

Assessment of Data Quality

The quality of VA data has continued to improve; it supports business planning and day-to-day decision-making activities. Each program office has initiated specific improvement actions. In addition, the Office of the Inspector General (OIG) has conducted audits to determine the accuracy of our data. We consider OIG reviews to be independent and objective. The following discussion describes in detail the actions each VA administration has taken to improve its data quality.

Veterans Health Administration

VHA has focused on data reliability, accuracy, and consistency for the past several years. The principles of data quality are integral to VHA's efforts to provide excellence in health care. In 2001, the Under Secretary for Health commissioned a high-level, cross-cutting task force on data quality and standardization whose membership includes the chief officer from VHA's Office of Quality and Performance, the Assistant Deputy Under Secretary for Health, and officials from the Chief Network Office and the Office of Information. This task force has focused on strategic planning to provide consistent definitions of clinical and business data for more effective clinical and organizational decision support. The members seek collaboration with other parties including DoD, Indian Health Service, private sector health care providers, and standards organizations.

VHA's commitment to quality data was confirmed by the results of an OIG audit of the validity of data collection of the quality measures that VHA tracks – Clinical Practice Guidelines Index and Prevention Index II. The report acknowledged a high degree of accuracy. The OIG made no recommendations. VHA continuously monitors data accuracy to ensure these high standards are maintained.

VHA has long been recognized as a leader in documenting credentials and privileges of VA health care professionals. In 2001, VHA implemented a new electronic data bank, VetPro. This database dramatically improved VHA's ability to ensure timely and appropriate credentialing of health care professionals. VetPro promotes and demonstrates to other Federal and private agencies the value of a secure, easily accessible, valid data bank of health professionals' credentials. In 2004, VHA and DoD launched a study into the merits of integrating DoD's system for credentialing and privileging, Centralized Credentials and Quality Assurance System, with VHA VetPro. The study resulted in recommendations favoring continued collaboration with a goal of accomplishing future integration.

VetPro improves the process of credentialing and privileging by:

- Establishing a secure, accessible, valid electronic database.
- Ensuring appropriate credentials for clinical roles of practitioners.
- Allowing verification of practitioners' track records.

The VHA Data Consortium addresses organizational issues and basic data quality assumptions. The consortium works collaboratively to improve information

reliability and customer access for the purposes of quality measurement, planning, policy analyses, and financial management. The ongoing initiatives and strategies address data quality infrastructure, training and education, personnel, policy guidance, and data systems. The VHA data quality coordinator and data quality workgroups provide guidance on data quality policies and practices. Several initiatives support the integrity and data quality of coding including:

- Development of strategies and standard approaches to help field staff understand the data content and meaning of specific data elements in VHA databases.
- Development of coding resources for field facilities, to include negotiating the purchase of knowledge-based files/edits from Ingenix™ for use within the Veterans Health Information Systems and Technology Architecture (*VistA*).
- Complete revision of *VistA* software to accommodate the requirements of the Health Insurance Portability and Accountability Act for use of those code sets involving health care claims.

To support the need for guidance in medical coding, VHA established the Health Information Management (HIM) Coding Council, comprised of credentialed expert coders with support from VHA HIM Central Office staff to provide research and response to coding questions within 24 hours. The council has completed an update to the national coding handbook, which provides expert guidance to field facilities. Additional initiatives include:

- “*Close Encounters*” and “*Data Quality Highlights*” newsletters for field staff guidance.
- Ongoing, periodic training programs on such topics as national standard code set updates.
- Standardization of electronic encounter forms including documentation templates.

The Patient Financial Service System (PFSS) project is the pilot implementation of a commercial billing and accounts receivable system in VHA. This project is designed to incorporate business process improvements

and commercial information systems that are proven in the private sector. The project will introduce commercial business practices and technology into VA through a VISN pilot project comprised of VA best practices and commercial best practices. The objectives of the pilot are to implement a commercial product and study the effects on collections, improvements to the business process, and information systems in a single test environment. Ultimately, the long-term strategy is to develop a scalable solution, which includes both a commercial solution and VA applications that can be implemented in all networks.

VHA completed the implementation of a national Master Patient Index (MPI). The MPI provides the ability to view clinical data from various VA medical facilities via the remote data view functionality within the Computerized Patient Record System. The MPI provides the mechanism for linking patient information from multiple clinical, administrative, and financial records across VHA health care facilities, enabling an enterprise-wide view of individual and aggregate patient information.

VHA is examining its current health information processing environment to plan how to best implement improvements over the next 5 years. As part of this process, VHA is assessing:

- What a high-performance automated health system needs to provide.
- What the ideal health and information system would look like.
- What the advantages and disadvantages of our current system are.
- How best to use a phased approach for moving from the current to the ideal environment.

Currently VHA is enhancing the *VistA* platform by completing the Decision Support System and implementing *VistA* Imaging. Given funding availability, mid/long-term efforts will include development of a comprehensive health database that will be timely and universally accessible across the full continuum of care

settings. This platform will provide the basis for enhancements to eligibility/enrollment processing packages leading to attainment of *One VA* goals, the reengineering of the *VistA* Scheduling Package, and enhancements/improvements to the billing and fee basis systems.

VHA's Health_eVet-*VistA* project is focused on the replacement of the existing *VistA* legacy health care information system by rehosting, enhancing, and/or reengineering current health information applications on a modern robust technology platform. This effort will enrich the functionality currently available, benefiting veterans, clinical care providers, and the general public by expanding the availability and use of health care information. Health_eVet-*VistA* will provide veterans access to their personal health record through the MyHealth_eVet component and make these data available to the veterans' health care providers, enabling the veterans and health care providers to access and share the health record, access trusted health information, and access key supportive services including prescription drugs and appointments. Health_eVet-*VistA* will provide the transition to a veteran-centered health care system that will establish longitudinal electronic health records and track veteran visit history including their problems, orders, results, and treatments, and documentation across all visits. VA clinical care providers will have immediate access to critical information regardless of which facility the veteran visited.

Veterans Benefits Administration

VBA continues to focus on data reliability, accuracy, and consistency in all facets of its operations from claims processing to FTE hiring patterns. Whether these data are in legacy systems or a data warehouse environment, the output must be accurate and consistent in order to be effective. Managing the accuracy of these data necessitates an ongoing commitment. In 2004, VBA again invested resources in support of this commitment. By using data quality methods and strategies across all

its business lines, VBA continues to show improvements in the quality of its data.

The Office of Performance Analysis and Integrity (PA&I) reports directly to the Under Secretary for Benefits and now performs many of the data quality functions formerly carried out by other VBA components. PA&I assesses data for completeness, validity, consistency, timeliness, accuracy, and appropriateness of use as indicators. These data are extracted from VBA's systems of record (for example, Benefits Delivery Network) and are imported into an enterprise data warehouse. All front-end systems and reports are developed using business rules provided by the respective VBA business lines.

Prior to release, each report is subject to a process to ensure accuracy and adherence to business rules. Specific data validation reviews are conducted throughout the year and data anomalies are routinely investigated and corrected as necessary. Below are several of the projects and approaches used as part of our data quality practices.

- VBA continues to use a "push of a button" application which allows all field offices to download timely and consistent information useful to the operations of that office. The data warehouse integrates the ability to convert large quantities of select information into a spreadsheet format for further analyses.
- The Gulf War Veteran Information System allows for analysis using trend data on population growth for policy and legislation purposes including those dealing with Post Traumatic Stress Disorder and Amyotrophic Lateral Sclerosis. VBA's ongoing efforts to maintain data accuracy include reviews of data definitions and the associated data related to those definitions.
- The Inventory Management System allows Veterans Service Representatives, teams, coaches, and Veterans Services Center managers to plan proactive and systematic, workload or inventory management through timely and accurate access to integrated information. After a review of data reported by this system ascertained that one specific data element

(authorizations) was being omitted, VBA made a modification to ensure the correct level of authorizations was being reported.

- The Fiduciary Beneficiary System automatically generates monthly random samples of claims for national review. This random sample approach allows managers and field staff to review claims systematically, saving both time and resources. A review of the methodology used in calculating the completed and pending cases in this system determined that all data and reports were complete and valid.
- VBA field personnel incorporate data from other systems outside of the administration as part of its workload management practices. One such system, Veterans Appeals' Control and Locator System (VACOLS), is maintained by the VA Board of Veterans' Appeals (BVA). BVA and VBA periodically review the data in this system for consistency. In FY 2004, an in-depth review of various detail and summary reports was undertaken. As a result, modifications will be made to VACOLS reports, which will provide greater detail of individual appellate cases to VBA. This will improve the accuracy of case counts shown in VACOLS and those physically at field offices.
- Corporate WINRS is a comprehensive case management system used to maintain complete case histories, generate forms and letters, control authorizations and payments on behalf of the participants, and assist in scheduling and tracking appointments. Reports are generated regularly to identify invalid and inaccurate data. Business lines use these reports to correct discrepant data.
- Since the mid 1990's, VBA has developed a comprehensive program of customer satisfaction surveys for all of its major business lines. Surveys provide feedback on all aspects of the compensation and pension claims process, education benefits, VA home loans, transactions related to insurance policy holders, and the vocational rehabilitation and employment program. These surveys produce statistically valid performance data at the national and local regional office levels. The surveys are

professionally designed to measure all aspects of the business process as experienced by the veteran or family member. Through extensive use of focus groups, cognitive labs, piloting and pre-testing, the surveys are thoroughly tested and modified, and continue to be improved. These annual mail surveys follow the industry standard for pre-notification and follow-up reminders, resulting in high response rates. Capturing these comparable data within each business line facilitates trend analyses. PA&I conducts special analyses showing key drivers of customer satisfaction and comparisons of performance among regional offices to continue the focus on service improvements.

PA&I also gathers and reviews performance data on a monthly basis. This information is presented in report format as part of the Deputy Secretary's monthly performance review where data generated within VBA as well as provided to VBA are discussed for accuracy and consistency. Decisions for subsequent corrections of problem areas are addressed at the highest managerial levels.

National Cemetery Administration

Experience and recent historical data show that about 80 percent of those interred in national cemeteries resided within 75 miles of the cemetery at the time of death. From this experience, NCA considers eligible veterans to have reasonable access if a burial option (whether for casketed or cremated remains) is available within 75 miles of the veteran's place of residence. NCA determines the percent of veterans served by existing national and state veterans cemeteries within a reasonable distance of their residence by analyzing census data on the veteran population. Arlington National Cemetery, operated by the Department of the Army, and Andrew Johnson National Cemetery and Andersonville National Cemetery, operated by the Department of the Interior, are included in this analysis. In 2000, VA's Office of the Actuary released VetPop2000, the authoritative VA estimate and projection of the number and characteristics of veterans. From 2000

through 2002, actual performance was based on the VetPop2000 model using updated 1990 census data. Since 2003, actual performance and the target levels of performance have been based on a revised VetPop2000 model using 2000 census data. Projected openings of new national or state veterans cemeteries and changes in the service delivery status of existing cemeteries are also considered in determining the veteran population served. (Multiple counts of the same veteran population are avoided in cases of service-area overlap.)

NCA collects data monthly on the timeliness of marking graves through field station input to the Burial Operations Support System. After reviewing the data for general conformance with previous report periods, headquarters staff validates any irregularities through contact with the reporting station.

Since 2001, NCA has used an annual nationwide mail survey to measure the quality of service provided by national cemeteries as well as their appearance. The survey provides statistically valid performance information at the national and regional (Memorial Service Network (MSN)) levels and at the cemetery level for cemeteries having at least 400 interments per year. The survey collects data annually from family members and funeral directors who recently received services from a national cemetery. To ensure sensitivity to the

grieving process, NCA allows a minimum of 3 months after an interment before including a respondent in the sample population. VA headquarters staff oversees the data collection process and provides an annual report at the national level.

In FY 2003, NCA established standards and measures for key operational processes including interments, grounds maintenance, and headstones and markers. NCA established the Organizational Assessment and Improvement (OAI) Program to identify and prioritize continuous improvement opportunities, and to enhance program accountability by providing managers and staff at all levels with one NCA "scorecard." In FY 2004, as part of the OAI Program, assessment teams drawn from national cemeteries, MSNs, and NCA Central Office began to conduct site visits to all national cemeteries, which will be visited on a rotating basis to validate performance reporting.

Office of Inspector General (OIG) Performance Audits

The OIG made an assessment of the Department's data quality in the Major Management Challenges section of this report. This information is shown on pages 246-247.