Overview of VA Data

VHA Nursing Research Field Advisory Committee Call
May 21, 2015

Presented by:

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Instructions

1. Describe the different VA databases available for clinicians and researchers and what information is contained in these different databases.
2. Describe access processes including rules and requirements for their use.
VA Information Resource Center

VIReC

“To improve the quality of VA research that utilizes databases and information systems”
Welcome to our new internet website.

Looking for VIReC's resources for VA researchers? Visit our Intranet site. Learn more...

Who We Are

VIReC is an HSR&D funded resource center. Our mission is to improve the quality of VA research that utilizes databases and information systems.

What We Do

VIReC conducts research and collaborates with experts in the field to create a knowledge base of factual and evaluative information. VIReC shares this knowledge with...
What VIReC Does

• Creates a knowledge base of factual and evaluative information about data.
• Shares knowledge with VA researchers.
  ▫ Intranet website
  ▫ VHA Data Portal (collaboration with NDS, VINCI and Data Quality)
  ▫ Cyberseminars (hosted by CIDER/HSR&D)
  ▫ Tutorials and documentation
  ▫ HelpDesk (virec@va.gov)
Topics for Today

- Overview of VA data sources and databases
- Data processing platforms and EHR (read-only) access portals
- Policies governing data access
- Where to go for more help
Common Sources of VA and VHA Data

- Administrative / Operations Data
- Clinical Care / Patient Records Data
- Veteran Population Surveys
- Performance Measurement Data
- Financial Recordkeeping
- Data from Other Agencies
Overview: Levels of Data

• Local facility data

• VISN level data

• Corporate (national) level
Orienting to VA Data

• A few resources that will help you get an overview of VA data and how to use it...
VHA Corporate Databases Monograph

- Produced by Office of Informatics and Analytics (OIA), National Data Systems
  - Includes 139 databases and information systems
  - Available via VHA Data Portal
VA INFORMATION RESOURCE CENTER (VIReC)

About Us
New Users of VA Data
Data Transition to CDW
News & Updates
FAQs
Acronyms
HelpDesk

Data Issues Brief, August 2014
Upcoming Cyberseminar
New: Risk Adjustment Tutorial
Real SSN Data Request Process
VA REDCap Project

At a Glance

- Data Issues Brief: News and updates about VA data and information systems.
- HSRData-L Listserv: Virtual community of VA researchers sharing knowledge about VA data and database use.
- VA/CMS Data for Research Project: VIReC serves as the data custodian for Centers for Medicare and Medicaid Services (CMS) data for research use in the VA.
- Journal Supplements: Collaborations with peer reviewed journals on VA data and informatics research topics.

Resources for Researchers

- Data Sources & Data Topics: Select a specific data source or data topic described by VIReC.
- Research User Guides: Detailed descriptions of select VA data sources, including variable descriptions.
- Data Reports: Technical reports, data investigations, and data quality updates.
- Summary Information: Current and historical information about dataset variables, counts, frequencies, and more.
- Publications: A complete list of peer reviewed articles and journal supplements published by VIReC.
- VHA Data Portal: A one-stop-shop for information about VHA data including details on requesting data access.
Toolkit for New Users of VA Data

Overview
This toolkit is intended as a starting point for new users of VA data. It may also be useful to experienced VA researchers who may be unaware of the many resources available within the VA.

Where to Start
There are many data sources available to VA researchers and it can be challenging to understand the scope and contents for each data source. VIREC's "Introduction to VIREC and VA Data" page contains a brief summary of the different VHA information systems.

There are multiple ways to search VIREC’s website for resources and information. A starting point for new researchers is to browse VIREC’s available data sources and topics (i.e. Medical SAS datasets and vital status ascertainment). Data source pages provide basic summary information, a list of resources associated with the data source, and access information.

Understanding VistA
The Veterans Health Information Systems and Technology Architecture (VistA) is the source of data for many VHA datasets or databases of interest to researchers. VistA is an integrated system of software applications that directly supports patient care at Veterans Health Administration (VHA) healthcare facilities.
The VHA Data Portal...

- Links to multiple data resources
- Information about how to apply for access to data
- Pointers to data documentation pages
VA Databases and Data Sources

- VA Inpatient and Outpatient Data (MedSAS)
- VA CMS Data for Research
- VA DSS National Clinical Data
- VA Vital Status File
- VA Pharmacy Data
- VA Corporate Data Warehouse Data
MedSAS Inpatient, Overview

Patient Treatment File (PTF)
Austin Information Technology Center (AITC)
National Data Systems (NDS)
MedSAS Inpatient Data

- Data element examples
  - Patient demographics
  - ICD-9 procedure/surgery codes
  - ICD-9 diagnosis codes
- Data steward:
  - National Data Systems (NDS)
MedSAS Outpatient, Overview

**Visit (SF) Dataset:** The Visit Dataset reports services provided to a patient in a 24-hour period (see 2.4.1).

**Event (SE) Dataset:** The Event Dataset provides information about individual outpatient encounters (see 2.4.2).

**Inpatient Encounters (IE) Dataset:** The Inpatient Encounters Dataset provides information about professional services received by patients during an inpatient stay (see 2.4.3).
MedSAS Outpatient Data

- Data element examples:
  - Patient demographics
  - CPT4 procedure codes
  - ICD-9 diagnosis codes
- Data steward:
  - National Data Systems (NDS)
VA Managerial Cost Accounting (MCA) System National Data Extracts (NDEs)

List of NDEs
VA MCA (formerly DSS) NDE - Clinical Data

LAB (lab test & costs)

RAD (radiology)

LAR (lab test results)

PHA (pharmacy prescriptions)
VA MCA National Clinical Data

- Data Element Examples:
  - Date
  - Test results
  - Ordering provider
  - Costs

- Data Steward:
  - VHA Managerial Cost Accounting Office (MCAO)

VA Pharmacy Data

- Medications dispensed from VA pharmacies

Three Sources

- Pharmacy Benefits Management (PBM)
- VHA Managerial Cost Accounting (MCA) NDE
- CDW Bar Code Medication Administration (BCMA) / Outpatient Pharmacy Domains
VA Pharmacy Data

• Data element examples:
  ▫ Generic drug name, days supply, VA drug class, Cost etc.

• Data Steward
  ▫ PBM: Fran Cunningham, PharmD
  ▫ MCAO: Managerial Cost Accounting Service
  ▫ NDS: National Data Systems

VA Vital Status File

- Multiple sources of mortality information
  - VA Workload Data
  - BIRLS Death File
  - Medicare Vital Status File
  - SSA Death Master File

- Two files: Master and Mini
VA Vital Status File

• Data element examples:
  ▫ Date of death (variables from the different sources and value selected as “best”)
  ▫ Last healthcare utilization date

• Data Steward:
  ▫ National Data Systems

• More information: “Vital Status Overview” page on VIReC Intranet
Corporate Data Warehouse Data

- National repository of VHA administrative and clinical data
- Relational database organized into data domains
- Data available from 1999 to present
Corporate Data Warehouse Data

- CDW Domain Examples
  - Patient
  - Staff
  - Vital Signs
  - Allergies
  - Immunization
  - Health Factors
  - Lab Chemistry
  - Pharmacy Outpatient

- Data Steward:
  - National Data Systems

- For more information:
  - VIReC Intranet
  - CDW SharePoint
  - VINCI data descriptions
VA/Centers for Medicare and Medicaid Services (CMS) Data

Contain data on services received outside the VA and paid for by Medicare or Medicaid

- Medicare enrollment and claims data
- Medicaid enrollment and claims data
- Medicare Current Beneficiary Survey (MCBS)
- Long Term Care Patient Assessment Data
- United States Renal Data System (USRDS)
VA/Center for Medicare and Medicaid Services (CMS) Data

• Data element examples:
  ▫ Medicare and Medicaid enrollment
  ▫ ICD-9 and CPT4 procedure codes
  ▫ ICD-9 diagnosis codes
  ▫ Charges and payments

• Data steward:
  ▫ VIReC’s VA/CMS Data for Research Project

• For more information
  ▫ VIReC Intranet-VA/CMS Data for Research Home Page
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Processing Platforms

- **Austin Information Technology Center Mainframe (AITC)**
  - Centralized computer processing center under VA Office of Information and Technology (OI+T)
  - For more information: VIReC Intranet or VHA Data Portal

- **VINCI**
  - Secure computing environment for VA researchers
  - For more information: VINCI Central site
## EHR Data Portals - Compensation & Pension Data Interchange (CAPRI) & VistAWeb

<table>
<thead>
<tr>
<th>CAPRI</th>
<th>Both</th>
<th>VistAWeb</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requires special software and</td>
<td>Read-only access to EHR one patient at a time</td>
<td>VA Intranet web portal accessed through local VistA</td>
</tr>
<tr>
<td>access/verify codes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data viewed from one healthcare</td>
<td>Require real SSN</td>
<td>Data consolidated from all sites in single</td>
</tr>
<tr>
<td>site at a time</td>
<td></td>
<td>chronological view</td>
</tr>
<tr>
<td>Includes search function</td>
<td>Approval for one, many, or all VA sites</td>
<td></td>
</tr>
<tr>
<td>Direct access to VistAWeb</td>
<td>Submit requests to DART</td>
<td>VistA Imaging available</td>
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</tbody>
</table>
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Criteria for Use of VA Data in Research

- Employment status
- Proposed use
- Data Steward requirements
- Sensitivity of data
- Physical location of data
Approval for Research Data Access is Multi-Departmental

- VHA Local Management
- CUPS* Point of Contact or ISO
- Data Steward
- VIReC on behalf of VHA ORD (Real SSN)
- VHA Privacy Office
- VHA Security Liaison Office

*Note: CUPS = Customer User Provisioning System
Data access for research

- General requirements include submission of
  - Description of data needed
  - Access form(s) for specific data source(s)
  - Research approval documents
    - Protocol (or summary)
    - IRB approval letter
    - R&D approval letter
    - HIPAA and Informed Consent documents
    - Real SSN Access Request (where applicable)
- Specific access forms vary by resource
  - See VHA Data Portal “Access Overview” page
Data access for operations - including quality improvement

- Submission of description of data needed, justification and signature of supervisor and ISO
- Specific access forms vary by resource, examples:
  - VA Form 9957 for scrambled SSN data on Mainframe
  - VHA NDS Healthcare Operations Form
- See VHA Data Portal Operations Access page for details by data source.
Welcome to the VHA Data Portal

The one-stop-shop for data users’ needs.

The VHA Data Portal is a collaborative effort among the following program offices to provide a central gateway to information about VHA data:

- VHA National Data Systems (NDS)
- VA Information Resource Center (ViReC)
- VA Informatics and Computing Infrastructure (VINCI)
- VHA Data Quality Program

Our mission is to promote a knowledge-sharing culture that supports the needs of VHA data users. The portal integrates information from multiple sources into a common format and single location to promote a comprehensive knowledge base and to facilitate a positive end-user experience.
Data Access Requirements are Determined by the Data Steward

• On the AITC Mainframe
  ▫ Local CUPS Point of Contact
    • ADUSH Enrollment
    • MedSAS -scrambled SSN
    • MedSAS -real SSN for local facility
    • MCA & VSSC Web Reports -scrambled SSN
  ▫ National Data Systems (NDS)
    • MedSAS -real SSN for VISN & National
    • MCA & VSSC Web Reports – real SSN
    • Vital Status File

Note: CUPS = Customer User Provisioning System
Data Access Requirements (2)

- National Data Systems (NDS)
  - In the Corporate Data Warehouse (CDW)
    - CDW Domain Data
    - MCA (formerly DSS)
    - Text Integrated Utility (TIU) Notes
    - Vital Status Data
  - Other Data Venues
    - MedSAS Files (copies in SAS)
    - BIRLS
    - CAPRI/VistAWeb
    - Homeless Registry
    - OEF/OIF Roster File
Data Access Requirements (3)

• VA Information Resource Center (VIReC)
  ▫ VA/CMS Data

• Pharmacy Benefits Management (PBM) Services
  ▫ PBM Data

• Patient Care Services (PCS)
  ▫ PCS Data
# Data Source Specific Access Information

## Data Source Request Processes

Expand a data source in the list below to view an outline of its data request process.

### ADUSH Enrollment Files

<table>
<thead>
<tr>
<th>Level of Access</th>
<th>Identifier</th>
<th>Functional Task Code</th>
<th>Data Source Location</th>
<th>Data Format</th>
<th>Type of Access</th>
<th>Request Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>National</td>
<td>Scrambled SSN</td>
<td>110NN01</td>
<td>AITC Mainframe</td>
<td>SAS</td>
<td>Direct</td>
<td>Local CUPS POC Request Process</td>
</tr>
<tr>
<td>VISN</td>
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### AITC Mainframe

### BIRLS Death File

### CDW Data

### MCA (formerly DSS) NDEs

### MCA (formerly DSS) Web Reports

### Medical SAS Inpatient & Outpatient Data Sets

### Non-VA Medical Care (formerly Fee Basis) Files
Access to VA Data by Non-VA Researchers

Data containing Protected Health Information (PHI) restricted to VA researchers

Exceptions

Collaborate with a VA Researcher

Obtain permission from VA Under Secretary for Health

Obtain HIPAA authorization from Veterans to use their data
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New User to VA Data?

Introduction to VIReC and VA Data

Overview
The Department of Veterans Affairs (VA) is structured into three main service lines, each providing specific services based on Veterans’ eligibility.

- Veterans Health Administration (VHA)
- Veterans Benefits Administration (VBA)
- National Cemetery Administration (NCA)

Health services research in the VHA is supported by the Office of Research and Development (ORD), Health Services Research & Development Service (HSR&D). HSR&D’s website provides an excellent overview of health services research.

VIReC’s Role
The VA Information Research Center (VIReC) develops resources and provides guidance to VA researchers using VA data. Our mission is to improve the quality of VA research that utilizes databases and information systems.

VIReC products and services enable VA researchers to access and learn about VA data and information systems. VIReC:
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Obtaining Help — HSRData-L Listserv

- Join at VIReC’s Intranet Web site
- Exchange of current information, ideas, questions, and answers about data and information systems issues affecting VA research
- Discussion among ≈ 1,100 VA-only researchers, data stewards, managers and other users
- Searchable archive of past discussions
Obtaining Help — Online Data Resources

- Health Economics Resource Center (HERC)
  - [http://www.herc.research.va.gov](http://www.herc.research.va.gov)

- VA Informatics and Computing Infrastructure (VINCI)

- VIReC Cyberseminars:
Obtaining Help from VIReC

- VIReC Intranet site
  - Research User Guides (RUGs)
    - Variable-level information
  - Technical Reports
  - Web-site “Toolkit for New Users of VA Data”
  - Monthly Data Issue Briefs
- HelpDesk
  - virec@va.gov
  - (708) 202-2413
Contact Information

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Hines VA Hospital
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708-202-2413
Planned FY15 Database & Methods Cyberseminars

- Requesting Access to VA Data for Research or Operations
- Assessing Inpatient and Outpatient VA Health Care Use
- Measuring Veterans Health Services Use in VA and Medicare
- Examining Veterans’ Pharmacy Data Use
- Assessing Race and Ethnicity
- Measuring Laboratory Use and Results Using the VA DSS National Lab Data
- Applying Comorbidity Measures Using VA and Medicare Data
- Improving Mortality Ascertainment
- Extracting Data from the EHR Using CAPRI and VistAWeb
- Using Data in the CDW
Questions?
Next session:
November 3, 2014

Requesting Access to VA Data for Research & Operations

Linda Kok, MS