

Veterans Using and Uninsured Veterans Not Using Veterans Affairs (VA) Health Care

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SYNOPSIS

Objectives. The objectives of this study were to: (1) examine veteran reliance on health services provided by the Veterans Health Administration (VA), (2) describe the characteristics of veterans who receive VA care, and (3) report rates of uninsurance among veterans and characteristics of uninsured veterans.

Methods. The authors analyzed data from the 2000 Behavioral Risk Factor Surveillance System. Using bivariate and multivariate analyses, the association of veteran's demographic characteristics, health insurance coverage, and use of VA services were examined. Veterans not reporting VA coverage and having no other source of health insurance were considered uninsured.

Results. Among veteran respondents, 6.2% reported receiving all of their health care at the VA, 6.9% reported receiving some of their health care at the VA, and 86.9% did not use VA health care. Poor, less-educated, and minority veterans were more likely to receive all of their health care at the VA. Veterans younger than age 65 who utilized the VA for all of their health care also reported coverage with either private insurance (42.6%) or Medicare (36.3%). Of the veterans younger than age 65, 8.6% (population estimate: 1.3 million individuals) were uninsured. Uninsured veterans were less likely to be able to afford a doctor or see a doctor within the last year.

Conclusions. Veterans who utilized the VA for all of their health care were more likely to be from disadvantaged groups. A large number of veterans who could use VA services were uninsured. They should be targeted for VA enrollment given the detrimental clinical effects of being uninsured.

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The number of uninsured Americans continues to grow: an estimated 45 million Americans or 15.6% of the population lacked health insurance in 2003.¹ If these numbers continue to increase, reliance on public sector health care facilities, including the Veterans Health Administration (VA), may also rise. The VA is one of the largest integrated health care systems in the United States. Historically, entry into the VA was based on military service-related medical conditions, disability, or financial need.² Although eligibility reforms from 1996 to 2002 opened enrollment to veteran populations not previously eligible for VA care, VA suspended new enrollment in 2003 for higher income veterans who were assigned to the lowest priority group.³ Previous studies suggest that some veterans who are uninsured do not seek VA care despite eligibility for VA coverage.⁴⁻⁶

Although veterans can receive VA and non-VA health care in both outpatient and inpatient settings,⁷⁻¹¹ the VA data systems capture primarily the encounters and outcomes occurring within the VA system. The extent of use of other health care coverage among veterans is of interest but has been difficult to quantify, particularly among veterans younger than 65 years of age. The purpose of this study is to describe the proportion and sociodemographic characteristics of veterans who currently receive either all or some of their health care through the Department of Veterans Affairs compared with veterans who do not use the VA. We will also describe other sources of health care coverage for veterans, including veterans who report no health insurance and no use of VA services, and characterize these uninsured veterans. Our study provides new national data on sources of care for our nation's veterans. The 2000 Behavioral Risk Factor Surveillance System is a unique source of data that provides national estimates of the characteristic of veterans who utilize VA services, information about dual use of health care services with other systems, and rates of uninsurance among veterans.

METHODS

Data source

We analyzed data from the 2000 Behavioral Risk Factor Surveillance System (BRFSS), a cross-sectional telephone survey of the civilian, non-institutionalized, adult population older than 18 years of age. The survey is conducted annually by the Centers for Disease Control and Prevention (CDC) in collaboration with health departments from all 50 states, the District of Columbia, Guam, and Puerto Rico. The 2000 BRFSS questionnaire is unique as it contains both veterans'

questions and other sources of health care coverage as core questions for all survey respondents. This is the only year that both these veteran and health care services questions were asked on the BRFSS.

The survey selects state-specific probability samples of households using a multistage-cluster design to produce a nationally representative sample that allows for reporting of accurate population estimates. The BRFSS uses random-digit dialing within blocks of telephone numbers to identify a probability sample of households with telephones in each state. In each household, one adult older than age 18 is randomly identified and interviewed. Each respondent is assigned a final sampling weight based on (1) his or her probability of selection, and (2) a post-stratification factor to assure that the age and race distribution of the weighted sample agrees with population estimates from the U.S. Census Bureau. Adults living in institutions such as nursing homes, prisons, or college dormitories are not eligible to be interviewed. The cooperation rate for the 2000 BRFSS was 53.2%.¹² A more detailed description of the survey has been published and is available from the CDC.¹³ BRFSS data are in the public domain and this study was granted an exemption from review by the Institutional Review Board of the University of Washington.

Study population

A total of 184,450 individuals were interviewed for the 2000 BRFSS. All respondents were asked, "Have you ever served on active duty in the United States Armed Forces?" Fifteen percent of respondents ($n=26,265$) answered affirmatively. Individuals who were not currently in active military service ($n=23,880$) were included in our study cohort. To assess use of VA health care facilities, all veterans were asked, "In the past 12 months, have you received some or all of your health care from VA facilities?" (responses: none, some, all). Less than 1% of the veterans ($n=83$) were either not sure or refused to answer this question and were excluded from the analysis. Our total study population consisted of 23,797 veterans.

Study variables

To determine health insurance coverage, respondents were asked, "Do you have any kind of health care coverage, including health insurance, prepaid plans such as HMOs, or governmental plans such as Medicare?" Respondents who reported no health insurance coverage at the time of the survey were considered to be uninsured. Self-reported demographic information included age, gender, race/ethnicity, educational level, and annual income. Individuals were asked the

length of time since their last physician visit and if they could not afford to see a physician within the past year. Respondents were asked to rate their health status as excellent, very good, good, fair, or poor. To determine disability days due to both physical and mental illness, respondents were asked, "Now thinking about your physical health, which includes physical illness and injury, for how many days during the past 30 days was your physical health not good?" and, "Now thinking about your mental health, which includes stress, depression, and problems with emotions, for how many days during the past 30 days was your mental health not good?" Responses were combined to assess the number of days of disability due to either physical or mental health factors (<8 days or ≥8 days per month).¹⁴ Current tobacco use was also assessed.

Data analysis

We performed bivariate and multivariate logistic regression analyses to determine the relationship between sociodemographic characteristics and receiving care at the VA. All analyses took into account the complex

survey design and weighted sampling probabilities and were performed using SUDAAN software.¹⁵ Using bivariate analysis to calculate proportions and 95% confidence intervals, differences in socioeconomic characteristics, health status, and health care access were calculated by use of VA services among veterans. We performed logistic regression analysis, controlling for age, gender, race/ethnicity, education, and annual income to assess the independent association of sociodemographic characteristics and receiving all care at the VA. For all of these variables except income, data was missing for less than 1% of individuals. We performed a stratified analysis by age greater or less than 65 years by type of health care coverage reported by veterans, use of VA services, and rates of uninsurance.

RESULTS

Table 1 displays the population characteristics and use of VA services for veterans in the U.S. Six percent (population estimate: 1.7 million) report receiving

Table 1. Use of VA health care by sociodemographic characteristics, access to care, and health status

		Veteran	All VA care	Some VA care	No VA care	
Population estimate		27,961,526	1,712,245	1,927,510	24,210,527	
Survey sample size (percent)		23,797	1,647 (6.2)	1,744 (6.9)	20,406 (86.9)	
		Percent	Percent	Percent	Percent	
Age (years)	18–45	23.3	21.7	22.1	23.5	$\chi^2 p<0.001$
	46–64	40.3	42.3	31.2	40.9	
	65 and older	36.4	36.0	46.7	35.6	
Female		5.5	6.3	5.5	5.5	
Male		94.5	93.7	94.5	94.5	
Race/ ethnicity	White	84.0	73.8	75.4	85.4	$\chi^2 p<0.001$
	Black	7.9	15.4	12.7	7.0	
	Hispanic	5.4	8.0	9.1	5.0	
	Other	2.7	2.8	2.8	2.7	
Education	Less than high school	8.3	15.7	12.9	7.4	$\chi^2 p<0.001$
	High school	30.5	36.8	30.8	30.1	
	College 1–3 years	30.9	33.8	30.4	30.7	
	College 4 years	30.3	13.7	26.0	31.8	
Annual income ^a	<\$15,000	7.3	22.7	14.1	5.7	$\chi^2 p<0.001$
	\$15,000–\$35,000	32.7	48.0	45.2	30.7	
	>\$35,000	60.0	29.3	40.7	63.6	
>1 year since last MD visit		24.5	15.3	14.8	26.0	$\chi^2 p<0.001$
Could not afford an MD/past year		6.5	10.5	11.4	5.8	$\chi^2 p<0.001$
Fair or poor health status		18.4	37.0	32.8	15.9	$\chi^2 p<0.001$
>8 disability days per month		8.4	19.3	18.2	6.8	$\chi^2 p<0.001$
Smoker		23.1	33.6	22.2	22.4	$\chi^2 p<0.001$

NOTE: Column totals may vary due to missing data or rounding error.

^aData available for $n=20,966$

all of their health care at the VA, an additional 6.9% (population estimate: 1.9 million) report receiving some of their health care at the VA, and the majority of veterans (population estimate: 24 million) report receiving no health care at the VA. In bivariate analysis, veteran use of VA health care differed by age, race/ethnicity, education, and income. Individuals who self-identified as African American or Hispanic, had less than a high school education, and had low incomes were more likely to report receiving all of their care at the VA. These differences were also noted in multivariate analysis controlling for all sociodemographic characteristics (Table 2). The multivariate estimates did not change when insurance status was included as a dichotomous variable in the multivariate model (data not shown). Veterans who did not use VA care were more likely to report no physician visit in the last year, but less likely to report problems affording a physician (Table 1). Veterans who used the VA for all of their health care were more likely to report fair or poor health and more than eight days a month of disability due to poor physical or mental health compared to those who did not use the VA for care.

The vast majority of all veterans older than age 65 reported Medicare coverage (data not shown). Five percent of veterans older than age of 65 received VA care exclusively, and 8.8% of veterans older than 65 used some VA care (data not shown). Of veterans younger

than age 65, 83.2% who did not use the VA for health care were covered by private insurance (Table 3). Of those who received some care at the VA, the majority (67.3%) were also covered by private insurance, with 21.4% reporting dual coverage with Medicare. The majority of non-elderly individuals receiving Medicare are disabled. By self-report, 13.9% of veterans who used the VA exclusively and 8.6% who report using some VA care indicate that they have no other form of health insurance.

Of the veterans younger than age 65, 8.6% (population estimate: 1.3 million individuals) who did not use the VA for health care reported being uninsured. Table 4 displays characteristics of these uninsured veterans compared with veterans who use the VA or have other health insurance. Uninsured veterans were more likely to be young, female, from minority populations, have less education, and report lower incomes than veterans who reported using the VA or who had other forms of health insurance coverage. Almost 60% of this population of uninsured veterans who did not use the VA reported no routine medical visit in the past year, compared with 22.5% of veterans with health care coverage. Uninsured veterans were also much more likely to report not being able to afford a doctor in the past year. Although uninsured veterans were more likely to report better health status and fewer disability days per month, they were also more likely to be smokers.

Table 2. Multivariate logistic regression associations for veterans receiving all health care at the VA

		OR	95% CI	p
Age (years)	18–45	1.0	Reference	<0.05
	46–64	1.3	1.0, 1.8	
	65 and older	0.9	0.7, 1.2	
Female		1.0	0.7, 1.5	
Male		1.0	Reference	
Race/ethnicity	White	1.0	Reference	<0.001
	Black	1.8	1.3, 2.4	
	Hispanic	1.3	0.8, 2.2	
	Other	1.0	0.7, 1.7	
Education	Less than high school	2.4	1.6, 3.4	<0.001
	High school	1.6	1.2, 2.1	<0.05
	College 1–3 years	1.8	1.4, 2.3	<0.001
	College 4 years	1.0	Reference	
Annual income	<\$15,000	6.3	4.6, 8.7	<0.001
	\$15,000–\$35,000	2.9	2.3, 3.8	<0.001
	>\$35,000	1.0	Reference	

NOTE: OR >1 more likely to receive all care at the VA compared to those who received some or none of their care at the VA, controlling for all listed covariates.

OR = odds ratio

CI = confidence interval

Table 3. Type of health care coverage by receipt of care at the VA among veterans younger than 65 years of age (n=13,939)

	<i>Received all care at the VA</i>	<i>Received some care at the VA</i>	<i>Did not use the VA</i>
Population estimate	439,567	749,717	14,847,718
Sample size (percent)	435 (2.7)	669 (4.7)	12,835 (92.6)
	<i>Percent</i>	<i>Percent</i>	<i>Percent</i>
Private insurance	42.6	67.3	83.2
Medicare	36.3	21.4	5.2
Medicaid or IHS	1.8	1.3	1.3
Other insurance	5.4	1.4	1.7
No insurance	13.8	8.6	8.6

NOTE: Column totals may vary due to missing data or rounding error.

 χ^2 $p < 0.001$

DISCUSSION

Our analysis of the BRFSS data shows that the majority of veterans did not use the VA for health care during the study period, including many veterans younger than age 65 who report having no other form of health care coverage. Our estimates regarding uninsured veterans are similar to those obtained from the Current Population Survey (CPS), the primary health insurance data collection instrument for the Census Bureau, for veteran enrollees younger than age 65 who report no other form of health care coverage.^{4,16} In the 2000 CPS, 1.6 million veterans reported being without any health insurance coverage during the entire calendar year.⁶ Rates of uninsurance were also similar to those reported in a Minnesota survey of veterans.⁵ In our study, uninsured veterans were younger, less educated, had lower incomes, and were more likely to be smokers than veterans who reported some type of health care coverage. These veterans also reported less access to health care with significantly fewer physician visits and more problems with not being able to afford a doctor.

Many uninsured veterans may not realize they are eligible for VA care. Many delay or avoid seeking medical care for a variety of reasons, including that younger, recently discharged male veterans, like others in their age cohort, have lower health care utilization in general. Transient or homeless veterans may have difficulty accessing the VA system and providing the needed contact information. VA facilities have not always been convenient to veterans needing health care services; however, since 1995 the VA has restructured to make services more widely available. Now more than 800 community-based outpatient clinics have opened across the U.S. to improve access to primary

care for veterans.¹⁷ These clinics have attracted many new VA users and have further supported the VA-wide shift from inpatient care to outpatient primary care.¹⁸ Although eligibility reforms opened up enrollment from 1996 to 2002, restrictions were implemented in 2003 to suspend enrollment of lower priority, higher income veterans who had no service-related illnesses. Thus, some veterans may not be currently eligible for VA care.³

Veterans who used the VA for all of their health care were more likely to be from poor, less educated, and minority populations, and were more likely to report fair or poor health and more disability days. Our results are consistent with previous reports about poor health status among veterans who use VA care.^{19,20} We also found that a significant number of veterans report the use of the VA services in addition to other types of health care coverage. Dual users older than 65 years of age have Medicare coverage compared with those younger than 65 who report coverage with private health insurance, with a smaller percentage also covered by Medicare. Individuals younger than age 65 who are covered by Medicare are primarily disabled, underscoring the high level of disability within the veteran population. Two federally funded programs, Medicare and VA, cover the majority of veterans older than age 65.

Among veterans younger than age 65 who received all of their care from VA, 43% had private health insurance. These findings are consistent with previous studies documenting dual coverage of Medicare beneficiaries in managed care HMOs and VA²¹ and use of Medicare hospitals by veterans for cardiac disease.¹⁰ Use of more than one source of primary care has also been described, especially among veterans with other forms of health insurance.⁸ Many VA users have other forms

Table 4. Characteristics of uninsured veterans compared with veterans with insurance or who use VA care

		Uninsured veterans	Veterans with insurance or who use VA care	
Population estimate		1,324,040	25,877,256	
Sample size		1,216	20,953	
		Percent	Percent	
Age (years)	18–45	55.9	21.3	χ^2 $p < 0.001$
	46–64	41.2	39.7	
	65+	2.9	39.0	
Female		8.7	5.2	χ^2 $p < 0.05$
Male		91.3	94.8	
Race/ ethnicity	White	78.1	84.3	χ^2 $p < 0.05$
	Black	10.0	7.8	
	Hispanic	9.4	5.3	
	Other	2.5	2.6	
Education	Less than high school	8.6	8.4	χ^2 $p < 0.001$
	High school	40.5	30.1	
	College 1–3 years	31.6	30.8	
	College 4 years	19.3	30.7	
Income	<\$15,000	16.0	6.9	χ^2 $p < 0.001$
	\$15,000–\$34,999	54.5	31.8	
	≥\$35,000	29.5	61.3	
>1 year since last MD visit		59.7	22.5	χ^2 $p < 0.001$
Could not afford an MD in past year		36.7	4.8	χ^2 $p < 0.001$
Health status	Excellent	22.6	18.5	χ^2 $p < 0.05$
	Very good	33.1	31.4	
	Good	30.1	31.3	
	Fair	11.0	13.2	
	Poor	3.2	5.6	
>8 disability days per month		6.4	8.6	χ^2 $p < 0.05$
Smoker		48.5	21.6	χ^2 $p < 0.001$

NOTE: Column totals may vary due to missing data or rounding error.

of health insurance, and there may be unmeasured factors that shape preference for the VA, including the generous pharmacy benefit and low co-pays.

Demand for VA services may continue to rise as drug costs increase for the estimated eight million veterans who currently have Medicare and are not using their VA benefits. The number of new veterans eligible for services is projected to peak in the mid-2010s as Vietnam-era veterans turn 65.⁹ Currently, one quarter of the nation's 40 million Medicare beneficiaries have no prescription drug coverage²² and another third have inadequate coverage.²³ Previous studies suggest that concern over drug costs in the private sector was one of the main reasons veterans transferred their health care to the VA system, which has a generous pharmacy benefit.²⁴ New Medicare provisions for prescription drug coverage may impact demand for VA services, although this effect is not known. Coverage varies by

plan and preliminary reports indicate that this benefit is not as straightforward or inexpensive as previously envisioned.²⁵

Although multiple forms of health care coverage have the potential to provide more options for veterans, continuity of care, health care planning, and financial and clinical accountability may be sacrificed.²⁶ Other programs may cover services provided by the VA, an especially important consideration given increasing demands and enrollment for VA clinical services.²⁶ The VA has implemented efforts to collect from private insurers for services provided to non-service connected veterans. In addition, the VA and the Department of Health and Human Services are currently investigating mechanisms for low priority veterans to use their Medicare benefit at the VA. This may be advantageous for both systems, as previous studies suggest that VA care is significantly less expensive than similar care

provided by fee-for-service Medicare²⁷ and may be of higher quality.¹⁸

Our study has several limitations. Suboptimal response rate may limit the generalizability of our results. The survey does not include adults living in households without telephones, who represent about 5% of the U.S. population and are more likely to be poor, non-white, and residents of the South.¹³ Because these populations are much more likely to be uninsured, we may have underestimated the proportion of individuals with no insurance. The survey measures health insurance at one point in time only, which may not accurately reflect the insurance status of those with short uninsured time periods throughout the year.²⁸ In addition, the BRFSS survey did not assess if veterans were enrolled in the VA system but not using care and did not assess the intensity of VA health care usage. All data were obtained by self-report and are subject to recall and other biases. However, we believe that reporting on the use of VA health services is fairly accurate, as our estimates of the number of VA users are similar to actual enrollment data collected by the Office of Policy and Planning at the VA.²⁹

As the U.S. looks for strategies to reduce the existing number of uninsured, expanding existing federal programs is one possible solution. Although our study suggests that the Department of Veterans Affairs provides services to individuals from disadvantaged groups including veterans from poor, less educated, and minority populations, a significant number of veterans remain uninsured. The large number of uninsured veterans who report not using VA services should be a target population for VA recruitment and enrollment efforts, especially given increasing evidence on the detrimental clinical effects of not having health insurance.^{30–32} Health care and preventive practices are indicated to minimize future morbidity among our uninsured veterans.

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