

# Identification of American Indian and Alaska Native Veterans in Administrative Data of the Veterans Health Administration and the Indian Health Service

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We sought to determine the extent to which the Indian Health Service (IHS) identified enrollees who also use the Veterans Health Administration (VHA) as veterans. We used a bivariate analysis of administrative data from fiscal years 2002–2003 to study the target population. Of the 32 259 IHS enrollees who received care as veterans in the VHA, only 44% were identified by IHS as veterans. IHS data underestimates the number of veterans, and both IHS and VHA need mechanisms to recognize mutual beneficiaries in order to facilitate better coordination of strategic planning and resource sharing among federal health care agencies. (*Am J Public Health.* 2006;96:1577–1578. doi:10.2105/AJPH.2005.073205)

The Department of Veterans Affairs' (VA) Veterans Health Administration (VHA) and the Department of Health and Human Services' Indian Health Service (IHS) recently initiated, with a memorandum of understanding, an effort to improve coordination and resource sharing for veterans who are eligible for healthcare in both federal systems.<sup>1–3</sup> VHA provides comprehensive healthcare to veterans on the basis of a priority system that recognizes service-connected illness and disability, as well as need. IHS provides healthcare to federally recognized tribes in 35

states. VHA, with its greater resources, appears to supplement IHS ambulatory services.<sup>4,5</sup> Despite high rates of military participation by American Indians and Alaska Natives,<sup>6,7</sup> which the US Census 2000 (Summary File 3, PCT66A-66H) reports as proportionately greater than other US race and ethnic groups, the number of veterans served by both federal systems is unknown.

Currently, neither VHA nor IHS has administrative mechanisms in place to identify enrollees of the other system. However, IHS user data identify individuals as veterans, and interagency strategic planning is performed, in part, on the basis of these data. This report evaluates the accuracy of veteran identification data in IHS records to better inform the planning process for optimizing healthcare for American Indian and Alaska Native veterans.

## METHODS

For our analysis, we compared veteran status in centralized administrative records from the VHA National Patient Care Database (VHA-NPCD) and the IHS National Patient Information Reporting System (IHS-NPIRS). We linked individuals' data using Social Security numbers as unique patient identifiers, and then created a merged de-identified analytic record. Records of 1 586 403 IHS enrollees (active and inactive users) who were aged 18 years or older on October 1, 2002, were matched with records for over 4 million VHA users in outpatient, inpatient, and fee-basis files for fiscal years 2002 and 2003.

Standards for defining *veterans* differ in the IHS and VHA systems. VHA verifies past military service as a condition of enrollment and provides care on the basis of degree of service-connected disability and degree of impairment to determine veteran status. These data were coded and recorded under the VHA-NPCD inpatient and outpatient "Means" variable and the outpatient "Eligibility" variable, indicating status as a *veteran* or *nonveteran*.<sup>8,9</sup> Nonveteran services include humanitarian emergency, TRICARE, (healthcare for active-duty and retired uniformed service members and their families), CHAMPUS (healthcare for dependents and spouses of veterans who are permanently disabled by a service-connected condition, and for spouses

of veterans who died honorably in the line of duty) and sharing agreements (under a sharing authority that allows the VA to sell services to other health care providers and generate revenue). We considered the use of fee-basis care, which is limited only to veterans, to be an indicator of veteran status.

In contrast, IHS-NPIRS records unverified, self-reported veteran identification in its "Eligibility" variable, which codes other public (e.g., Medicare, VA) or private health care resources. If individuals were not listed as veterans in IHS-NPIRS, military experience was treated as unknown. We used verified data on veteran status from the VHA as the standard for comparison.

## RESULTS

We identified a total of 37 441 IHS enrollees in VHA records. We excluded 271 records (0.7%), because treatment dates or reports were not in the fiscal years 2002 or 2003. The final sample was composed of 37 170 American Indian and Alaska Native IHS enrollees who received VHA care during the target period.

Significant differences were found in how each system identified veterans. Among IHS enrollees who used VHA facilities, the VHA-NPCD identified 32 259 veterans (Table 1). IHS-NPIRS identified 44% of these enrollees as veterans. IHS-NPIRS identified an additional 368 enrollees as veterans that VHA-NPCD classified as nonveterans (i.e., 55% sharing agreements, 21% VHA employees, 9% other federal employees).

## DISCUSSION

Less than half of IHS self-reported records matched VHA data on verified military experience. Veterans are significantly underrepresented in IHS-NPIRS. The inability to identify veterans within its service population limits IHS providers' treatment options, including referrals to VHA for specialized services and programs. Likewise, VHA is limited in its ability to develop strategic partnerships with IHS as a community provider. The underestimation of the veteran population may undermine strategic planning between VHA and IHS and hinder efforts to share resources,

**TABLE 1—Agreement on Veteran Identity of Indian Health Service (IHS) Enrollees in IHS National Patient Information Reporting System and Veterans Health Administration (VHA) National Patient Care Database for VHA Users: Fiscal Years 2002 and 2003**

IHS-NPIRS Category	VHA-NPCD Category		Total n
	Veteran <sup>a</sup> n (% of Total)	Nonveteran <sup>a</sup> n (% of Total)	
Veteran <sup>b</sup>	14 250 (44%)	368 (7%)	14 618
Unknown <sup>b</sup>	18 009 (56%)	4543 (93%)	22 552
Total	32 259 (100%)	4911 (100%)	37 170

Note. IHS-NPIRS=Indian Health Service's National Patient Information Reporting System; VHA-NPCD=Veterans Health Administration's National Patient Care Database. <sup>a</sup>As determined by VHA-NPCD outpatient data coded within the "Eligibility" variable, VHA-NPCD inpatient data coded within the "Means" variable, or the use of fee-basis care as an indicator of verified military experience. <sup>b</sup>As determined by IHS-NPIRS outpatient and inpatient data coded within the "Eligibility" variable.

target programs, coordinate care, and appropriately exchange information.

Our analysis was limited to the identification of veterans among IHS-NPIRS enrollees who used VHA care; enrollees in IHS urban programs are not included. False-positive veteran status in IHS-NPIRS may indicate problems common to administrative data, such as errors in data collection or data entry; veterans who return to active duty are reclassified as nonveterans in VHA-NPCD. Some veterans in IHS-NPIRS may be ineligible for VHA care on the basis of their military discharge status. Our results are limited to enumerating veterans in these federal administrative data and do not indicate access factors or the extent of care provided to American Indian and Alaska Native veterans.

For the first time, we now know that more than half (56%) of veterans who are IHS enrollees are not identified in IHS-NPIRS data. Both VHA and IHS rely on this information to improve coordination and resource sharing for this vulnerable population. Identifying veterans among IHS enrollees is a critical step to realizing strategic initiatives for coordination between VHA and IHS. We recommend a focused campaign to improve identification and coding of veterans among IHS users. VHA should consider adding a new VHA-NPCD

data variable to identify dual-eligible IHS users. Sharing information and actively collaborating are key elements to improving the quality of federal health care systems. Plans for improved coordination should include the identification of mutual beneficiaries in electronic health records as well as in administrative data. ■

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### Contributors

B.J. Kramer originated the study, supervised all aspects of its implementation, led the analysis, and wrote the article. M. Wang linked and merged administrative data, and created the de-identified record for this analysis. J.O. Harker was responsible for data cleaning and management of the de-identified data set. T. Hoang reviewed statistical analyses and assisted in interpretation of data. B. Finke and M.D. Saliba contributed to the policy analysis from the perspectives of IHS and VHA, respectively.

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### Human Participant Protection

This project was approved by the Veteran Affairs Greater Los Angeles Healthcare System institutional review board.

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