



# Insights

## An Overview of VA Long-Term Care Database and Information Resources

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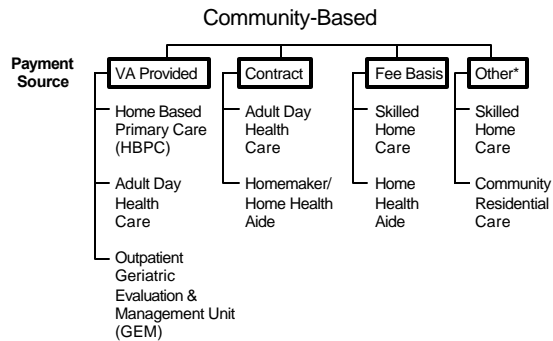
### A. Introduction

This *Insights* was developed to give researchers a brief overview of Department of Veterans Affairs (VA) long-term care (LTC) databases. The focus of this *Insights* is on LTC patient-level databases that are most frequently used for research and information resources.

### B. Long-Term Care Services Within VA

The VA health care system provides for the health care of veterans across the continuum of care. Long-term care refers to all post-acute programs and services provided to veterans. These services may be provided by a VA medical center (VAMC). Alternatively, they may be arranged by VA staff and provided in a non-VA setting. Non-VA care may be financed by VA, Medicare, Medicaid, private insurance, and/or out-of-pocket. Veterans may utilize one or more of these services depending on eligibility and need. Individuals typically require LTC services when a chronic condition, trauma, or illness limits their ability to carry out basic self-care tasks, often called activities of daily living (ADLs; e.g., dressing, toileting, etc.), or household chores, known as instrumental activities of daily living (IADLs; e.g., meal preparation, using the telephone, etc.), or when care is required following acute care discharge that cannot be effectively managed in an outpatient setting (e.g., post-operative wound care/dressing changing, IV antibiotics, rehabilitation, catheter care, etc). VA has one of the most comprehensive LTC programs in the U.S. (See Figure 1).

Figure 1: VA LTC Programs and Services



### C. LTC Resource Guides

In the early 1990's, researchers at the Midwest Center for Health Services and Policy Research (MCHSPR) were interested in examining veterans' use of post-acute services across the continuum of care.

Review of VA administrative databases for LTC services and programs revealed that VA was lacking good, comprehensive, computerized databases for most of these services and programs. These researchers were awarded a Service Directed Research (SDR) grant to explore LTC database issues (Weaver, Guihan, Cowper, et al., 1998). One result of the project was the development of a three volume *Long-Term Care Resource Guide*. The volumes provide a comprehensive understanding of VA community- and institution-based LTC through 1995. This resource guide should be considered an initial stepping-stone to anyone researching LTC data issues within VA. The VA Information Resource Center (VIREC) is custodian for the guide and maintains it on the VIREC Web site at: <http://www.virec.research.va.gov/DATABASES/LTCRGUID/EXPAGE.HTM>. A short description of each of the volumes appears on the next page.

- *Volume 1: VA LTC Program and Database Descriptions.* Each chapter provides a narrative description of each service or program. The chapters are sub-divided into specific components including a general description of the program/service, a listing and description of any computerized data directly tied to this particular program/service. Information on the unit of analysis, data quality, the type of information that is lacking, reports generated, information contacts, and a listing and description of any paper records and forms used are also presented.
- *Volume 2: Database Content Statements and VA Forms* contains copies of paper records and content statements of all computerized databases for each of the services and programs described in Volume I and comprises three separate sections: a database comparison chart, a section containing the VA database content statements for each LTC program or service, and a section containing the VA forms used by the LTC program or service.
- *Volume 3: Abstracts and Articles* catalogs all VA HSR&D-funded research conducted on VA LTC programs and services through 1995. It contains a list of funded projects with abstracts and any journal articles, book chapters, or related publications that resulted from these grants. This volume comprises two separate sections: a section containing all VA HSR&D research conducted on VA LTC programs/services and other related topics, and a section containing published journal articles and book chapters regarding VA LTC programs/services and other related topics. Abstracts are listed in chronological order of completion date.

#### **D. VA LTC Databases**

While there are a number of VA databases available to researchers interested in LTC issues, researchers should exercise caution in using any single database to examine LTC utilization by veterans. The lack of a single VA database across the continuum of LTC programs and services means that describing any utilization subset of this continuum is complex. Described below are select examples of databases most commonly used. The purpose, scope and technical caveats of each is addressed.

#### **Database Examples**

##### *Community-Based: Home Based Primary Care (HBPC) Database*

VA operates Home Based Primary Care (HBPC) programs at about 75 VAMCs across the nation.

Two HBPC data files are generated at the local VA facility level and are electronically transmitted to the Austin Automation Center (AAC) to populate the national HBPC Database: 1) the admission/discharge (A/D) file and 2) the visit log file. The A/D file contains basic demographic information, diagnosis, functional status, and informal caregiver information upon admission. Whenever a patient is discharged from the program for any reason, a discharge record is created, including discharge status. The visit log contains a record of every patient encounter by a HBPC staff person, including provider type, site of visit, reason for visit, and visit date. While the visit log file is longitudinal, the functional assessment information is available only at admission and discharge; any periodic reassessment of patient status is not electronically available. Since 1998, CPT-4 codes are also available for each visit. The primary purpose of this database is to provide HBPC management with casemix, caseload and other performance information. The HBPC Database includes information about VA provided HBPC only. Information on patients receiving contract or Fee Basis home care are not included.

It should be noted that data on HBPC visits are also electronically transmitted to the AAC to populate the National Patient Care Database (NPCD) Outpatient Clinic Files (OPC). However, experience from a recently completed VA Cooperative trial (CSP# 3 – Hughes, Weaver, and Cummings) revealed that there is significant, but not complete, overlap between these files. Approximately 12% of visits recorded in the OPC file were not included in the HBPC visit log file. Furthermore, 16% of visits were only recorded in the HBPC visit log file. To capture all use, these authors suggest that it is important to cross-reference both databases.



**Institution-Based: Patient Treatment File (PTF) – Extended Care MAIN (XM) File**

The PTF is the historic database used collectively to identify the SAS datasets that contain VA's inpatient data. These data, stored at the AAC, comprise four files, which are referred to as Main, Bedsection, Procedure and Surgery. In addition to the traditional administrative files for acute care use, VA maintains a comparable database for admissions and discharges to VA extended care and domiciliary units. The *PTF Extended Care MAIN (XM) file* contains data on demographics (e.g., Social Security Number (SSN), age, date of birth, marital status); geographics (e.g., county, state, VISN); inveterate health status (e.g., Agent Orange and radiation exposure); economics (e.g., income, means test indicator); and diagnostics (e.g., diagnostic related groups (DRGs), International Classification of Diseases – Version 9 (ICD-9) codes, primary diagnosis) for individuals in VA Nursing Home Care Units and domiciliaries. Guihan and colleagues provide an example of analyses that can be conducted by merging PTF & Patient Assessment File data (Guihan, et al., 1999).

**Institution-Based: Patient Assessment File/Instrument (PAF/PAI) and Resident Assessment Instrument Minimum Data Set (RAI/MDS)**

The Patient Assessment File (PAF) contains data for VA patients at all VAMCs with extended care facilities from 1987 to the present. PAF is a compilation of inpatient questionnaire results from the Patient Assessment Instrument (PAI). PAI data are collected within two weeks of a patient's initial admission to LTC and semi-annually thereafter. PAI collects information on medical treatments and conditions, selected diagnoses, ADLs, behaviors, some rehabilitation therapies, and chronic respiratory support. A copy of the questionnaire can be found at the following Internet site: <http://www.virec.research.va.gov/databases/lcguid/voltwo/V2100064.HTM>.

VA will replace the PAF/PAI with the Resident Assessment Instrument/Minimum Data Set (RAI/MDS). The last administration of the PAI is scheduled for April 2001. The RAI/MDS, developed by the Health Care Financing Administration (HCFA) in the early 1990's, utilizes an interdisciplinary team assessment approach for treatment planning. VA's goal in moving from the PAF/PAI to the RAI/MDS is to improve data integrity by using standardized instruments to collect reliable and valid information. A copy of the MDS instrument is located at <http://www.hcfa.gov/medicaid/mds20.default.htm>. VA will follow HCFA guidelines for data collection, i.e., patient assessment must be completed with 14 days of admission (but will not participate in reimbursement protocols involving more frequent data collection for prospective payment purposes). Most VAMCs will use local-area networked personal computers to collect MDS data. Once the various disciplines have completed their assessments, information from the local facility electronic medical records are electronically extracted to complete MDS data fields. Local facilities will electronically transmit MDS data to the AAC to populate a national data set at the AAC. The AAC will use the MDS data to generate the Resource Utilization Groups Version III (RUGs III) scores as well as other quality reports including the quality indicators (QIs). VAMCs will be able to access their own data locally or via the AAC. The automated version of the RAI/MDS is scheduled to be fully implemented in VA by the end of calendar year 2000.

**E. The Future of VA LTC**

With the advent of the Millennium Health Care and Benefits Act (P.L. 106), enacted by Congress on November 30, 1999, (see Website reference) there will be significant changes in the delivery of VA long-term care services such as the addition of services, (e.g., assisted living services). Changes in the structure of LTC services could also have implications for data available for research.

## F. Select LTC Database and Information Sources and References

### Web Sites (Current as of this printing)

- a. The *Long-Term Care Resource Guide, Volumes I-III*, by Weaver FM, Guihan ML, Cowper DC, et al., 1998, (VA HSR&D SDR 93-113) <http://www.virec.research.va.gov/DATABASES/LTCRGUID/EXPAGE.HTM>
- b. The Geriatrics and Extended Care Strategic Healthcare Group (G/EC SHG) maintains an informational page on VA Programs for Senior Veterans. <http://www.va.gov/seniors>
- c. The VHA Office of Information Technical Services recently released the "VHA Corporate Databases Monograph: 1999-2000." This monograph, found at: [http://vista.med.va.gov/softserv/Monograph/1999/NDS\\_Monograph\\_1999-2000.htm](http://vista.med.va.gov/softserv/Monograph/1999/NDS_Monograph_1999-2000.htm), contains summary information on nearly 100 VA corporate and "enterprise-level" databases.
- d. A wide variety of database documentation, including links to several database inventories. <http://www.virec.research.va.gov>
- e. The full text for the Veterans Millennium Health Care and Benefits Acts, P.L. 106 <http://rwebgate.access.gpo.gov/useftp.cgi?IPaddress=162.140.64.21&filename=publ117.106&directory=/diskb/wais/data/106.cong.public.laws>
- f. Current information on the status of the implementation phase of the RAI/MDS Project is available on the Implementation and Training Services (ITS) Web site [\[REDACTED\]](#)

### Contacts

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- c. *PAF/PAI and RAI/MDS*; Christa Hojlo, Chief for Nursing Home and Subacute Care, Geriatrics and Extended Care Strategic Healthcare Group (G/EC-SHG), Telephone: 202-273-8544, E-mail: [christa.hojlo@mail.va.gov](mailto:christa.hojlo@mail.va.gov)
- d. *PTF – MAIN XM File*; Mike Kerr, Health Information Analyst, VIREC, Telephone: 708-202-2413; E-mail: [kerr@research.hines.va.gov](mailto:kerr@research.hines.va.gov) or Wendy Carter, Database Point of Contact, Telephone: 202-273-8694, E-mail: [wendy.carter@hq.mail.va.gov](mailto:wendy.carter@hq.mail.va.gov)

### References

1. Guihan ML, Weaver F, Cowper D, Nydam T, and Miskovics S. Using Department of Veterans Affairs databases to examine differences in long term care utilization by men and women veterans. *Journal of Medical Systems*. 1999;23:201-18.
2. Hughes S, Weaver F, and Cummings J, A Multi-site Randomized Trial of Team Managed Hospital Based Home Care. (CSP#3) Cooperative Studies Program, Department of Veterans Affairs, (1/93-3/99).
3. Kubal J, Guihan M, Hynes D, and Cowper D, The Long-Term Care Database Guide: A Resource on VA Community-Based Programs. *Illinois Morbidity and Mortality Review: A Quarterly Report (Special Issue: Veterans in the Community)*. 1998;3:10-5.
4. VA Health Care Programs for Elderly Veterans: VA Long-Term Care at the Crossroads, Report of the Federal Advisory Council on the Future of Long-Term Care, 1998 available at: <http://www.va.gov/seniors/health/LongTermCare/default.asp>
5. Department of Veteran Affairs Strategic Plan: Fiscal Years 1998-2003, September 30, 1997, DVA Office of the Assistant Secretary for Policy and Planning, Washington, DC, available at: <http://www.va.gov/StrategicPlan98/>

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### Suggested Citation

Kubal JD, Weaver FM, Guihan ML, Cowper, DC, Hynes, DM. An Overview of VA Long-Term Care Database and Information Resources. *VIREC Insights*; no. 4. Hines, Illinois: VA Information Resource Center, 2000.

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