Database & Methods Cyberseminar Series

Session #4. Ascertain Veterans’ Vital Status: VA Data Sources for Mortality Ascertainment and Cause of Death
The objectives of this cyberseminar are to:

• Identify data sources for Veteran vital status ascertainment
• Understand the contents and structure of the VA Vital Status Files and their appropriate use for mortality ascertainment
• Describe the respective strengths and limitations of available VA data sources for mortality ascertainment
• Identify other relevant sources of death data including the National Death Index and state death certificates
• Demonstrate how these data resources can be used in research studies
Session roadmap

- Data sources for Veteran vital status ascertainment
- VHA Vital Status Files
- Data sources for Veteran & Non-Veteran mortality
- Date of Death Workgroup
- Other resources for mortality data
- Examples of using mortality data for research
Poll Question #1

I am interested in VA data primarily due to my role as:

a. Research investigator
b. Data manager
c. Project coordinator
d. Program specialist or analyst
e. Other (specify)
Poll Question #2

How would you rate your knowledge of methods to ascertain death dates for Veterans in the VA?

- a. 1 (No knowledge)
- b. 2
- c. 3
- d. 4
- e. 5 (Expert)
Session roadmap

- Data sources for Veteran vital status ascertainment
  - Sources in VHA Vital Status Files
  - Sources not in VHA Vital Status Files
- VHA Vital Status Files
- Data sources for Veteran & Non-Veteran mortality
- Date of Death Workgroup
- Other resources for mortality data
- Examples of using mortality data for research
### BIRLS Death File

<table>
<thead>
<tr>
<th>Received from</th>
<th>Veterans Benefits Administration (VBA) Beneficiary Identification and Records Locator System (BIRLS) database extract</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Sources</td>
<td>Family, VHA hospitals, VA National Cemetery Administration, Social Security Administration (SSA)</td>
</tr>
<tr>
<td>Coverage</td>
<td>Veterans known to VA</td>
</tr>
<tr>
<td>Update Schedule</td>
<td>Monthly (complete overlay)</td>
</tr>
<tr>
<td>Location</td>
<td>Austin Information Technology Center (AITC) and on VINCI</td>
</tr>
</tbody>
</table>

Available in the VSF
## VA/CMS Medicare Vital Status File

<table>
<thead>
<tr>
<th>Received from</th>
<th>Centers for Medicare &amp; Medicaid Services (CMS) annually</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Sources</strong></td>
<td>SSA, Medicare claims, Other (e.g., family)</td>
</tr>
<tr>
<td><strong>Coverage</strong></td>
<td>Veterans enrolled in Medicare (&gt;=65 years old or disabled)</td>
</tr>
<tr>
<td><strong>Update Schedule</strong></td>
<td>Annual (deaths through April 2015)</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>Available from VIReC</td>
</tr>
</tbody>
</table>

Available in the VSF

01/2018
## SSA Death Master File

<table>
<thead>
<tr>
<th><strong>Received from</strong></th>
<th>Social Security Administration (SSA)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Sources</strong></td>
<td>Family, funeral directors, post offices, financial institutions, other federal agencies, state vital records agencies</td>
</tr>
<tr>
<td><strong>Coverage</strong></td>
<td>Individuals with SSN (first issued 1936)</td>
</tr>
<tr>
<td></td>
<td>Includes deaths occurring outside United States</td>
</tr>
<tr>
<td></td>
<td>More complete for over 65 population and for beneficiaries</td>
</tr>
<tr>
<td><strong>Update Schedule</strong></td>
<td>Weekly (and VA receives annual overlay)</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td>AITC</td>
</tr>
</tbody>
</table>

Available in the VSF
# Medical SAS Inpatient File

<table>
<thead>
<tr>
<th>Received from</th>
<th>Austin Information Technology Center (AITC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Sources</td>
<td>VistA PTF File (#45), Date of Disposition (DISDAY), and Type of Disposition (DISTYPE) fields</td>
</tr>
<tr>
<td>Coverage</td>
<td>Inpatient deaths in VA facilities</td>
</tr>
<tr>
<td></td>
<td>Inpatient deaths in non-VA hospitals</td>
</tr>
<tr>
<td>Update Schedule</td>
<td>Weekly</td>
</tr>
<tr>
<td>Location</td>
<td>AITC (MedSAS) and Corporate Data Warehouse (CDW)</td>
</tr>
</tbody>
</table>
# Corporate Data Warehouse (CDW)

<table>
<thead>
<tr>
<th>Received from</th>
<th>Corporate Data Warehouse (CDW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Sources</td>
<td>VISTA</td>
</tr>
<tr>
<td>Coverage</td>
<td>Deaths verified by official source including VHA facilities, death certificates, and National Cemetery Administration (NCA)</td>
</tr>
<tr>
<td>Update Schedule</td>
<td>Daily</td>
</tr>
<tr>
<td>Location</td>
<td>[CDW Patient 3.0 ]</td>
</tr>
</tbody>
</table>

*Not Available in the VSF*
### SPatient.SP Patient Table

*Columns were updated in 2017 Patient release*

<table>
<thead>
<tr>
<th>Columns</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DeathDateTime</strong></td>
</tr>
<tr>
<td><em>DeathVistaErrorDate</em> and <em>DeathDateTimeTransformSID</em></td>
</tr>
<tr>
<td>Death date may contain defaulted month and day</td>
</tr>
<tr>
<td><strong>DeceasedFlag (created by CDW)</strong></td>
</tr>
<tr>
<td>Flag set to ‘Y’ if there is information in the <em>DeathDateTime</em> column that can be converted to a date and ‘N’ otherwise. There are a small number of records with invalid values in the death date time that have an ‘N’ in this column, previously the Deceased column contained a ‘Y’ for these records.</td>
</tr>
</tbody>
</table>
**New Fields**

<table>
<thead>
<tr>
<th>Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>DeathDocumentationType</td>
</tr>
<tr>
<td>DeathEnteredByStaffSID</td>
</tr>
<tr>
<td>DeathLastUpdatedByStaffSID</td>
</tr>
<tr>
<td>DeathModifiedDateTime</td>
</tr>
<tr>
<td>DeathModifiedDateTimeTransformSID</td>
</tr>
<tr>
<td>DeathModifiedVistaErrorDate</td>
</tr>
<tr>
<td>DeathNotificationSource</td>
</tr>
</tbody>
</table>
CDW Limitations

Current policy: Information to be entered from “official sources” only

- **VHA Directive 1906**
  - *VHA facility* (if patient died in the VHA facility or while under VA auspices)
  - *Death certificate*
  - *National Cemetery Administration*

- **38 CFR 3.211 – Death**

- **EVVE Certification**

CDW Date of Death Analysis and Vital Status File Comparison
Session roadmap

• Data sources for Veteran vital status ascertainment

• VHA Vital Status Files
  • Structure and contents
  • Challenges in using the VHA VSF

• Data sources for Veteran & Non-Veteran mortality

• Date of Death Workgroup

• Other resources for mortality data

• Examples of using mortality data for research
Poll Question #3

Have you ever used the VHA VSF?

a. Yes, both the Master File and Mini File
b. Yes, only the Mini File
c. Yes, only the Master File
d. No
VHA VSF Background

• Single sources are incomplete
• Using the National Death Index as the gold standard:

<table>
<thead>
<tr>
<th>DOD Source</th>
<th>Sensitivity</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIRLS</td>
<td>64-80%</td>
</tr>
<tr>
<td>VA/CMS Medicare</td>
<td>83%</td>
</tr>
<tr>
<td>SSA</td>
<td>89-95%</td>
</tr>
<tr>
<td>PTF</td>
<td>5-12%</td>
</tr>
</tbody>
</table>

• Combined sources provide **97.5%-98.3% sensitivity**
• VIReC VA-NDI Mortality Data Merge Project
# VHA VSF Creation

| **Owner** | Built by National Data Systems (NDS)  
First available in October 2006 |
|-----------|-----------------------------------|
| **Data Access** | See VHA Data Portal website:  
http://vaww.vhadataportal.med.va.gov/Home.aspx  
(Intranet only) |
| **Coverage** | Veterans known to VA  
VHA activity FY 1992 or later  
VBA compensation and pension |
| **Update Schedule** | Updated quarterly |
| **Files** | Two files + conversion file: Master, Mini, scrambled/real SSN |
Construction of VHA VSF

VBA Data

- VHA Data
- VHA Data
- VHA Data

MVI Data

- VHA Data
- VHA Data
- VHA Data

BIRLS

- CMS
- CMS
- CMS

SSA

- Deaths
- Deaths
- Deaths

Merge on
SSN, DOB & SEX

Merge on
SSN

Merge on
SSN

- Medical SAS Inpatient Datasets and Census (PTF)
- Inpatient and Outpatient Encounter (ENC)
- Non-VA care or Fee Files (FEE)
- DSS Pharmacy Files (DSS)
- Enrollment (ENR)
- Veterans Service Network Corporate Mini Master File (VETSNET)

One record per SSN/DOB/SEX

- Last Activity Dates by Source
- Inpatient Deaths

Add MVI DOB and Sex

- Add Death Data
- DOB, SEX, &DOD

Select veterans

Select ‘best’ DOB, SEX, DOD for each SSN

Obtain Date of Last Activity for an SSN

One Record Per SSN, DOB, Sex

One Record Per SSN
More detail on VHA VSF Construction

Ascertaining Veterans’ Vital Status: VA Data Sources for Mortality Ascertainment & Cause of Death
Noreen Arnold, MS & Claire Hoffmire, PhD
5/4/2015

Ascertaining Veterans' Vital Status and Dates of Death: The VHA Vital Status File and Other Data Sources for Mortality Ascertainment in VA
Elizabeth Tarlov, PhD
7/14/2014
## Vital Status Files

*December 8, 2017*

<table>
<thead>
<tr>
<th>Master</th>
<th>Mini</th>
</tr>
</thead>
<tbody>
<tr>
<td>Veterans &amp; Non-Veterans</td>
<td>Veterans only</td>
</tr>
<tr>
<td>1 record per SSN/DOB/Sex combination</td>
<td>1 record per SSN</td>
</tr>
<tr>
<td>125 variables</td>
<td>16 variables</td>
</tr>
<tr>
<td>28,935,000 records</td>
<td>17,385,952 records</td>
</tr>
<tr>
<td>19,756,939 SSNs</td>
<td>17,385,952 SSNs</td>
</tr>
<tr>
<td>41% of SSNs have &gt;1 record (8,162,408 SSNs)</td>
<td>-</td>
</tr>
</tbody>
</table>
### Vital Status Mini Contents

**12/8/2017**

**n = 17,385,952**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACT_LAST_DT</td>
<td>LAST HEALTHCARE OR BENEFIT ACTIVITY DATE</td>
</tr>
<tr>
<td>ACT_LAST_DT_IND</td>
<td>LAST HEALTHCARE OR BENEFIT ACTIVITY DATE INDICATOR</td>
</tr>
<tr>
<td>ACT_LAST_DT_SRC</td>
<td>LAST HEALTHCARE OR BENEFIT ACTIVITY DATE SOURCE</td>
</tr>
<tr>
<td>DOB</td>
<td>BEST DATE OF BIRTH</td>
</tr>
<tr>
<td>DOB_IND</td>
<td>BEST DATE OF BIRTH INDICATOR</td>
</tr>
<tr>
<td>DOB_SRC</td>
<td>DATA SOURCE BEST DATE OF BIRTH</td>
</tr>
<tr>
<td>DOD</td>
<td>BEST DATE OF DEATH</td>
</tr>
<tr>
<td>DOD_IND</td>
<td>BEST DATE OF DEATH INDICATOR</td>
</tr>
<tr>
<td>DOD_SRC</td>
<td>DATA SOURCE BEST DATE OF DEATH</td>
</tr>
<tr>
<td>LIVING_IND</td>
<td>PRESUMED LIVING INDICATOR</td>
</tr>
<tr>
<td>SCRSSN</td>
<td>SCRAMBLED SOCIAL SECURITY NUMBER</td>
</tr>
<tr>
<td>SEX</td>
<td>BEST GENDER</td>
</tr>
<tr>
<td>USE_AFTER_DTH_FLG</td>
<td>UTL_LAST_DT IS GT DOD +31 DAYS (0=NO 1=YES)</td>
</tr>
<tr>
<td>UTL_LAST_DT</td>
<td>LAST HEALTHCARE UTILIZATION DATE</td>
</tr>
<tr>
<td>UTL_LAST_DT_IND</td>
<td>LAST HEALTHCARE UTILIZATION DATE INDICATOR</td>
</tr>
<tr>
<td>UTL_LAST_DT_SRC</td>
<td>LAST HEALTHCARE UTILIZATION DATE SOURCE</td>
</tr>
</tbody>
</table>
## Best DOB and DOD Sources on VSF Mini

### VHA VSF Mini on December 8, 2017

<table>
<thead>
<tr>
<th>Best Birth Date Data Source</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIRLS DEATH FILE</td>
<td>1,322</td>
</tr>
<tr>
<td>MEDICARE DATA</td>
<td>543,123</td>
</tr>
<tr>
<td>DECISION SUPPORT SYSTEM</td>
<td>15,305</td>
</tr>
<tr>
<td>OUTPT/INPAT ENCOUNTER</td>
<td>696,170</td>
</tr>
<tr>
<td>ENROLLMENT SYSTEM</td>
<td>263,260</td>
</tr>
<tr>
<td>FEE BASIS</td>
<td>8,409</td>
</tr>
<tr>
<td>MVI</td>
<td>15,426,359</td>
</tr>
<tr>
<td>PATIENT TREATMENT FILE</td>
<td>157,887</td>
</tr>
<tr>
<td>SOCIAL SECURITY DEATH FILE</td>
<td>24,237</td>
</tr>
<tr>
<td>VBA</td>
<td>249,880</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,385,952</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Best Death Date Data Source</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>No Death Date</td>
<td>10,645,328</td>
</tr>
<tr>
<td>BIRLS DEATH FILE</td>
<td>147,688</td>
</tr>
<tr>
<td>MEDICARE DATA</td>
<td>4,281,024</td>
</tr>
<tr>
<td>FEE BASIS</td>
<td>100,195</td>
</tr>
<tr>
<td>PATIENT TREATMENT FILE</td>
<td>799,630</td>
</tr>
<tr>
<td>SOCIAL SECURITY DEATH FILE</td>
<td>1,412,087</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,385,952</strong></td>
</tr>
</tbody>
</table>

01/2018
Potential Challenges when using VHA VSF

- Demographics do not match
- Multiple dates of death
- Activity after date of death
- Erroneously recorded dates of death in sources

Note: VHA VSF should not be used for business operations regarding individual veterans
# Possible Strategies for Matching Cohorts

<table>
<thead>
<tr>
<th>Use the Mini File for the initial search for deaths</th>
<th>Match on SSN</th>
</tr>
</thead>
</table>
| Use the Master File to investigate unusual cases   | For example:  
|                                                   | - Cohort DOB/Sex do not match Mini DOB/Sex  
|                                                   | - May be records on the Master File with matching demographics |
| Activity after death                               | - Check DOB/Sex for DOD sources on Master File  
|                                                   | - Are all DOD on Master File the same? |
| Consider additional supplementary data sources     | Use the NDI or State Vital Statistics Offices for cases lost to follow up, i.e.,  
|                                                   | - No death date  
|                                                   | - No VHA or VBA activity after end of follow up |
| Consider using CDW                                 | Use for individuals without activity after 1991 or very recent deaths |

01/2018
Session roadmap

• Data sources for Veteran vital status ascertainment
• VHA Vital Status Files
• Data sources for Veteran & Non-Veteran mortality
• Date of Death Workgroup
• Other resources for mortality data
• Examples of using mortality data for research
National Death Index

- Gold standard for death ascertainment
- Available from the National Center for Health Statistics
  - Source of data: State Vital Statistics Offices
  - Records from 1979 through 2015 (~12 month lag)
- Contains cause of death from death certificates
- Information about fees & access:
  - [http://www.cdc.gov/nchs/ndi.htm](http://www.cdc.gov/nchs/ndi.htm)
- Suicide Data Repository from the VHA Office of Public Health
National Death Index for Veterans

CDC’s National Death Index Plus contains ~2.7 million records (1979-2014)

- Date and cause of death (ICD-10 codes)
- Veteran decedents only, all causes of death
- Current mortality archive:
  - Service members who separated from active duty service (including deactivation NG & Reserve) between 1979-2011
  - All users of VHA services, FY2000-2014
- Please see http://vaww.virec.research.va.gov/Cause-of-Death/Overview.htm
## National Death Index for Veterans

<table>
<thead>
<tr>
<th>Availability</th>
<th>Suicide Data Repository (SDR), which is administered jointly between VA Office of Mental Health and DoD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Access</td>
<td>All applications for access to NDI data available from SDR</td>
</tr>
<tr>
<td></td>
<td>Reviewed by a joint VA-DoD Board of Governance (meets quarterly – January, April, July, October)</td>
</tr>
<tr>
<td>Contact Information</td>
<td>Contact <a href="mailto:VHACANSRDataRequests@va.gov">VHACANSRDataRequests@va.gov</a> for more information about accessing NDI data from the SDR.</td>
</tr>
<tr>
<td></td>
<td>Data through 2014 are now available.</td>
</tr>
</tbody>
</table>
SSA Epidemiological Search

- Provides date of death
- Validates SSN
- Provides ‘presumed living’ status
  - Based on SSA administrative data including:
    - Payroll deductions, railroad retirement or disability payments, death claims filed by beneficiaries
    - Advantage: Reduces loss to follow up
- Deaths occurring outside the US
- Fees & Access
  - [http://www.ssa.gov/policy/about/epidemiology.html](http://www.ssa.gov/policy/about/epidemiology.html)
State Death Certificates

- States’ policies regarding the release of death certificates vary considerably, as deceased individuals are not human subjects.

- An informal review of state vital statistics offices websites revealed that 24 mentioned a process for obtaining death records.
State Death Certificates
Advantages and Disadvantages

- Veteran status is reported on the death certificate.
- The whole death record, including contributing causes and not just underlying cause, is available.
- With identifiers can be linked to VA data.
- Limited in scope—not all states allow release of records for research.
- Death record is the official record but concerns about accuracy of information remain.
Defense Manpower Data Center (DMDC)

- Contains files that report casualties in past and ongoing conflicts.
- These publicly available files contain the actual names, rank, pay grade, unit, and place of death.
- This reporting is part of the Defense Casualty Analysis System (DCAS).
- For more information: https://www.dmdc.osd.mil/dcas/pages/casualties.xhtml.
- These files have been used for research purposes, e.g. The association of state per capita income and military service deaths in the Vietnam and Iraq wars. *Population Health Metrics* 2009; 9:2.
Session roadmap

- Data sources for Veteran vital status ascertainment
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- Other resources for mortality data
- Examples of using mortality data for research
Date of Death Project

• VHA Date of Death Workgroup evolved into the Date of Death Project that now includes leadership and participation from VHA, VBA, and NCA

• Purpose: improve VA ascertainment and documentation of death of individuals known to the VA

• Develop processes and procedures to improve accuracy and completeness of date of death

• Master Veteran Index (MVI) is the authoritative service for date of death

• Electronic Verification of Vital Events is now in use at the VA
Date of Death Project (cont.)

EVVE – Electronic Verification of Vital Events

• NAPHSIS
  • National Association for Public Health Statistics and Information Systems
• Online query system of state vital statistics data bases
  • Death Certificates
  • Birth Certificates
Date of Death Project (cont.)

- Analyses (DQ, IdM, and HEC) March of 2015
- Individuals in the CDW without a date of death in the CDW
  - 2.7 million had a date of death in another source (SSA Death Master File, BIRLS, NCA, Department of Defense, etc.)
- Activity after death
  - Most individuals had only one event after death
  - Research into individual cases found few individuals where the activity after death indicated individual was living (Individuals with many events need careful research)
Date of Death Project (cont.)

Status

• MVI became the authoritative source for date of death in August 2017

• In the fall of 2017, MVI was seeded with dates of death originating from VistA

• In November 2017, MVI began accepting dates of death from the weekly SSA DMF file after internal verification of the deaths
  • The weekly files contain recent deaths

• In the spring of 2018, MVI will begin updating records with the older dates of death on the SSA DMF file

• Dates of death in the MVI are being pushed out to the VistA records, thus more death dates will be found in the CDW
Session roadmap

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CDC National Center for Health Statistics

- The Centers for Disease Control (CDC) also has a number of death search tools as well as limited individual death files.

- Examples include CDC Wonder underlying cause of death search tool
  - [http://wonder.cdc.gov](http://wonder.cdc.gov)

- Individual level multiple cause of death files are also available
  - [http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm#Mortality_Multiple](http://www.cdc.gov/nchs/data_access/VitalStatsOnline.htm#Mortality_Multiple)
CDC Injury Prevention & Control
Data & Statistics

- Web-based Injury Statistics Query and Reporting System (WISQARS)

- These databases have limited information due to privacy concerns, but have research applications.

- Essentially these files are de-identified.
Benefits of Additional Mortality Information

• Findings derived from information on VHA Veterans alone are unlikely to be broadly generalizable to all Veterans
  • 70% of the 22 million living U.S. Veterans in 2012 not enrolled/using VHA service

• Relative to the Vital Status File, additional data sources allow VA researchers to:
  • Study the whole/general Veteran population
  • Compare Veterans who use VHA services prior to death to those who do not
  • Compare Veteran and non-Veteran by cause of death
Session roadmap

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Research Example #1

Mental Health (Veteran National Death Index)

• Trivedi, et al. Life expectancy and common causes of death among Veterans with mental illnesses (submitted for publication).

• Used Veteran NDI to examine life expectancy and cause of death in Veterans with mental health conditions.

• Veterans with mental health conditions died prematurely of preventable conditions such as ischemic heart disease.
Research Example #2

Service Connected Disability (Veteran National Death Index)

• Maynard et al. Cause of death in Veterans with service connected conditions, submitted for publication.

• Veterans were categorized by 3 age groups, corresponding to period of service.

• In the group born after 1957, cardiovascular disease and cancer accounted for about 1/3 of deaths, whereas deaths due to accidents, suicide, or assault accounted for nearly 35% of deaths.
Research Example #3

State Death Certificates

• Washington State offers death records for purchase.
• Files of decedent names and the death records themselves are available from 1968 to current with each file costing $20 per year.
Studies using Washington State Death Records


Additional Resources
<table>
<thead>
<tr>
<th>Data Source</th>
<th>Coverage</th>
<th>Update schedule</th>
<th>Included in VHA VSF?</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIRLS Death File</td>
<td>Veterans known to VA</td>
<td>Monthly (complete overlay)</td>
<td>YES</td>
</tr>
<tr>
<td>VA/CMS Medicare Vital Status File</td>
<td>Veterans enrolled in Medicare (&gt;=65 years old or disabled)</td>
<td>Annual</td>
<td>YES</td>
</tr>
<tr>
<td>SSA Death Master File</td>
<td>Individuals with SSN (first issued 1936); Includes deaths occurring outside United States; More complete for over 65 population and for beneficiaries</td>
<td>Weekly (and VA receives annual overlay)</td>
<td>YES</td>
</tr>
<tr>
<td>Patient Treatment File</td>
<td>Inpatient deaths (VA hospitals, Non-VA when covered by VA)</td>
<td>Weekly</td>
<td>YES</td>
</tr>
<tr>
<td>Corporate Data Warehouse</td>
<td>Veterans</td>
<td>Daily</td>
<td>NO</td>
</tr>
<tr>
<td>National Death Index</td>
<td>Veterans and non-veterans</td>
<td>Search engine, lags 1 year</td>
<td>NO</td>
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<tr>
<td>SSA Epidemiological Search</td>
<td>Social Security recipients and applicants</td>
<td>Search engine</td>
<td>NO</td>
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<tr>
<td>State death records</td>
<td>Veterans and non-veterans</td>
<td>Annually</td>
<td>NO</td>
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</table>
Resources

VHA Data Quality
http://vaww.virec.research.va.gov/DataQuality/Overview.htm

National Data Systems
Dorothea Garrett (Dorothea.Garrett@va.gov)

VIReC Website Resources
http://vaww.virec.research.va.gov (VA Intranet only)
Information on VA data sources and how to access data
Documentation on VA data sources like VHA VSF
(http://vaww.virec.research.va.gov/VSF/Overview.htm)

VHA Data Portal
Integrates information from multiple sources into a single location to promote a comprehensive knowledge base
http://vaww.vhadataportal.med.va.gov/Home.aspx (Intranet only)
VIReC Options for Specific Questions

<table>
<thead>
<tr>
<th>HSRData Listserv</th>
<th>HelpDesk</th>
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<tbody>
<tr>
<td>• Community knowledge sharing</td>
<td>• Individualized support</td>
</tr>
<tr>
<td>• ~1,300 VA data users</td>
<td><a href="mailto:virec@va.gov">virec@va.gov</a></td>
</tr>
<tr>
<td>• Researchers, operations, data stewards, managers</td>
<td>(708) 202-2413</td>
</tr>
<tr>
<td>• Subscribe by visiting</td>
<td></td>
</tr>
<tr>
<td><a href="http://vaww.virec.research.va.gov/Support/HSRData-L.htm">http://vaww.virec.research.va.gov/Support/HSRData-L.htm</a> (VA Intranet)</td>
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Quick links for VA data resources

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<tr>
<th>Resource</th>
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<th>Access</th>
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<tr>
<td>VIReC</td>
<td><a href="http://vaww.virec.research.va.gov/Index.htm">http://vaww.virec.research.va.gov/Index.htm</a> (VA Intranet)</td>
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<tr>
<td>Health Economics Resource Center (HERC)</td>
<td><a href="http://vaww.herc.research.va.gov">http://vaww.herc.research.va.gov</a> (VA Intranet)</td>
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<td>CDW</td>
<td><a href="https://vaww.cdw.va.gov/Pages/CDWHome.aspx">https://vaww.cdw.va.gov/Pages/CDWHome.aspx</a> (VA Intranet)</td>
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</table>
References


• Hoffmire C, Kemp J, Bossarte R. Changes in Suicide Mortality for Veterans Relative to Non Veterans by Gender and History of VHA Service Utilization, 2000-2010. Psychiatric Services 2015; 00:1–7; doi: 10.1176/appi.ps.201400031

Contact information

VA Information Resource Center
Hines VA Hospital
virec@va.gov
708-202-2413

Chuck Maynard
cmaynard@u.washington.edu
Next session:
February 5, 1 pm Eastern

Database & Methods Cyberseminar Series

Assessing Race & Ethnicity

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