Insights

Data Documentation on the VIReC Web Site

VA INFORMATION RESOURCE CENTER

In 1998, the VHA's Office of Research and Development, Health Services Research and Development Service, established the **VA Information Resource Center (VIReC),** a special field unit designed to make database information available to the research community.

The VIReC provides information on:

> the content,
>
> availability,
>
> reliability,
>
> validity, and
>
> accessibility

of data sources within the VA and for select non-VA databases in support of health services research investigations.

Although their primary customers are researchers, there are a number of products that are useful to all end-users. For example, documentation of select SAS databases at the Austin Automation Center (AAC), specifically, the four outpatient files generated out of the **National Patient Care Database (NPCD)** and the **Patient Treatment File (PTF)**.

Another priority for the VIReC is the dissemination of information about the **Decision Support System (dSs)**.

The VIReC Web site is located at: www.virec.research.va.gov. The web site contains a wide varity of data documentation products for select VA and non-VA databases. Some examples of documentation for several commonly-used databases follow:

1) Outpatient Data: OPC is the traditional database name used to collectively identify the SAS datasets that hold outpatient date. These data, stored at the Austin Automation Center (AAC), are generated out of the National Patient Care Database as "data marts" and consist of four files:

> **Visits,**
> **Procedures,**
> **Diagnoses, and**
> **Event**

The **Visit** file orginated in FY 1980, but at that time contained only very basic utilization data and almost no patient demographic variables. Each subsequent year has seen the exact set of variables slightly changed.

A comprehensive variable list is available at the VIReC Web site under the OPC link (www.virec.research.va.gov/ DATABASES/NPCD/ NPC_CONSF.HTM).

Following a directive by the VA's Under Secretary for Health, VA treatment facilities were required to capture full diagnostic (ICD-9) and procedural (CPT-4) information for 100% of ambulatory care appointments. As a result, the national data rollup was expanded and reorganized.

In FY-97, the **Procedure file** was expanded to include 15 procedure variables (CPT codes) per encounter. The **Diagnosis file**, with 11 diagnostic variables (ICD-9 codes) per encounter was created. Comprehensive variable lists are available for the **Visit**, **Procedure** and **Diagnosis files**.

FY-99 file structures, variable names, text descriptions and, if applicable, tables of print values for all four outpatient files are located on VIReC Web site under the OPC link (www.virec.research.va.gov/DATABASES/NPCD/NPCD.HTM#NPCD.

2) Inpatient Data: The Patient Treatment File (PTF) is another database that has been documented. A comprehensive list of variable names, the range of years used, and the history of the print formats for PTF are available on the VIReC Web site under the PTF link (www.virec.research.va.gov/DATABASES/NPCD/NPCD.HTM#PTF.

The Inpatient data is in four separate SAS datasets; **Main**, **Procedure**, **Surgery** and **Bedsection**. The **Main** file is organized by episode of care and was created in FY 1970. The **Procedure** file contains ICD-9 coded procedures and was added in FY-88. The **Procedure** file contains procedures that were performed in areas other that the surgical suites. The **Surgery** file, created in FY-84, is organized by surgical episode within the eipsode of care. Contained in the file are as many as five surgical procedures (ICD-9 coded) that were performed within the operating suite. The **Bedsection** file is organized by bedsection within the episode. It was created in FY-84.

FY-99 file documentation includes file structures, variable names, test descriptions and print values as well as links to VA Policy documents regarding the acquisition of key data.

3) Decision Support System Documentation:
The **Decision Support System (dSs)** is a longitudinal, secondary database that combines
selected elements of VA clinical and cost data. The dSs utilizes Transition II ® software from Eclipsys Corporation at www.eclipsys.com (formerly Transition Systems, Inc. (TSI) at www.tsidss.com/ABOUTTSI.html).

dSs provides information on patterns of care and treatment outcomes by linking resource consumption with costs associated with healthcare processes. It is designed to support management decision-making, but holds great promise as a tool for VA researchers as well. Information on the VIReC Web site about **dSs** (www.virec.research.va.gov/DATABASES/DSS/Dss.htm) includes:

> categories of information contained within the database,
> how data are put into dSs,
> how data are stored,
> how data are categorized,
> a description of select applications of dSs,
> a listing of the standard site extracts from local VistA and from national databases,
> a listing of laboratory results in the dSs database,
> and sources of information about dSs useful to end-users.

4) Historical HSR&D Documentation:
Database Resource Guides developed by other HSR&D researchers under grants from Health Services Research and Development, include a five volume "Blue Book" set:
➢ **Overview**
(www.virec.research.va.gov/DATABASES/RESGUIDE/VOL1/CHAPTER1/INTRO.HTM).

> This volume provides an overview of:
> access and confidentiality issues,
> TSO/ISPF,
> JCL and SAS, and
> uploading and downloading data.

➢ **Patient Treatment File**
(www.virec.research.va.gov/DATABASES/RESGUIDE/vol2/ntab2.htm).

This volume provides information about the Patient Treatment File up to 1996.

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YOUR GUIDE TO VA DATA

➢ **Outpatient Care File**
(www.virec.research.va.gov/
DATABASES/RESGUIDE/vol3/ntab3.htm).

This volume provides information on the Outpatient Care File up to 1996.

➢ **VAMC Costing**
(www.virec.research.va.gov/
DATABASES/RESGUIDE/VOL4/CHAPTER1/
INTRO.HTM).

The following costing databases are described:
the **Financial Management System (FMS)** and the **Cost Distribution Report (CDR).**

Additionally, documentation covering the methodologies for VA planning, resource allocation, and cost recovery are available.

➢ **Decentralized Hospital Computer Program** (Now called VistA)
(www.virec.research.va.gov/
DATABASES/RESGUIDE/VOL5/
INTRO.HTM).

In this volume, information is provided about the computerized medical information systems used at all VA Medical Centers.

In addition, documentation on community and institutional-based long-term care services provided by VA, arranged by VA, or contracted out are contained in a 3-volume **Long Term Care Guide** on the VIReC Web site
(www.virec.research.va.gov/
DATABASES/LTCRGUID/EXPAGE.HTM).

5) Other Information Available at VIReC:
An abundance of data is available within the
Department of Veterans Affairs. The VIReC Web site includes a **database inventory** that was created out of the HSR&D 1993 State of the Art Conference on VA databases to increase the accessibility of VA, other government, and private databases.

This inventory is unique for two reasons:

(1) it lists data characteristics, documentation and linkage capacity; and

(2) it builds on the knowledge and insights of experienced VA researchers, policy makers, managers and clinicians about database strengths, weaknesses, accessibility and applications
(www.virec.research.va.gov/
DATABASES/ANNOTATED.htm).

A link is also available to the database inventory compiled by the Office of Information (OI).

6) The VIReC Web site also provides information on:

➢ **How to access VA databases**
(www.virec.research.va.gov/
DATABASES/access%20and%20training.htm)

➢ **How to obtain training**
(www.virec.research.va.gov/
DATABASES/access%20and%20training.htm); and

➢ **Links** to other useful Internet and VA Intranet web sites.
(www.virec.research.va.gov/TOPBUTTONS/
Links.htm)

What Are "VIReC Insights" All About?

VIReC Insights are produced by the VA Information Resource Center (VIReC) staff to provide VA researchers with a starting point for understanding concepts in data management and basic information about health related databases. Upcoming **Insights** will cover:

✸   Data Warehousing

✸   National Patient Care Database (NPCD)

✸   Decision Support System (dSs)

✸   Geographic Information Systems (GIS)

If you would like to suggest topics for future Insights, please contact us at:

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