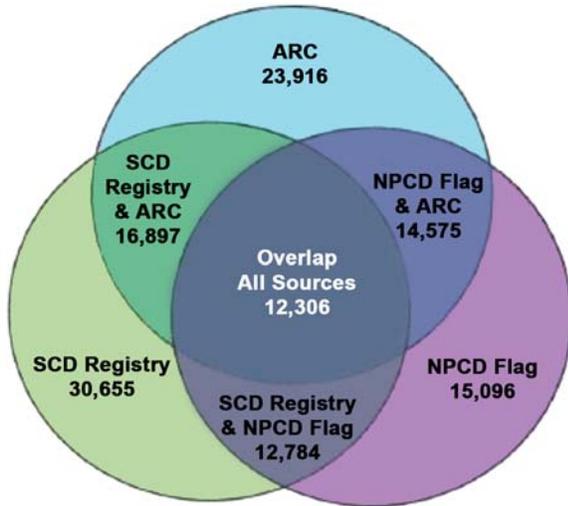# JRRD

at a Glance

Using VA data for research in persons with spinal cord injuries and disorders: Lessons from SCI QUERI

Bridget M. Smith, PhD, et al.

The Department of Veterans Affairs (VA) provides services to more than 25,000 veterans with spinal cord injuries and disorders (SCI/D). This article introduces researchers to the use of VA data to examine questions related to SCI/D using examples from Spinal Cord Injury Quality Enhancement Research Initiative studies. Sources of VA data available to investigators interested in SCI/D research include national-level data sets and data obtained directly from electronic medical charts and/or patients. Using a combination of methods allows researchers to have more complete data and to obtain detailed information about complications such as pressure ulcers and obesity.

Accuracy of external cause-of-injury coding in VA polytrauma patient discharge records

Kathleen F. Carlson, MS, PhD, et al.

Understanding causes of injury among veterans is important for development of injury prevention and rehabilitation services. External cause-of-injury codes (E-codes) provide this information and are available in Veterans Health Administration (VHA) administrative data. Using medical records for comparison, we studied the accuracy of E-coding in discharge data for 566 VHA polytrauma inpatients. Of the injured patients, 74 percent had been assigned E-codes. E-coding accuracy varied by VHA site and was better for combat-related injuries (81% E-coded) than for other injuries. E-coding accuracy should be improved before E-codes are used as a single source of data on causes of veterans' injuries.

Are VHA administrative location codes valid indicators of specialty substance use disorder treatment?

Alex H. S. Harris, PhD, et al.

Locations	**Clinic Stops (Outpatient)**	SUD Individual Session (513)
		SUD Home Visit (514)
		SUD/PTSD (519)
		Intensive SUD Treatment (547)
		SUD Group Session (560)
		SUD Telephone (545)
	Bed Sections (Inpatient)	SUD Residential Rehabilitation (27)
		High-Intensity SUD Treatment Program (74)
		SUD Domiciliary (86)
SUD Diagnoses (ICD-9-CM)		291–292, 303–304, 305.0, 305.2–305.9, 535.3, 571.1
Mental Health Related Procedures (CPT)		90801–90802, 90804–90815, 90826–90829, 90845, 90847, 90849, 90853, 90857, 90862, 90870–90871, 90875–90876, 99201–99205, 99211–99215, 99217–99220, 99241–99245, 99341–99345, 99347–99350, 99385–99387, 99395–99397, 99401–99404, 99420

Healthcare quality managers and researchers often need to identify specific healthcare events from administrative data. We examined whether Veterans Health Administration clinic stop and bed section codes were reliable indicators of substance use disorder (SUD) treatment as documented in clinical progress notes. We found that SUD residential and inpatient bed section codes can be used to identify SUD treatment from administrative data but that outpatient SUD clinic stop codes need to be paired with diagnosis and procedure codes in order to accurately identify SUD-focused treatment visits. These results can be applied to improve the validity of research and quality measurement.

Mental illness-related disparities in length of stay: Algorithm choice influences results

Susan M. Frayne, MD, MPH, et al.
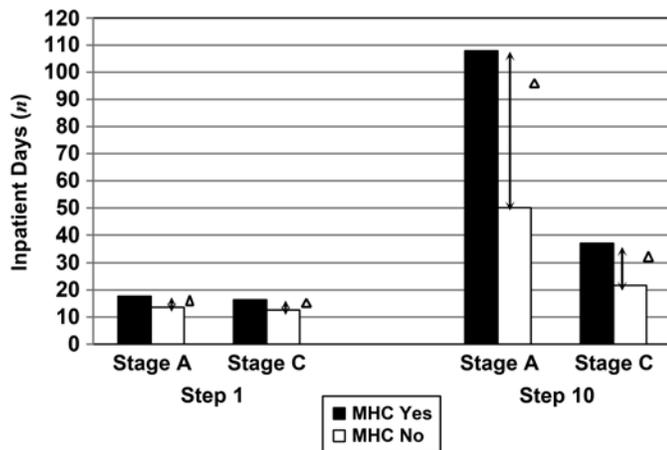
Researchers often use Veterans Health Administration (VHA) data to understand the care veterans receive when admitted to a VHA hospital. However, these data must be used correctly. We found that patients with mental health conditions consistently have longer average length of stay when admitted but the choice of algorithm used to calculate length of stay from VHA data affects conclusions about the size of this difference. Our findings will help researchers properly tailor algorithms for calculating length of stay. This will lead to more accurate results in future studies used to guide strategic planning initiatives to improve VHA inpatient healthcare delivery.

Can administrative data identify active diagnoses for long-term care resident assessment?

Dan R. Berlowitz, MD, MPH, et al.

The Minimum Data Set is widely used in care planning for nursing home residents and can serve as an important source of diagnostic information on veterans receiving rehabilitation in this important setting. This study examines whether data files can be used in place of clinicians' assessments to identify active diagnoses. We found that Department of Veterans Affairs (VA) data files are not a suitable replacement and that for many diagnoses there was poor agreement between nurses and databases. Further efforts are required to determine best approaches for identifying active diagnoses for residents residing in VA nursing homes.

Matching prosthetics order records in VA National Prosthetics Patient Database to healthcare utilization databases

Mark W. Smith, PhD, et al.

Each year, the Department of Veterans Affairs (VA) prescribes millions of prosthetics and assistive devices to veterans. These include items that the veteran can take on and off, such as eyeglasses and hearing aids, as well as devices implanted in the body. The VA tracks these items in the National Prosthetics Patient Database (NPPD). Researchers sometimes need to match NPPD entries to records in other VA databases. Our goal was to learn whether most NPPD records could be matched to other VA records for the same individuals. We found moderate success in matching records across databases.

VHA Corporate Data Warehouse height and weight data: Opportunities and challenges for health services research

Polly Hitchcock Noël, PhD, et al.
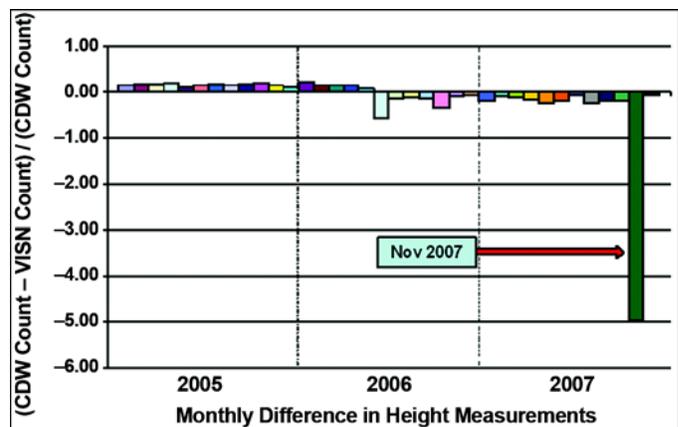
The Corporate Data Warehouse (CDW) is a potentially important new data source within the Veterans Health Administration. This article describes an administrative project and a research study that examined the variability and reliability of weight and height data within the CDW and compares the data with the regional warehouse data. Our work suggests that the CDW is a generally reliable source of weight and height data. Challenges include relatively fewer recorded heights than weights and biologically implausible values and variation, which may reflect measurement or data entry errors. We discuss strategies to minimize the effect of these errors and policy changes that could improve data quality.

Validation of erythropoietin use data on Medicare's End-Stage Renal Disease Medical Evidence Report

Michael J. Fischer, MD, MSPH, et al.

Veterans are at high risk for developing kidney disease, and those who develop the disease have extremely high morbidity and mortality rates. Anemia is a frequent complication of kidney disease and leads to poor health. To treat anemia successfully in veterans, physicians administer erythropoiesis-stimulating agents (ESAs). Much of the prior research investigating the relationship between ESAs, anemia, and kidney disease is based on information from Medicare's Medical Evidence Report (Form 2728). Before this study, the accuracy of the information on Form 2728 was not known. This study found significant errors in ESA information reported on Form 2728, which could have led to biased findings and misunderstandings in prior research. Recognition of these shortcomings of Form 2728 will benefit researchers because they will be able to conduct better studies of this matter in the future.

Creating a sampling frame for population-based veteran research: Representativeness and overlap of VA and Department of Defense databases

Donna L. Washington, MD, MPH, et al.
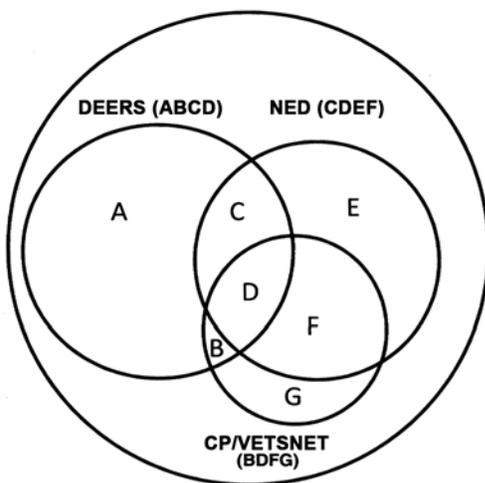
Database		Contribution (%)
ABCD	DEERS	29.7
+EF	NED	20.1
+G	CP/VETSNET	1.6

Although most veterans obtain healthcare outside the Department of Veterans Affairs (VA), most veteran research is conducted in VA healthcare settings and does not address the health or healthcare of the vast majority of veterans. We describe VA and Department of Defense administrative databases available for identification of veterans for research studies. Use of these databases will expand the pool of potential research subjects beyond VA healthcare users. Veterans and those engaged in clinical practice, policy, and research involving veterans may benefit from findings generated from research studies that include the perspective of both VA users and veterans who do not use VA healthcare.

What can Medicaid data add to research on VA patients?

Ann Hendricks, PhD, et al.

This article summarizes VA patient enrollment in state Medicaid programs and their use of Medicaid and Medicare services. The article gives researchers guidance as to which kinds of studies could benefit from including Medicaid data, either because many of the veterans in their research might use Medicaid or because veterans who use both Medicaid and VA may have greater healthcare needs than those who use VA only.

Use of Medicare and DOD data for improving VA race data quality

Kevin T. Stroupe, PhD, et al.
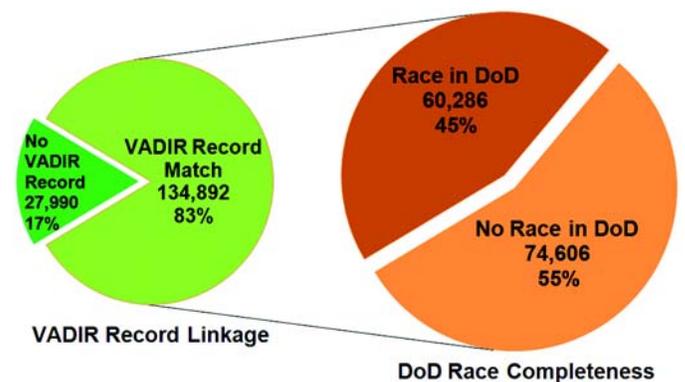
High rates of missing race data in Department of Veterans Affairs (VA) records are a known problem. Our study used race information from Medicare and the Department of Defense (DOD) to supplement VA race data. We also examined the agreement in race between the three databases. We found that adding Medicare improved race data substantially, while adding DOD data was less

significant. Most VA patients recorded as African American or white were also recorded that way in Medicare and DOD data. However, variation was found between the databases for other minority patients. Results provide researchers with options for more complete and consistent race data.

Using the Medicare Current Beneficiary Survey to conduct research on Medicare-eligible veterans

Yvonne Jonk, PhD, et al.
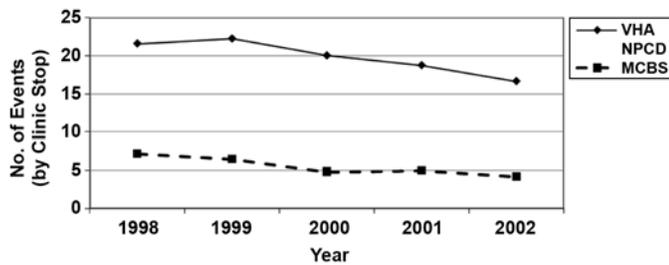
This study focuses on the quality of the Medicare Current Beneficiary Survey (MCBS) data set and its usefulness for conducting research on veterans enrolled in Medicare. The MCBS has been conducted since 1992 and follows samples of the Medicare population for 4 years. Enrollees report their health status, health insurance coverage, healthcare use, billing records, and satisfaction with care. Since the Veterans Health Administration (VHA) does not bill for services, healthcare costs were estimated by the survey sponsors (Centers for Medicare and Medicaid Services). We compared these cost estimates, as well as self-reported use of health services, with the VHA's healthcare records and cost data sets.

Brief report: Comparison of methods to identify Iraq and Afghanistan war veterans using Department of Veterans Affairs administrative data

Ann Bangerter, BS, et al.
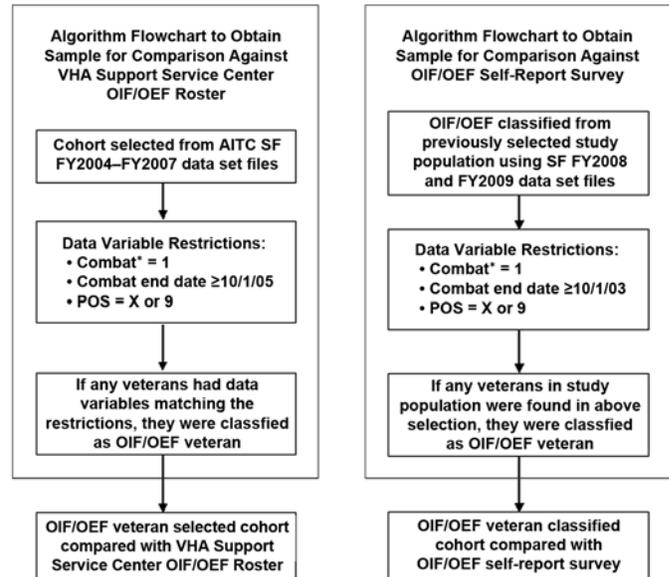
The Department of Veterans Affairs (VA) is committed to serving the complex needs of veterans of the ongoing Operation Iraqi Freedom/Operation Enduring Freedom (OIF/OEF) conflicts. Research designed to improve VA healthcare to these veterans depends on accurate and timely identification of this cohort. This article describes alternate methods for identifying OIF/OEF veterans using national VA patient databases as well as self-reported period of service surveys and the official Veterans Health Administration Support Service Center OIF/OEF Roster. It further characterizes the differences between samples created using these methods. This analysis will improve the quality of research about OIF/OEF veterans and thereby facilitate higher quality standards of care.