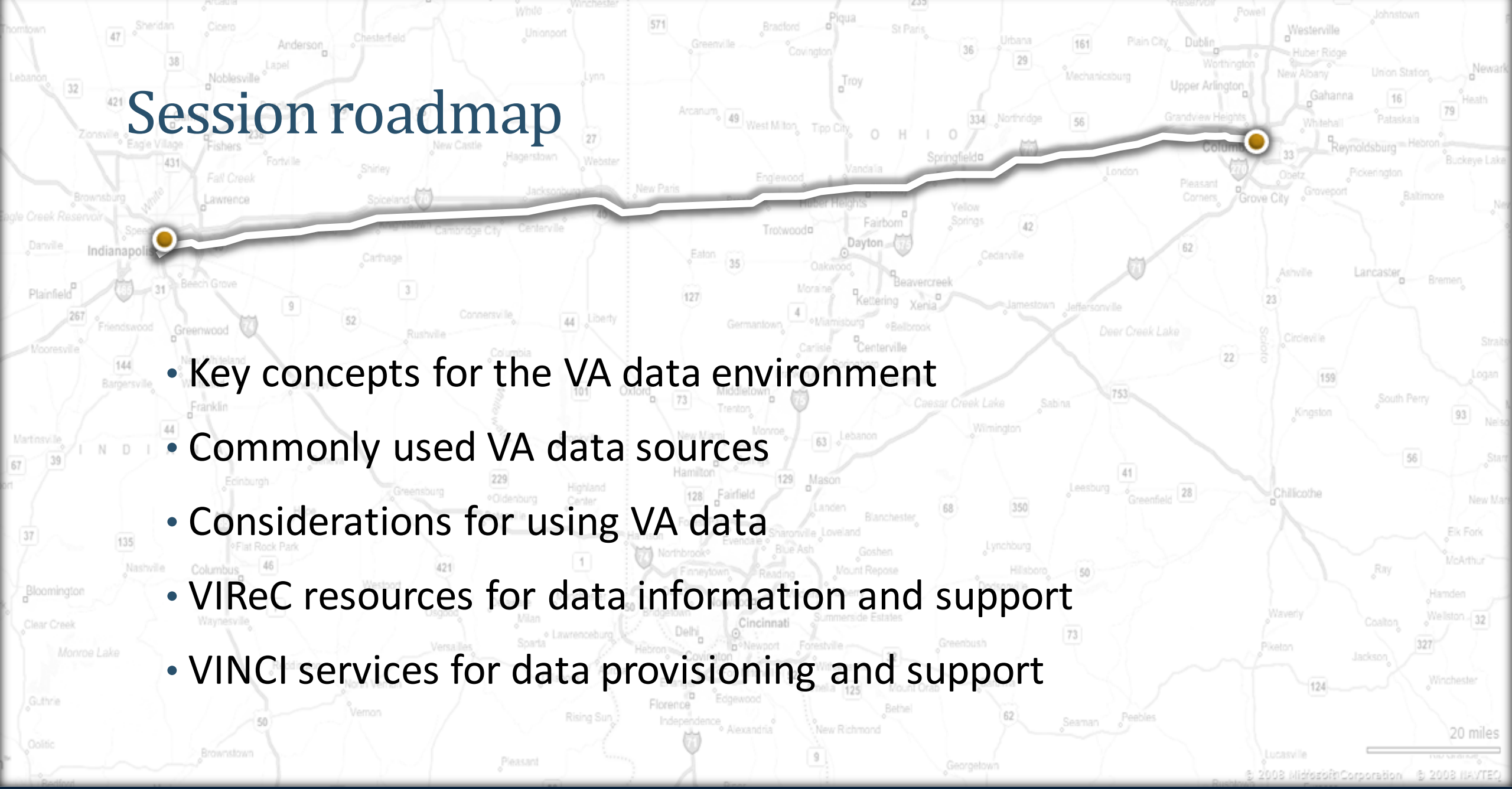
Strengths of VA Data

- Size/Volume - largest integrated healthcare system in US, with 23 years of longitudinal data on 25+ million patients
- Breadth/Scope of data – includes clinical data, assessment tools, administrative etc.
- Timely – some data available in almost real time
- Can be linked to external data (i.e., CMS, NDI, DoD)
- Data created for VHA operations can also be used for research

Challenges & limitations

- Data landscape can be complicated – multiple sources for similar data elements; likely to get more complicated with EHRM
- Analyses may not be generalizable to general population
  - Mostly male, lower SES, sicker than average, Veteran-prevalent conditions (PTSD, mental health, traumatic brain injury, limb loss)
- Not all Veterans enrolled in VHA
- Many Veterans also receive care outside VHA
  - Multiple overlapping data sources with a steep learning curve
- Some data elements are less reliably available, e.g., income, education

Session roadmap



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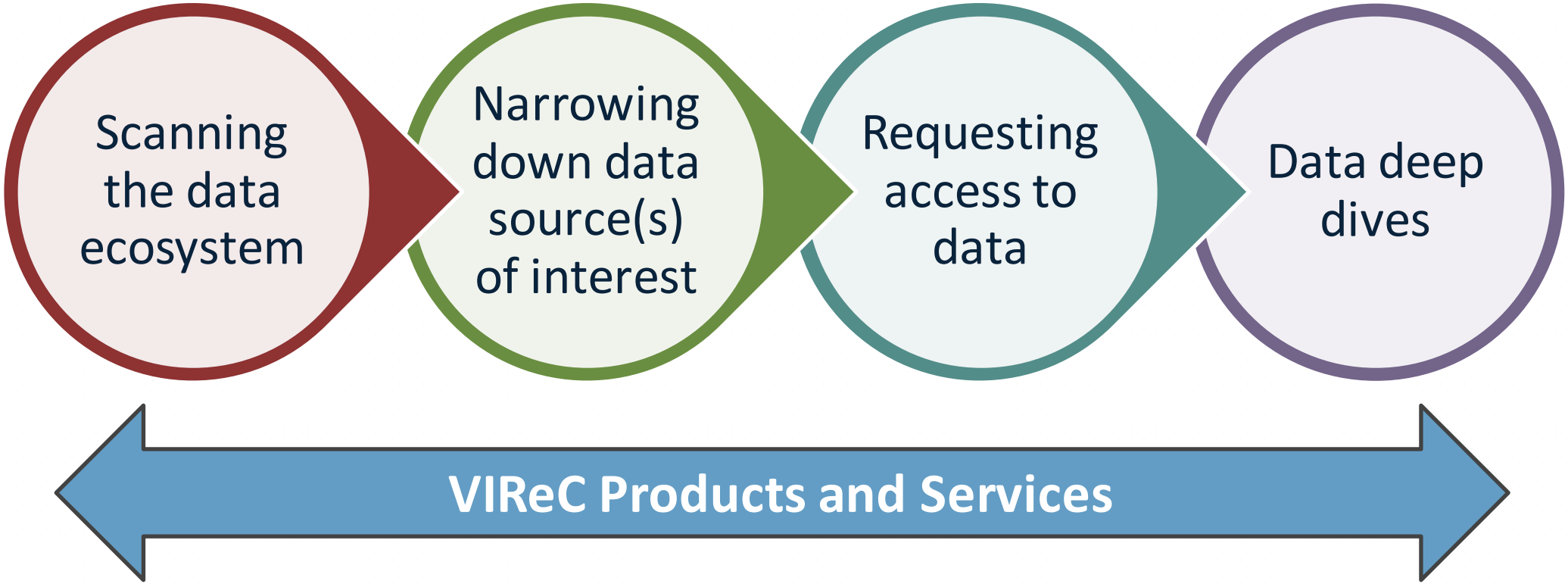
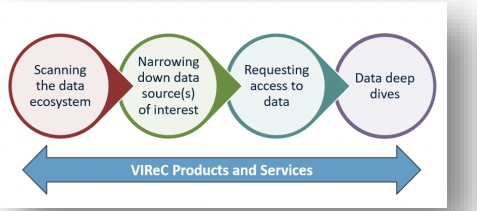
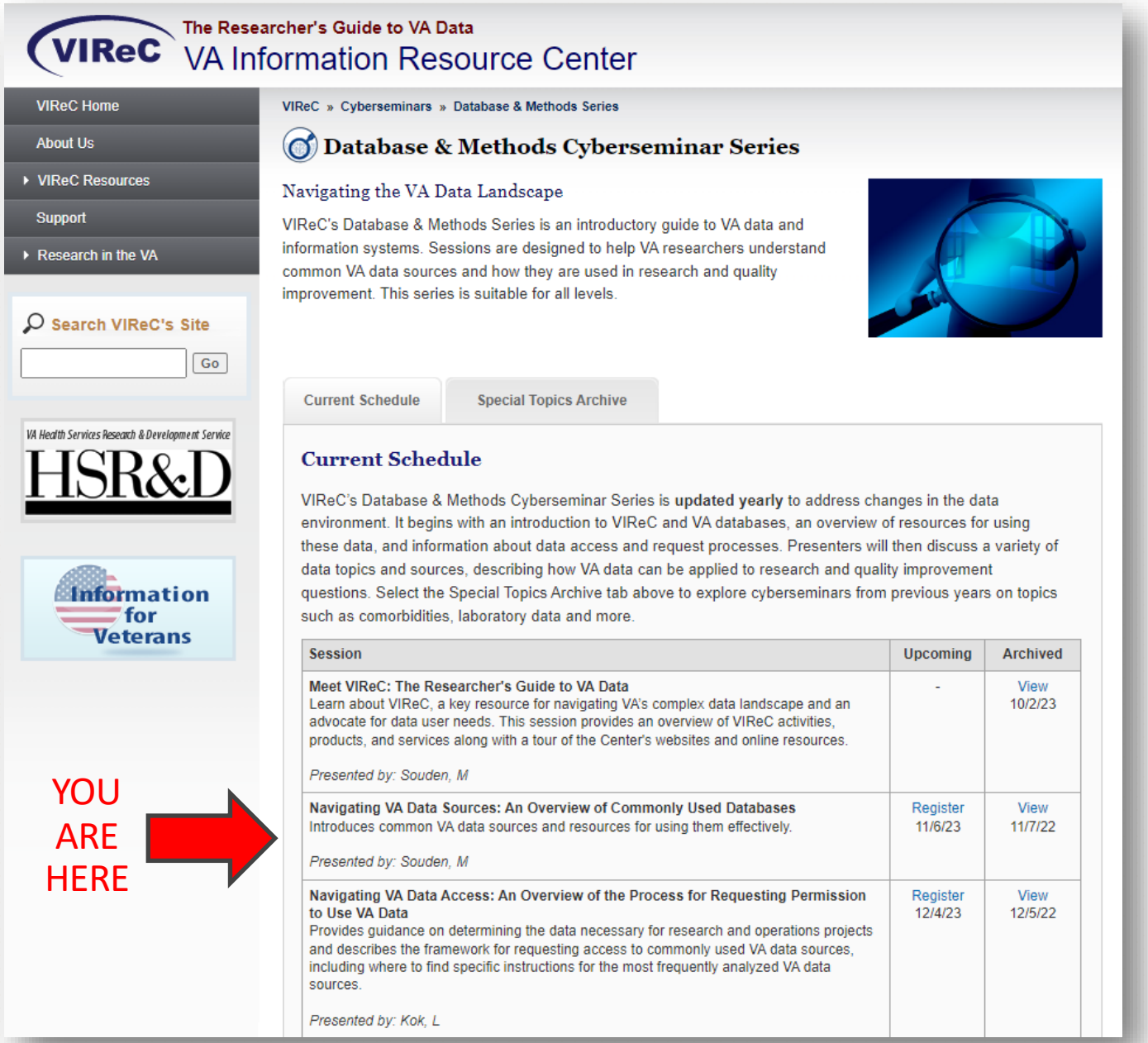
Navigating the VA Data Landscape



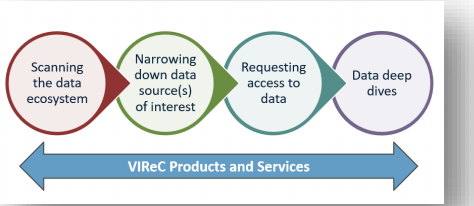
Deeper dives into data sources discussed today

[Database & Methods Cyberseminar Series (va.gov)]





More about VIReC Data Resources (archived session)



Database & Methods FY23 Session 1

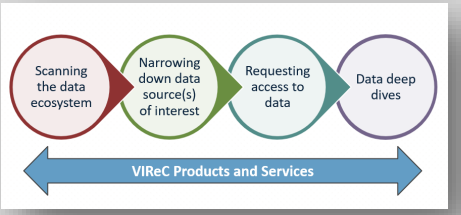
Meet VIReC: The Researcher's Guide to VA Data

Maria Souden, PhD, MSI
Director, VA Information Resource Center

from October 2, 2023

https://www.hsrd.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=6415

VIReC Dissemination Venues



vaww.virec.research.va.gov

VA network only

News & new resources

Resources for working with data

www.virec.research.va.gov

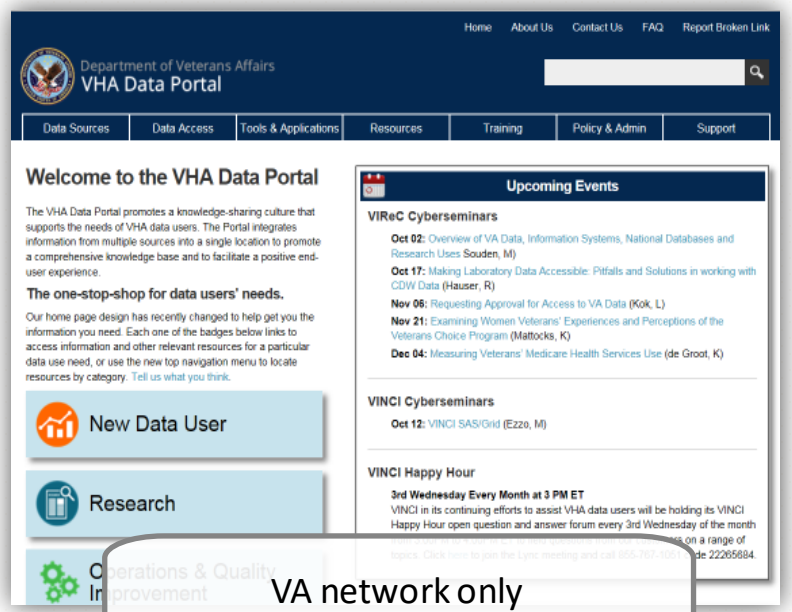
Public-facing

VIReC overview

Publications & events

Cyberseminars

vaww.vhadataportal.med.va.gov



VA network only

Collaborative with NDS & VINCI

Data source & access information

Coming Soon!

DKH
DATA KNOWLEDGE HUB

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

VIReC VA Information Resource Center
HERC VA Health Economics Resource Center
NDS VHA National Data Systems
VINCI VA Informatics and Computing Infrastructure

- 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
- HelpDesk for individual responses to questions about VA data and data access
- Knowledge sharing forums for connecting, collaborating, and sharing experiences with VA data

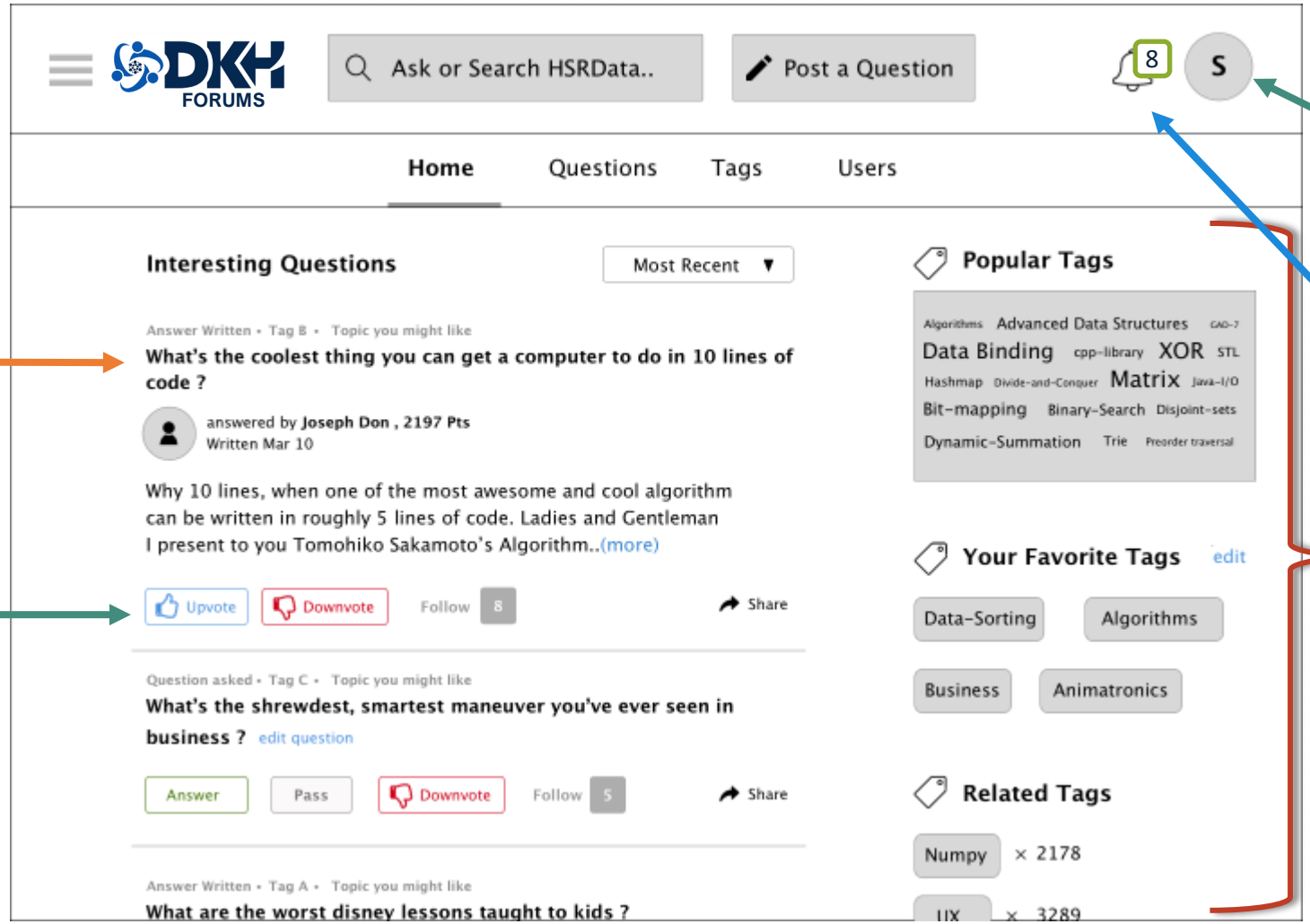
Coming soon: DKH Forums Next-Generation Knowledge-Sharing

Conversations

User friendly interface
Threads stay together

Voting/Rating

Measure of quality
Reputation



User Profiles

Experts self-identify
Supports collaboration

Notifications

Awareness in forum

Concept Tagging

Topical knowledge organization
Filter & follow topics

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)

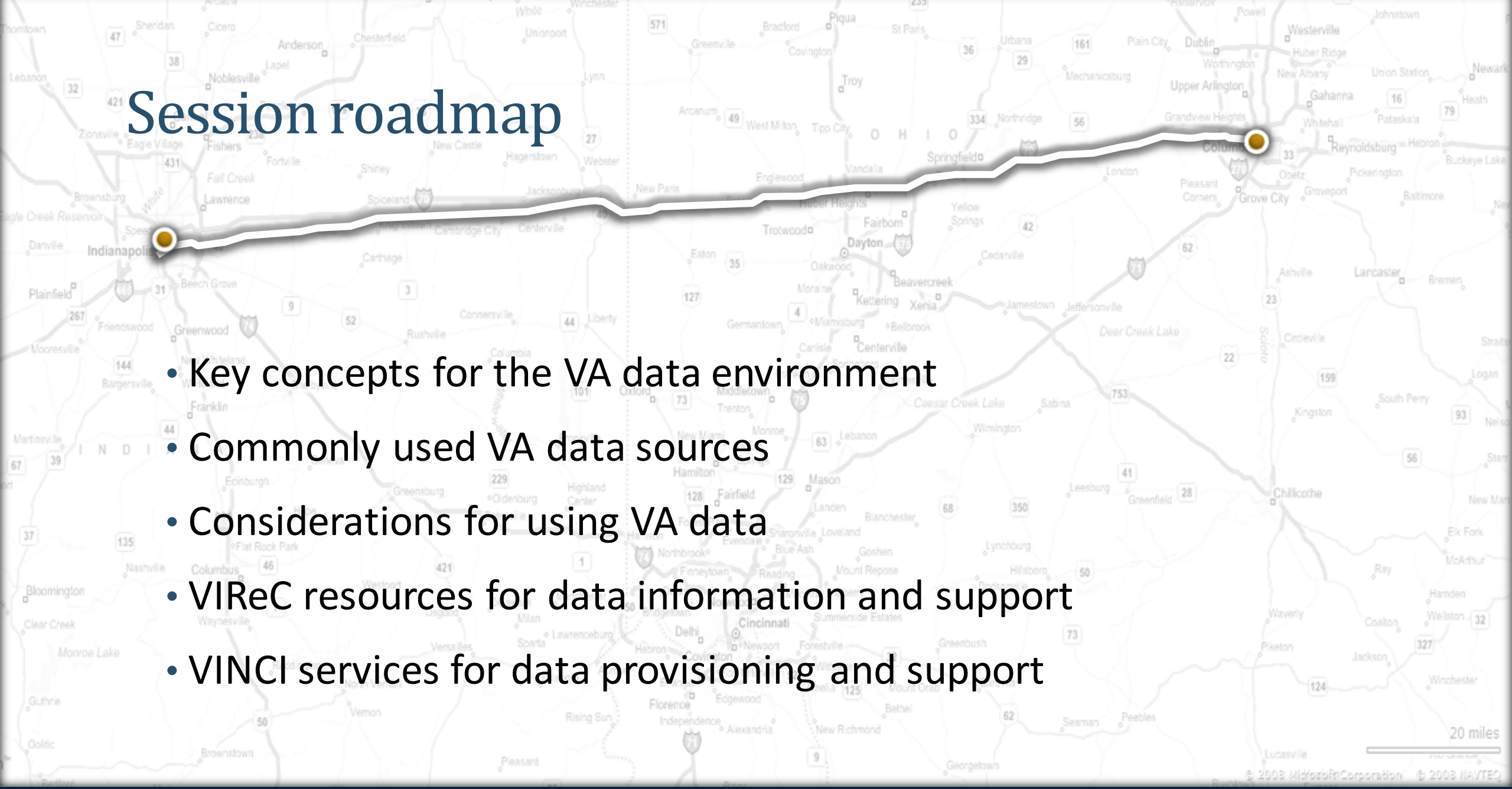
VIReC HelpDesk

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

VINCI Weekly Office Hour

- https://vincicentral.vinci.med.va.gov/SitePages/VINCI_University-VINCI_Training_&_Office_Hour.aspx

Session roadmap



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Getting the data: VINCI data provisioning and support

VA Informatics and Computing Infrastructure

- Secure data environment
- High-speed processing platform
- Free data management and analytic tools
- IT data provisioning
- Research data services & concierge
  vincicentral.vinci.med.va.gov/SitePages/Services-Concierge.aspx?web=1 (VA Intranet)
- VINCI Central Website
  vaww.vinci.med.va.gov/vincicentral/ (VA Intranet)

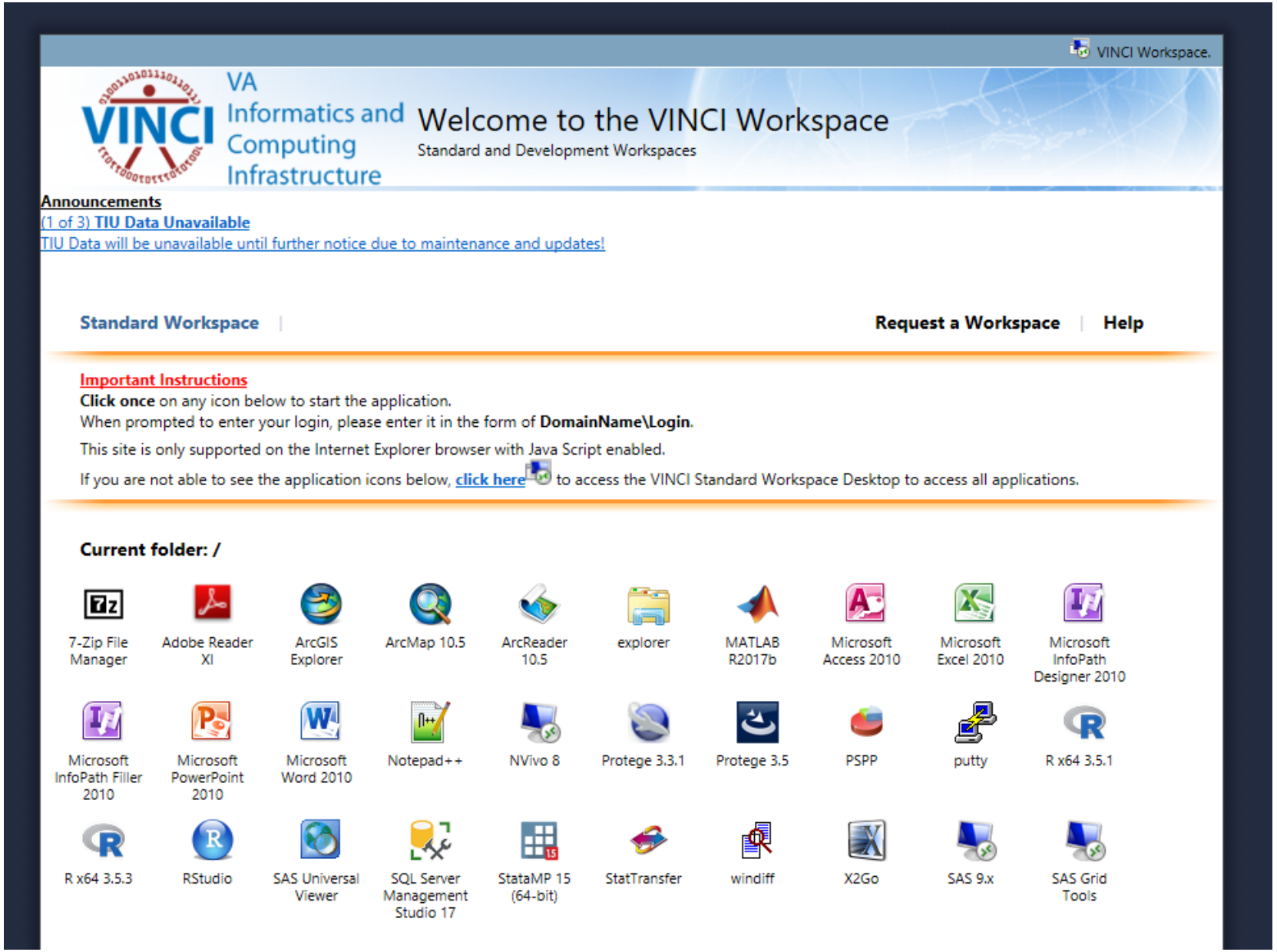
VA Informatics and Computing Infrastructure

Discussants:

Brian Robison
VINCI Services
VINCIServices@va.gov

Andrew Holbrook
VINCI Data Manager, QA and Training Lead
VINCIServices@va.gov

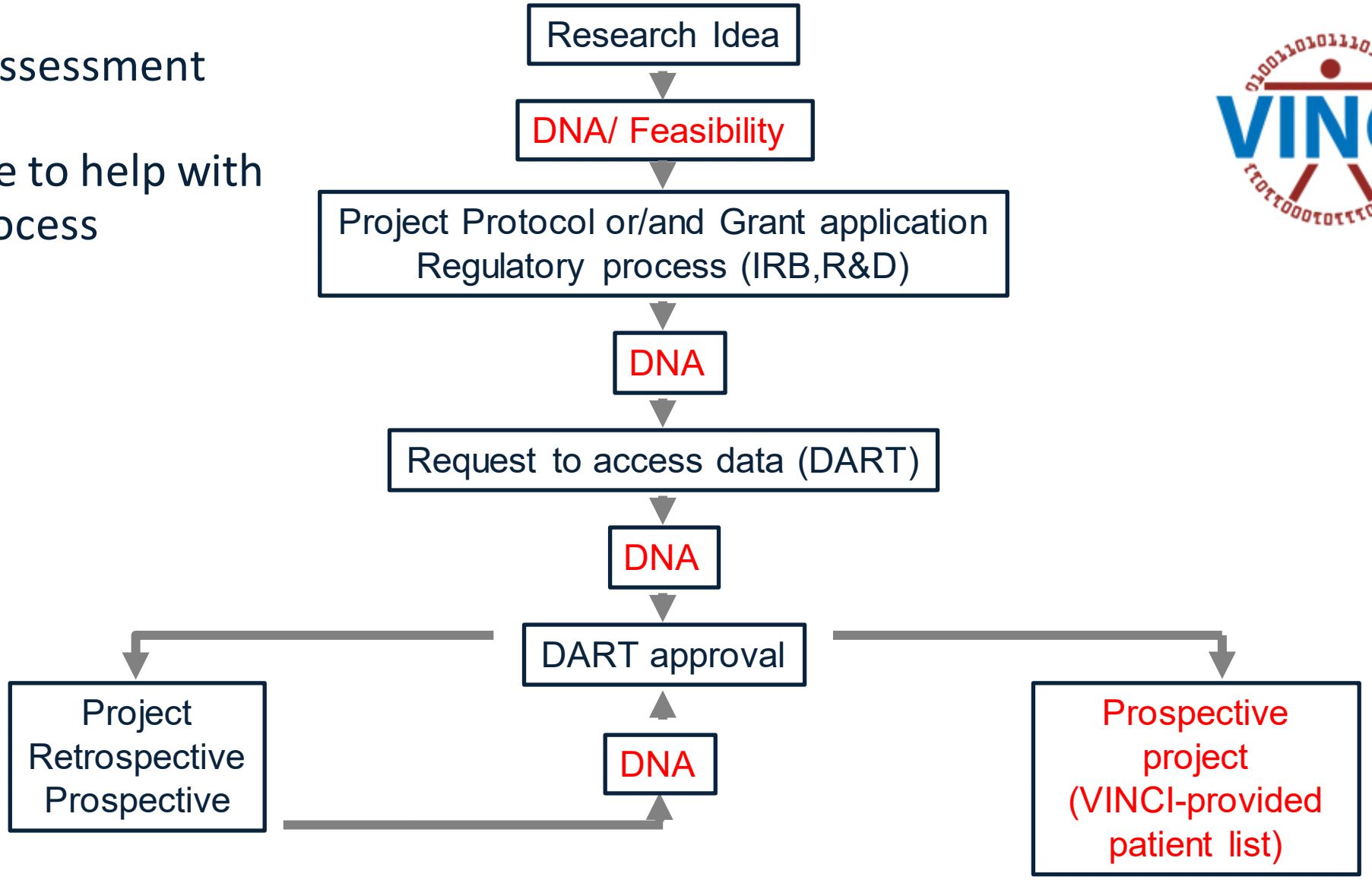
VINCI secure workspace



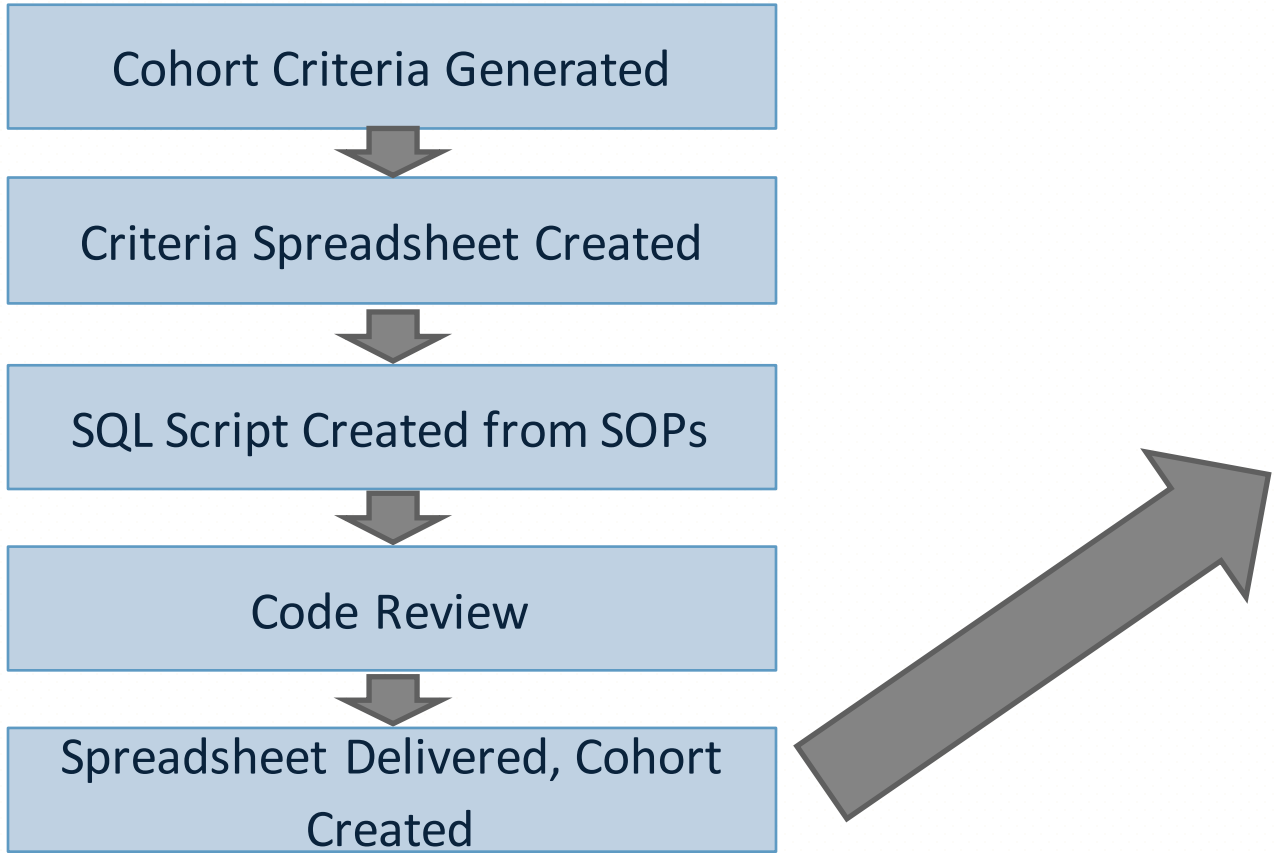
VINCI services within your project lifecycle

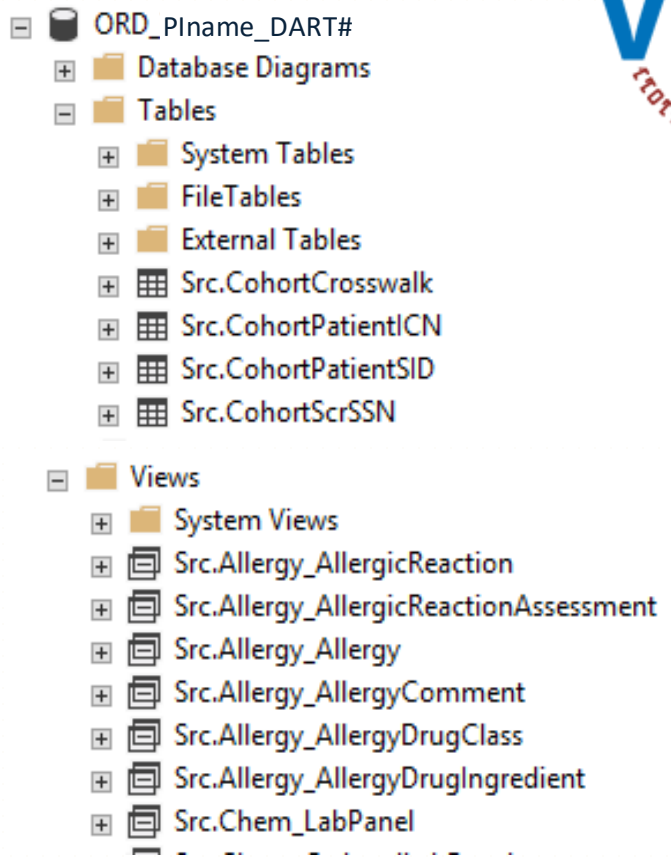
DNA = Data Needs Assessment

I.e., VINCI is available to help with every step of this process



What to expect from VINCI data provisioning





THANK YOU!
Questions?

CONTACT INFORMATION

Maria Souden, MSI, PhD

Director
VA Information Resource Center
Hines VA Hospital
maria.souden@va.gov

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

Learn more about requesting VA Data!

Database & Methods FY24

Navigating VA Data Access: An Overview of the Process for Requesting Permission to Use VA Data

Linda Kok, MA
VIReC Senior Analyst for Data Access & Policy

December 4, 2023

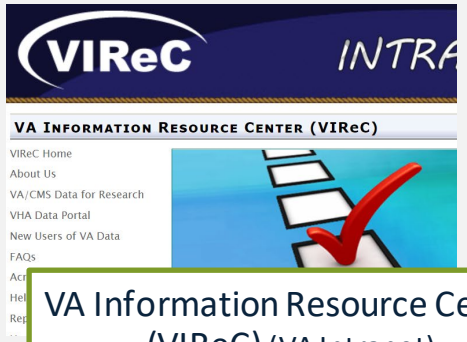
Link to register: www.hsrd.research.va.gov/cyberseminars/catalog-upcoming-session.cfm?UID=5222

Database & Methods

BONUS SLIDES

Resources for *VA Data Users*

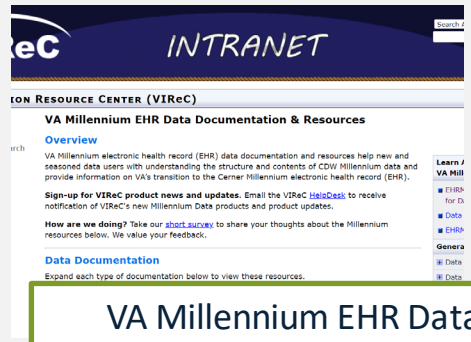
Select image to visit page



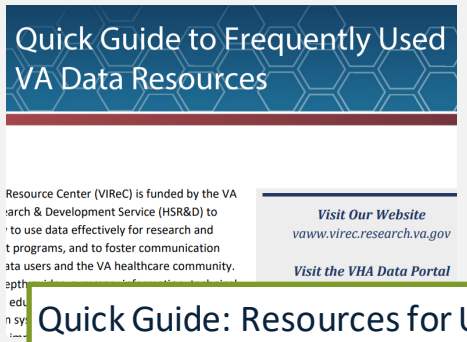
VA Information Resource Center (VIReC) (VA Intranet)

VHA Data Portal (VA Intranet)

VIReC Cyberseminars

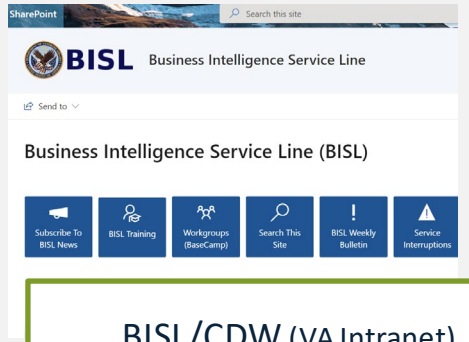


VA Millennium EHR Data Documentation (VA Intranet)



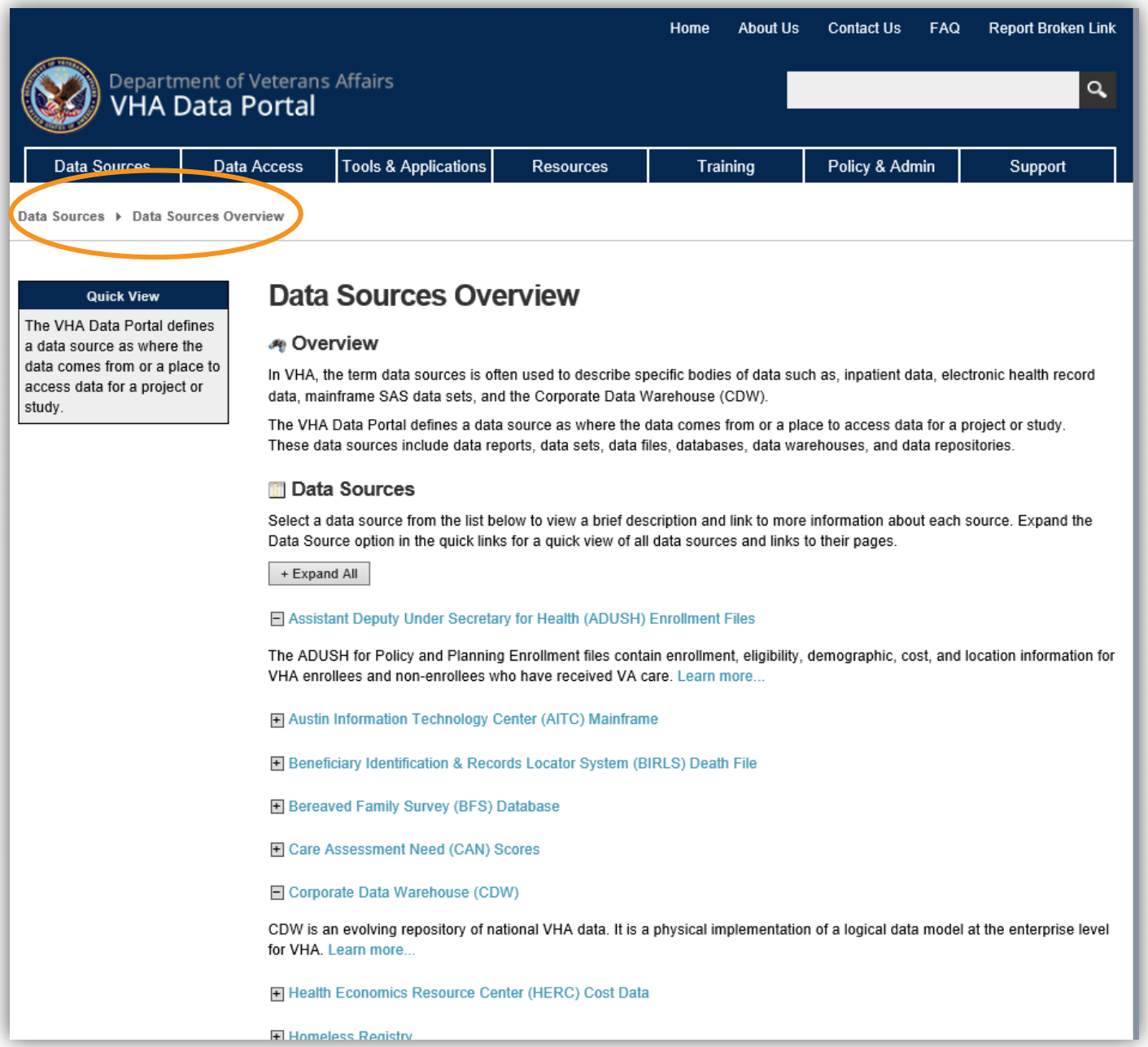
Quick Guide: Resources for Using VA Data (VA Intranet)

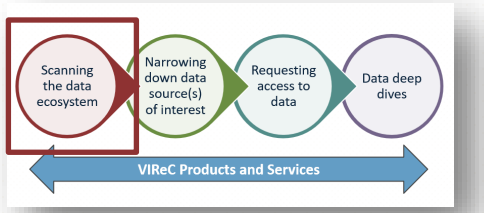
VA Informatics and Computing Infrastructure (VINCI) (VA Intranet)



BISL/CDW (VA Intranet)

Health Economics Resource Center (HERC) (VA Intranet)



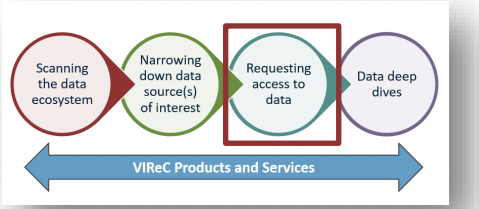


Commonly used VA Data Sources

VHA Data Portal

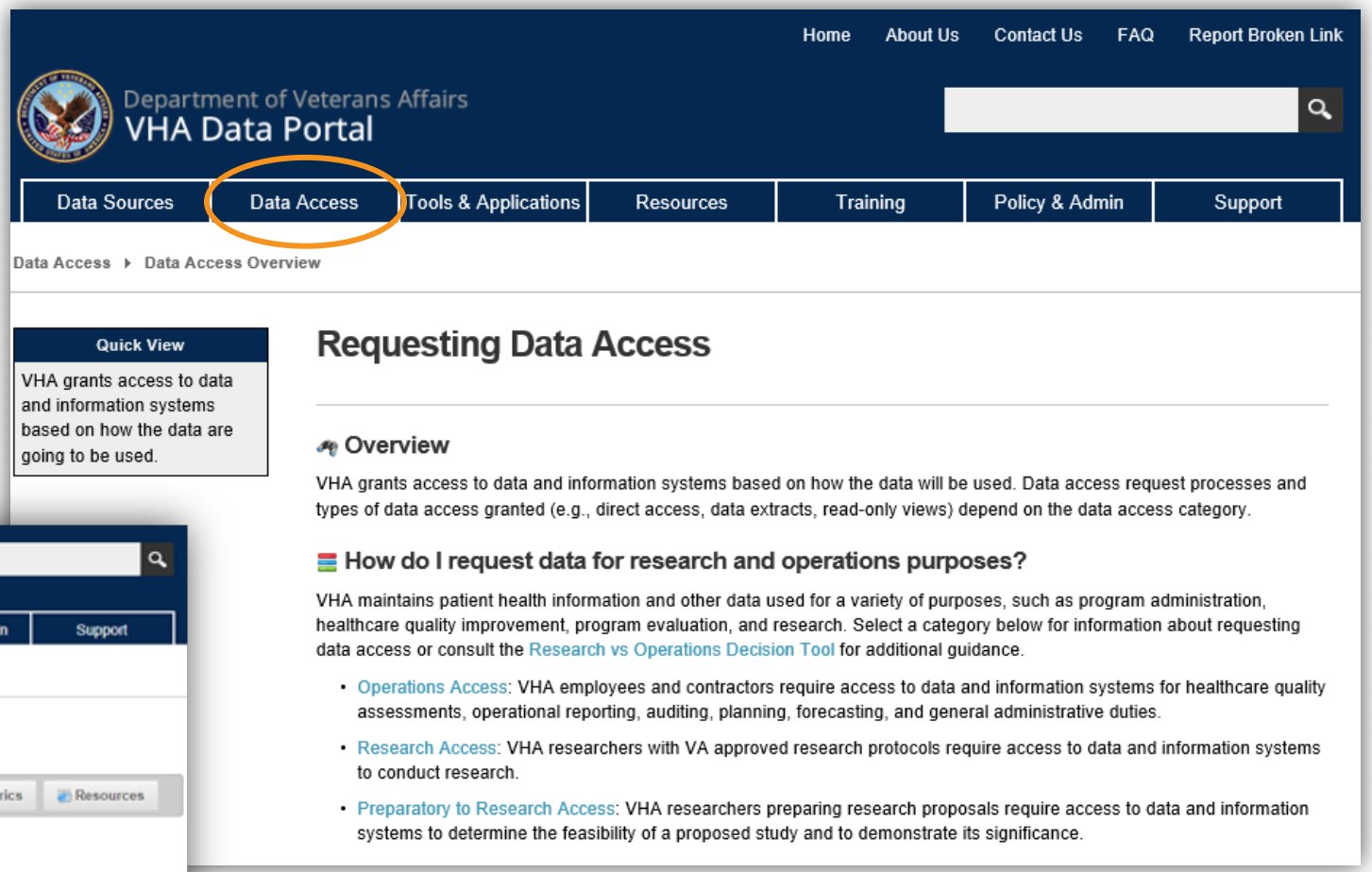
Index of Data Sources

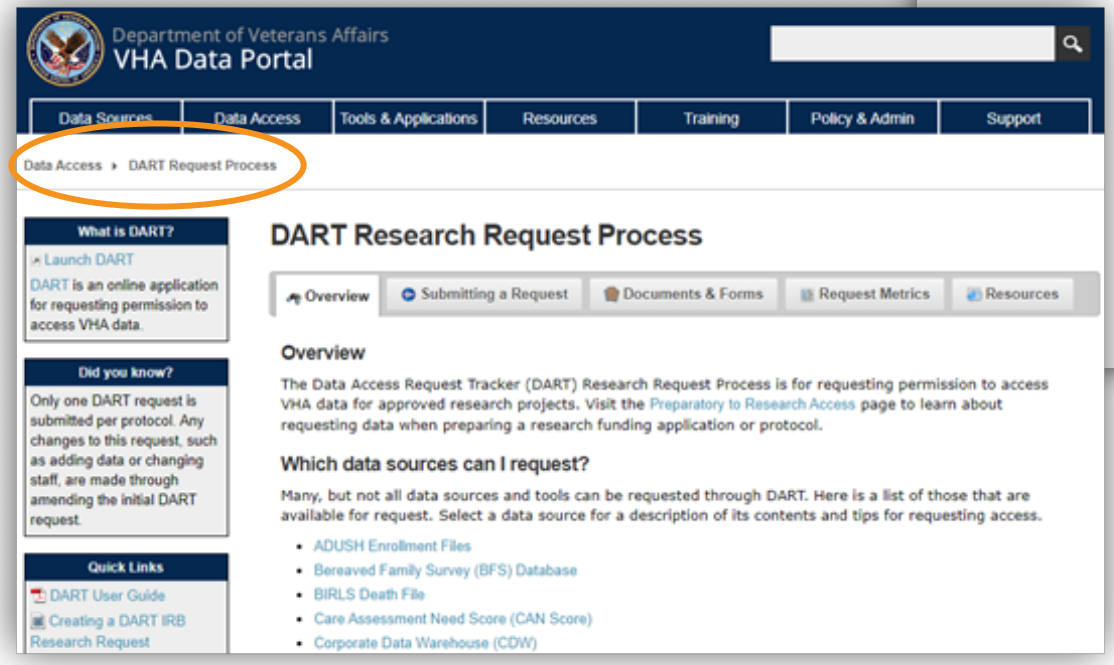
vaww.vhadataportal.med.va.gov/DataSources/DataSourcesOverview.aspx
(VA Intranet)



Detailed Access and Permissions Processes

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





VIReC guides to CDW data contents and structure

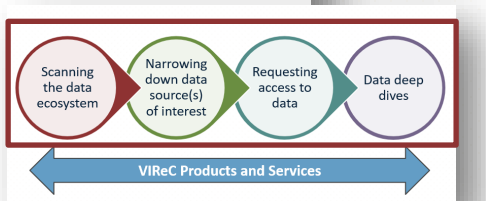
vaww.virec.research.va.gov/CDW/Documentation.htm
(VA Intranet)

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	



EHRM Resources for Researchers

"EHRM & Research" page on the Research Resource Guide SharePoint

dvagov.sharepoint.com/sites/VHAPugResearch/RRG/Pages/EHRM-Research.aspx

"EHRM and Implications for Data Users" page on the VIReC website

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

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

dvagov.sharepoint.com/sites/VACO.OEHRMoffice/DMM/Pages/DIRAKnowledgeShareHome.aspx

Syndicated Data Bits **– Bi-weekly Webinars**

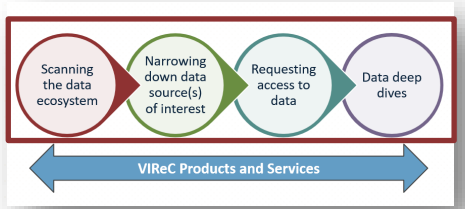
tinyurl.com/y3wgxzu5

Office of Electronic Health Record Modernization (OEHRM) Intranet site

vaww.ehrm.va.gov/

VIReC Resources for Data from the new VA EHR

[VA Millennium EHR Data Documentation & Resources]



VIReC INTRANET

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VA INFORMATION RESOURCE CENTER (VIReC)

VIReC Home

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

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?

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**
- **Millennium Factbooks**
- **The Researcher's Notebook: Millennium Data Discovery Series**
- **Millennium Data Reviews**
- **Data Layout & Descriptions**
- **Crosswalks & Data Mappings**

EHRM Resources

Learn About EHRM & VA Millennium EHR Data

- EHRM & Implications for Data Users
- Data Documentation
- EHRM Resources

General Resources

- Data Access
- Data Sources
- Data Tools
- Data Topics
- Products & Services
- Special Projects

Learn About EHRM & VA Millennium EHR Data

- Overview
- Introduction to the EHRM
- Understanding the Cerner Data Environment
- Initial VA Data Migration to Cerner Environment
- Data Syndication
- Accessing and Using Syndicated Data
- Data Documentation & Resources
- Key EHRM Terms
- FAQs

General Resources

- Data Access
- Data Sources
- Data Tools
- Data Topics
- Products & Services
- Special Projects

Shortcuts to VIReC's VA Millennium data documentation

Data Reviews

- VIReC Data Review: Laboratory Tests in Millennium
- VIReC Data Review: Vital Signs in Millennium Data

Hot off the press to your inbox!

Submit a VIReC HelpDesk request for new product updates varedcap.rcp.vaec.va.gov/redcap/surveys/?s=KXMEN77LXK (VA Intranet)

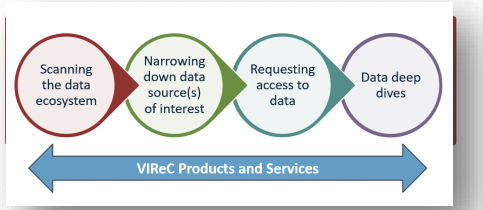
Factbooks

- CDW Millennium Factbook: Immunization Domain

Researcher's Notebooks

- Using PowerForms to Explore Cerner Millennium Data (Part I)
- Using PowerForms to Explore Cerner Millennium Data (Part II)
- Identifying Immunizations Administered Pre- and Post- Cerner EHR Transition

Other VIReC resources for learning about VA data



Database & Methods Cyberseminars

- www.virec.research.va.gov/Cyberseminars/Database-Methods.asp

VIReC Intranet "Data Topics" Pages

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

Methods & Technical Documentation

- Researcher's Notebook Series: vaww.virec.research.va.gov/Notebook/Overview.htm
- Data Reviews: https://vaww.virec.research.va.gov/Reports/Reports-Index.htm