

Gender Differences in Newly Separated Veterans' Use of Healthcare

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The United States' post-9/11 operations in the Middle East have greatly affected well-being among US service members, including women veterans—who now comprise 1 in 6 post-9/11 veterans. Depression, anxiety, and posttraumatic stress disorder (PTSD), as well as pain from physically demanding deployments, drive veterans to seek healthcare.¹ Upon separation from the military, most are eligible for care in the Veterans Health Administration (VHA) for 5 years per the National Defense Authorization Act of 2008. VHA healthcare, formerly dominated by Vietnam-era or older male veterans, has increasingly needed to adapt to younger patients and to women's healthcare needs.²

Barriers to healthcare include cost, transportation, stigma, and intra- and interpersonal factors.³⁻⁶ Veterans may undervalue seeking help for problems, feel that help-seeking is counter to their military cultural values, or distrust the healthcare system.^{7,8} The VHA seeks to improve access by increasing options for VHA-paid care in community settings through the highly publicized Veterans Choice Program (VCP) and increased capacity for women's healthcare.⁹ Congress enacted the Veterans Access, Choice, and Accountability Act of 2014 to improve access to VHA-mediated care, making it easier for veterans to get appointments through the VHA, with providers outside the VHA, paid for by the VHA. Although the precipitous rollout of Veterans Choice has not been trouble-free,¹⁰ VCP is widely used.

Women's transition into civilian life has specific features. Villagran et al found that less use of healthcare correlated with declines in health during women's transition out of the military.¹¹ Another study of 283 post-9/11 veterans reported high rates of psychosocial risk factors among the women.¹² VHA data from 5 million veterans connected psychosocial factors and Gulf War service with obesity for both genders.^{13,14} The purpose of this study was to examine gender differences in the use of VHA and non-VHA health services during the first 15 months of the transition from military to civilian life.

MATERIALS AND METHODS

This study was approved by the institutional review boards at VA Boston Healthcare System for the mailed outreach and at

ABSTRACT

OBJECTIVES: The Veterans Health Administration (VHA) is adapting to a new model of care in the wake of the Veterans Choice Act of 2014. A longitudinal study, The Veterans Metrics Initiative, captured multiple domains of psychosocial health and healthcare use as veterans moved through the first 15 months of transition from military to civilian life. This study examined gender differences and clinical, social, and lifestyle correlates in healthcare use.

STUDY DESIGN: The multiwave web-based survey collected self-reported measures from a national sample of newly separated military veterans.

METHODS: Multivariable analysis weighted to represent the sampling frame and account for attrition at follow-up examined the association between gender and self-reported healthcare utilization overall and in the VHA.

RESULTS: In fall 2016, veterans within approximately 90 days post military separation provided baseline data and completed a follow-up survey a year later, representing a cohort of 49,865. Sleep problems, anxiety, and depression were associated with healthcare use for both men and women following transition. Women were twice as likely as men to use healthcare in general but equally likely to use VHA care. For women veterans, unstable housing at separation was associated with less healthcare use a year later, especially for the subgroup with mental/behavioral health issues.

CONCLUSIONS: US veterans separating from military service need expert care, both in the VHA and elsewhere, for anxiety, depression, and sleep disturbance. Women veterans may be underserved by the VHA and may benefit from housing assistance programs to enable ongoing healthcare use.

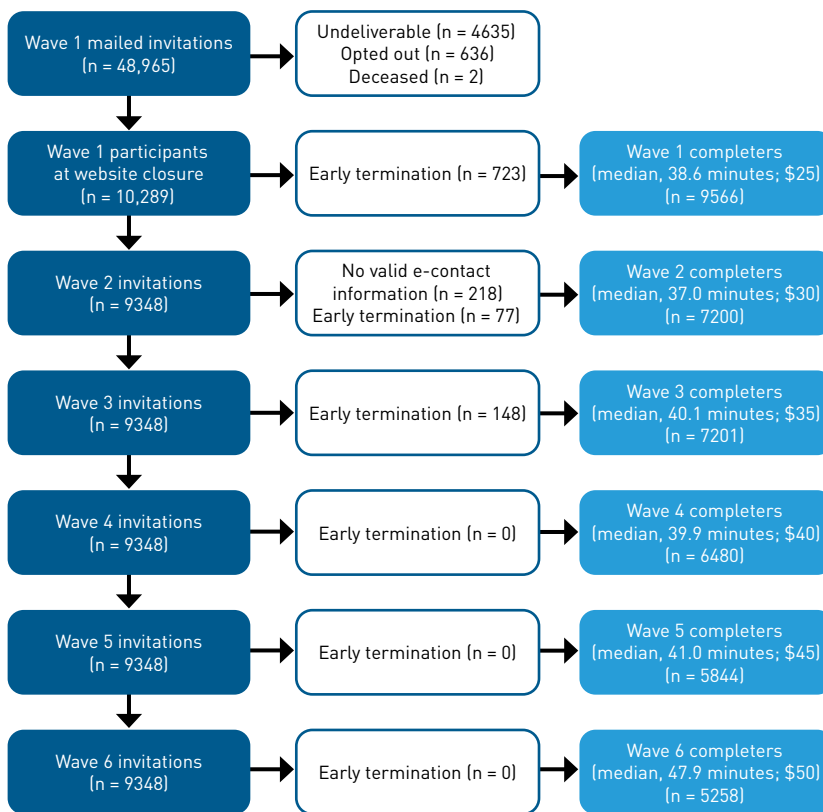
Am J Manag Care. 2020;26(3):97-104. doi: 10.37765/ajmc.2020.42633

TAKEAWAY POINTS

The Veterans Health Administration (VHA) may need to further enhance how care is provided to women veterans to attract them to VHA services. Women veterans appeared to reduce healthcare use when they had concerns about losing their housing. The VHA may need to make housing assistance programs more well-known or widespread.

- ▶ Women veterans' healthcare is likely to involve non-VHA care.
- ▶ The coordination of care management must be possible across healthcare systems.
- ▶ Evidence-based therapy training should be available to non-VHA and VHA providers alike.

FIGURE. Flow Chart of the TVMI Survey Cohort



TVMI indicates The Veterans Metrics Initiative.

ICF International (Fairfax, Virginia) for the survey processes. Veterans separating from active-duty military service (including Reserve/National Guard activated 180 days or more) in fall 2016 were identified through the VHA/Department of Defense Identity Repository and invited by a letter, with \$5 cash enclosed, to access a web-based survey managed by ICF. The baseline survey closed when incentive funds were exhausted. Of 48,965 veterans invited, 9566 self-enrolled, completed the survey, and received \$20 gift cards. In November 2017, all baseline participants were invited to respond to a follow-up survey (\$35 incentive); the survey closed

when incentive funds were depleted (n = 7201) (Figure). Weights adjusting for nonresponse relative to the sampling frame were generated based on gender, rank/pay grade, and branch, and for differential dropout at follow-up.

The primary aims of the parent study are to examine trajectories of well-being during the transition period, identify veteran-utilized transition and reintegration programs, decompose programs into their common components, and analyze the association of program components with trajectories of well-being.¹⁵ The 6-wave longitudinal study collects data semiannually (2016-2019), and coding to identify common program components is underway. Program characterization and decomposition takes many months, after which the primary aims may be addressed. Secondary analyses such as this one permit investigation into the veterans' transition process as it unfolds.

Measures

Veterans reported age, gender, race/ethnicity, marital status (married or living with a domestic partner, single, divorced, widowed), parental status, and single-parent status.

The survey asked about healthcare use. For baseline, the look-back period was since separation from the military, about 90 days. At follow-up, the look-back period was 6 months. Items asked about use of any kind of healthcare, use of the VCP, use of VHA hospitals, and use of VHA clinics; these last 2 questions were combined to measure any VHA care. The utilization measures had an ordinal response scale ranging from 0 (never) to 5 (≥4 times a week), which was collapsed to indicate none versus any.

Respondents reported whether they were working, looking for work, or in school and whether they were concerned that their housing situation was unstable. Social support was assessed by the Medical Outcomes Study

Social Support scale, which has demonstrated good psychometrics; the 8 ordinal-response items queried how often various kinds of support were available from relatives and friends.¹⁶ Problems with sleep quality were assessed by endorsing "sleep problem or disorder" as one of their "ongoing physical or mental/emotional health conditions, illnesses, or disabilities" or reporting they "had gotten quality sleep" never/rarely/sometimes as opposed to often/most or all of the time. Veterans completed scales to assess probable depression per the Patient Health Questionnaire,¹⁷ probable anxiety per the Generalized Anxiety Disorder core measure,¹⁸ and PTSD.

Veterans who endorsed experiencing a traumatic event were given the 5-item Primary Care PTSD Screen for DSM-5 assessing symptoms experienced in the past month. Respondents were considered positive for PTSD if they scored 3 or more, a level associated with PTSD based on diagnostic interview.¹⁹ Respondents reporting no traumas were considered negative for PTSD.

Among behavioral risk factors, veterans reported tobacco use at least sometimes versus never or rarely. Binge drinking was indicated as drinking 5 or more drinks for men or 4 or more for women, at least once a month.²⁰ Some measures were not collected at baseline to minimize respondent burden. Therefore, obesity was measured by self-reported height and weight collected at an interim follow-up 6 months post baseline with a retrospective request for "weight when you left the military." Body mass index was calculated and categorized as underweight (15-18.4), normal (18.5-24.9), overweight (25-29.9), or obese (≥ 30).

Use of licit and illicit opioids was added to the 1-year follow-up. One question asked how often the veteran "used an opioid painkiller (such as [10 common brand names were specified]) prescribed for you for your daily use." Response options were not at all, 1 to 30 days, 31 to 60 days, 61 to 90 days, and more than 90 days. A second question asked how often the veteran "used an opioid painkiller (such as ...) without a prescription of your own," with response options of not at all, 1 or 2 times, 3 to 12 times, 13 to 36 times, and more than 36 times. Responses were combined to indicate any use of opioids in the past 6 months.

An indicator of having suicidal ideation, binge alcohol drinking, or probable PTSD, anxiety, or depression identified the subgroup with mental and behavioral health problems, to permit examination of those who might be expected to seek care.

Analysis Plan

Weighted descriptive statistics described veterans in the sampling frame. Bivariate associations were assessed by Rao-Scott χ^2 or correlation coefficient for baseline descriptives and post hoc comparisons of transition issues. Baseline predictors were entered into logistic regression models of baseline or follow-up healthcare utilization using SAS PROC SURVEYLOGISTIC (SAS Inc; Cary, North Carolina) and the keyword DOMAIN to generate 3 models: total sample including gender as an independent variable, men only, and women only. Factors included age (in decades), gender, race (African American, white, other nonwhite), Hispanic, married/partnered, single parent, Army versus other branch, officer versus warrant officer or enlisted, looking for work, working now, in school now, unstable housing, probable anxiety, probable depression, binge drinking, obesity at separation, and tobacco use. The subgroup with mental or behavioral health problems was analyzed in separate models. Effects were estimated as odds ratios (ORs) with 95% confidence limits (CLs), focusing on ORs of 2:3 or smaller (or 3:2 or larger), approximately equivalent to a correlation of 0.10. ORs less than 2:3 (or >3:2) suggest a medium effect, and those greater than 2 (2:1) or smaller than 0.5 (1:2) denote a large effect.²¹ Post hoc stepped-down Bonferroni estimates

adjusted for multiple comparisons. Data were weighted up to the original sampling frame unless otherwise specified.

RESULTS

After applying study weights, 16% of the veterans newly separated in fall 2016 were women. Women veterans were more likely to be African American compared with men (23% vs 12%; $\chi^2 = 91.87$; $P < .0001$) (Table 1; eAppendix Table [eAppendix available at [ajmc.com](#)]). They were less likely to be Marines or special operatives. Women were somewhat more likely to respond to the invitation to participate in the survey study (unweighted, 18% of responders).

Women were less likely to be married and more likely to be single, divorced, or widowed at baseline. Women were a bit less likely to be parents but twice as likely to be single parents. Unstable housing was similar across genders (10% vs 12%; $\chi^2 = 3.9$; $P = .05$). Women self-reported slightly lower mean levels of social support than men. Lifestyle factors differed by gender: Women were less likely than men to be obese (15% vs 20%; $\chi^2 = 17.5$; $P < .0001$), use tobacco (13% vs 27%; $\chi^2 = 88.4$; $P < .0001$), or binge drink (11% vs 20%; $\chi^2 = 47.1$; $P < .0001$) but more likely to use opioids (13% vs 9% at follow-up; $\chi^2 = 14.9$; $P = .0001$).

Mental or physical problems were common. About two-thirds (65%) reported sleep problems, with similar rates across genders. Women screened positive modestly more often for probable depression (23% vs 18%; $\chi^2 = 13.6$; $P = .0002$) and anxiety (32% vs 26%; $\chi^2 = 14.1$; $P = .0002$).

Use of healthcare was reported by 60% of women versus 43% of men at baseline and 37% of women versus 26% of men at follow-up. Use of the VHA was reported by one-third of the cohort, but using VCP was uncommon (baseline, 6% each gender; follow-up, 11% of women vs 9% of men).

Multivariable Models of Any Healthcare Use

At baseline, women were twice as likely to use healthcare as men (OR, 2.15; 95% CL, 1.84-2.52) (Table 2). Other factors positively associated with healthcare use among all participants were older age (OR, 1.74 per decade; 95% CL, 1.62-1.87) and sleep problems (OR, 1.50; 95% CL, 1.31-1.71). There were no inverse correlates with meaningful effect size. Among men, age (OR, 1.85 per decade; 95% CL, 1.71-2.01) and sleep problems (OR, 1.47; 95% CL, 1.27-1.70) were significant factors. Among women, although sleep problems achieved a meaningful effect size (OR, 1.62; 95% CL, 1.19-2.20), the significance was lost after adjustment for multiple comparisons.

At 1-year follow-up, women used healthcare more than men (OR, 1.84; 95% CL, 1.57-2.14). Other positive correlates did not rise above the criterion of 3:2—married/partnered, officers, students, sleep problems, and probable depression. Among men, no correlates other than age had a criterion effect size. For women, healthcare use at follow-up was negatively associated with concern about unstable housing (OR, 0.53; 95% CL, 0.32-0.86), but the P value exceeded .05 after stepped-down Bonferroni adjustment.

TABLE 1. Characteristics of Veterans Newly Separated in Fall 2016 (N = 49,865)

	Men			Women			Total Cohort		
	n	SD	%	n	SD	%	n	SD	%
Age group in years									
18-29	20,519	336.8	51.6	4285	156.1	56.7	24,804	344.7	52.4
30-39	10,396	215.9	26.1	1946	92.8	25.7	12,342	225.5	26.1
40-49	6939	157.8	17.4	1015	63.4	13.4	7954	165.5	16.8
≥50	1912	91.2	4.8	311	35.5	4.1	2224	97.2	4.7
Race/ethnicity									
White non-Hispanic	28,119	337.2	68.3	4390	162.9	56.3	32,509	325.5	66.4
Minority race/ethnicity	13,050	316.1	31.7	3406	156.6	43.7	16,456	334.8	33.6
Service branch									
Army	13,754	293.5	33.5	2351	120.8	30.2	16,105	302.8	32.9
Navy	7440	240.2	18.1	1862	111.3	23.9	9302	257.4	19.0
Air Force	5377	167.8	13.1	1369	78.9	17.6	6746	179.8	13.8
Marines	7868	239.3	19.1	566	58.4	7.3	8434	243.7	17.3
Reserve/National Guard	6677	254.3	16.2	1628	128.8	20.9	8305	279.7	17.0
Rank									
Enlisted	34,932	379.1	84.9	6387	203.3	81.9	41,319	350.8	84.4
Officer	5759	161.4	14.0	1357	88.7	17.4	7116	178.2	14.5
Warrant	478	56.8	1.2	52	15.4	0.7	530	58.8	1.1
Marital status									
Never	10,585	309.0	25.7	2174	131.4	27.9	12,759	326.1	26.1
Married	26,752	321.5	65.0	4081	155.2	52.3	30,833	311.7	63.0
Divorced	3796	176.0	9.2	1517	103.1	19.5	5312	200.0	10.9
Widowed	20	12.1	0.0	24	10.1	0.3	44	15.8	0.1
Any healthcare use since separation									
No	23,314	363.0	56.9	3088	146.3	39.8	26,403	364.8	54.2
Yes	17,661	306.6	43.1	4668	170.9	60.2	22,329	316.6	45.8
VHA healthcare use since separation									
No	28,347	361.6	69.2	5447	188.2	70.0	33,794	350.9	69.3
Yes	12,637	282.9	30.8	2336	122.1	30.0	14,973	294.5	30.7
VCP healthcare use since separation									
No	38,402	340.4	94.1	7299	211.0	94.4	45,701	286.2	94.2
Yes	2393	143.1	5.9	434	51.8	5.6	2826	151.2	5.8

VCP indicates Veterans Choice Program; VHA, Veterans Health Administration.

In the subgroup with mental or behavioral health problems, women were more likely to use healthcare (OR, 1.88; 95% CL, 1.54-2.29). Among women (but not men) in this subgroup, unstable housing at baseline was again associated with less utilization. In the subgroup of employed veterans, women used less healthcare if they were concerned over their housing, whereas men did not. In the subgroup of veterans who were parents, single parenting was associated with less healthcare use for men, whereas housing instability was a risk factor for less healthcare use for women.

Among nonusers of any healthcare, gender differences in transition-related issues were minimal: Women were slightly less likely to network with military peers for a job (47% vs 52%) and more likely to move to a new place to live (17% vs 14%) or report

volunteer activities (29% vs 24%); there were no differences in unstable housing, VHA rating for service-connected disability, or use of transition programs for disabled veterans.

VHA Healthcare

At baseline, no appreciable gender difference was found (Table 3). Factors positively associated with VHA care—with each factor increasing odds by about 50%—were sleep problems, anxiety, and depression (OR range, 1.51-1.52; 95% CLs exclude 1). Among men, use of the VHA was positively associated with sleep problems, anxiety, and depression and negatively with being an officer. Among women, anxiety (OR, 2.04; 95% CL, 1.37-3.03) was associated with greater odds of using the VHA.

At follow-up, moderate positive effects of age, Army service, sleep problems, and anxiety were observed; associations with gender, African American race, obesity, looking for work, in school, and depression were statistically significant but small. For men, sleep problems and anxiety were associated with use of the VHA. For women, anxiety and depression had moderate effect sizes that did not survive adjustment for multiple comparisons. For those with mental/behavioral disorders, sleep problems were associated with use of the VHA (no effect of gender).

Veterans Choice Program

VCP use at baseline was associated with African American ethnicity (OR, 1.96; 95% CL, 1.44-2.68) (Table 4). Among men, the ethnicity effect persisted. For women, no appreciable effects were detected. Using VCP at follow-up was more common for those with sleep problems in the total sample (OR, 2.06; 95% CL, 1.59-2.67) and for those in school now (OR, 1.44; 95% CL, 1.17-1.76). Among men, positive correlates were sleep problems, school, and older age. For women, VCP use correlated modestly with age. There was insufficient use of VCP to support meaningful subgroup analysis.

DISCUSSION

Women veterans were twice as likely as men to use any healthcare immediately post military separation and 84% more likely than men to do so a year later, but use of the VHA was more gender-neutral, showing no effect at baseline and only a 22% increase for women relative to men at 1 year. This is unexpected because women tend to use healthcare more than men do.²² Veterans Choice can be invoked because of long wait times or distance from VHA clinics. Still, women's use of VHA-facilitated care through VCP was no different at baseline and only slightly greater than men's 1 year later. These findings together suggest that women are underusing the VHA and instead turning to non-VHA care, outside of the VHA's community care programs.

Female veterans with anxiety were more likely to use the VHA than women without anxiety. Male veterans' use of the VHA was associated with sleep problems, anxiety, and

TABLE 2. Factors Associated With Reporting Any Healthcare Use at Baseline and 1 Year Later*

	Total Cohort			Men			Women		
	OR	95% LCL	95% UCL	OR	95% LCL	95% UCL	OR	95% LCL	95% UCL
Any Healthcare: Baseline									
Age in decades	1.74	1.62	1.87	1.85	1.71	2.01	1.22	1.02	1.46
Female	2.15	1.84	2.52	-	-	-	-	-	-
Hispanic	0.94	0.79	1.12	0.93	0.77	1.13	1.00	0.68	1.47
African American	0.94	0.78	1.13	1.01	0.82	1.25	0.81	0.56	1.15
Other minority race	1.07	0.90	1.28	1.10	0.90	1.35	0.96	0.65	1.42
Married/partnered	1.22	1.03	1.44	1.15	0.94	1.39	1.29	0.91	1.85
Single parent	0.87	0.70	1.08	0.89	0.69	1.15	0.84	0.56	1.26
Army	1.14	1.01	1.29	1.18	1.03	1.35	0.96	0.72	1.29
Officer	0.97	0.83	1.13	0.94	0.79	1.11	1.23	0.83	1.83
Obese at separation	1.05	0.91	1.21	1.05	0.90	1.23	1.03	0.70	1.50
Nicotine dependence	1.05	0.91	1.21	1.10	0.95	1.28	0.72	0.48	1.09
Binge alcohol use	0.97	0.83	1.14	1.03	0.87	1.22	0.64	0.41	1.00
Social support score	1.00	0.99	1.00	1.00	0.99	1.01	0.98	0.97	1.00
Looking for work	1.04	0.92	1.19	1.03	0.89	1.20	1.08	0.81	1.43
In school	1.13	1.00	1.29	1.15	0.99	1.32	1.10	0.82	1.46
Unstable housing	0.90	0.73	1.10	0.94	0.75	1.17	0.78	0.49	1.24
Sleep problems	1.50	1.31	1.71	1.47	1.27	1.70	1.62	1.19	2.20
Anxiety screen positive	1.25	1.06	1.48	1.21	1.01	1.46	1.37	0.93	2.03
Depression screen positive	1.18	0.98	1.43	1.20	0.97	1.49	1.10	0.71	1.72
Any Healthcare: Follow-up									
Age in decades	1.41	1.31	1.51	1.49	1.38	1.61	1.07	0.90	1.27
Female	1.84	1.57	2.14	-	-	-	-	-	-
Hispanic	0.87	0.72	1.05	0.82	0.66	1.03	1.07	0.73	1.57
African American	0.77	0.63	0.93	0.77	0.61	0.97	0.77	0.54	1.09
Other minority race	0.94	0.78	1.14	0.99	0.80	1.24	0.72	0.48	1.07
Married/partnered	1.20	1.00	1.44	1.22	0.98	1.51	0.98	0.69	1.40
Single parent	0.84	0.67	1.05	0.73	0.55	0.98	1.08	0.72	1.62
Army	1.02	0.90	1.16	0.99	0.86	1.15	1.14	0.86	1.52
Officer	1.29	1.10	1.51	1.27	1.07	1.52	1.45	0.99	2.13
Obese at separation	1.01	0.86	1.17	1.01	0.85	1.20	0.98	0.68	1.42
Nicotine dependence	0.97	0.83	1.13	1.01	0.86	1.19	0.78	0.50	1.20
Binge alcohol use	1.02	0.86	1.20	1.07	0.90	1.28	0.81	0.51	1.28
Social support score	1.00	0.99	1.01	0.99	0.99	1.00	1.01	0.99	1.03
Looking for work	0.92	0.80	1.06	0.87	0.74	1.02	1.13	0.85	1.51
In school	1.20	1.04	1.37	1.25	1.07	1.46	1.05	0.79	1.39
Unstable housing	0.89	0.72	1.11	1.00	0.79	1.27	0.53	0.32	0.86
Sleep problems	1.17	1.02	1.35	1.15	0.98	1.35	1.24	0.91	1.68
Anxiety screen positive	1.11	0.93	1.33	1.12	0.91	1.36	1.08	0.75	1.55
Depression screen positive	1.27	1.04	1.55	1.24	0.99	1.56	1.44	0.95	2.17

LCL indicates lower confidence limit; OR, odds ratio; UCL, upper confidence limit.

*Results from multivariable logistic regression models.

CLINICAL

TABLE 3. Factors Associated With Reporting VHA Healthcare Use*

	Total Cohort			Men			Women		
	OR	95% LCL	95% UCL	OR	95% LCL	95% UCL	OR	95% LCL	95% UCL
VHA Healthcare: Baseline									
Age in decades	1.34	1.25	1.45	1.34	1.23	1.45	1.38	1.16	1.64
Female	0.88	0.75	1.04	–	–	–	–	–	–
Hispanic	1.16	0.97	1.39	1.10	0.90	1.34	1.55	1.04	2.31
African American	1.15	0.95	1.38	1.12	0.90	1.38	1.35	0.92	1.98
Other minority race	1.06	0.88	1.28	1.07	0.87	1.32	1.04	0.68	1.57
Married/partnered	0.90	0.75	1.08	0.91	0.74	1.11	0.90	0.62	1.29
Single parent	0.89	0.70	1.12	0.86	0.66	1.13	0.91	0.60	1.41
Army	1.57	1.38	1.78	1.56	1.36	1.79	1.56	1.16	2.11
Officer	0.68	0.58	0.81	0.68	0.57	0.82	0.69	0.46	1.06
Obese at separation	0.96	0.83	1.11	0.97	0.83	1.15	0.84	0.57	1.23
Nicotine dependence	0.94	0.81	1.10	0.97	0.82	1.14	0.75	0.46	1.21
Binge alcohol use	1.01	0.85	1.19	1.04	0.86	1.24	0.78	0.48	1.28
Social support score	1.00	0.99	1.01	1.00	0.99	1.01	1.00	0.99	1.02
Looking for work	1.29	1.13	1.48	1.29	1.11	1.51	1.28	0.95	1.73
In school	1.32	1.15	1.51	1.38	1.19	1.60	1.06	0.79	1.43
Unstable housing	0.96	0.78	1.17	0.95	0.76	1.19	1.00	0.61	1.64
Sleep problems	1.52	1.31	1.75	1.59	1.36	1.87	1.14	0.81	1.60
Anxiety screen positive	1.52	1.28	1.79	1.45	1.20	1.74	2.04	1.37	3.03
Depression screen positive	1.51	1.25	1.82	1.64	1.33	2.02	1.04	0.67	1.61
VHA Healthcare: Follow-up									
Age in decades	1.56	1.45	1.67	1.56	1.44	1.69	1.55	1.31	1.85
Female	1.22	1.04	1.42	–	–	–	–	–	–
Hispanic	1.20	1.00	1.43	1.18	0.96	1.44	1.31	0.88	1.96
African American	1.22	1.01	1.47	1.14	0.92	1.42	1.40	0.97	2.02
Other minority race	0.96	0.80	1.15	1.00	0.81	1.22	0.76	0.50	1.17
Married/partnered	0.86	0.72	1.03	0.89	0.73	1.09	0.77	0.53	1.10
Single parent	0.86	0.69	1.08	0.80	0.61	1.05	0.97	0.64	1.48
Army	1.52	1.34	1.72	1.46	1.27	1.68	1.84	1.38	2.47
Officer	0.66	0.56	0.78	0.68	0.56	0.81	0.60	0.40	0.89
Obese at separation	1.21	1.04	1.40	1.25	1.06	1.46	0.99	0.68	1.45
Nicotine dependence	1.00	0.86	1.16	1.03	0.88	1.21	0.75	0.49	1.15
Binge alcohol use	1.07	0.91	1.26	1.07	0.89	1.27	1.09	0.71	1.68
Social support score	1.00	0.99	1.00	0.99	0.99	1.00	1.01	0.99	1.03
Looking for work	1.28	1.12	1.47	1.25	1.08	1.46	1.42	1.06	1.91
In school	1.31	1.15	1.50	1.36	1.17	1.58	1.14	0.85	1.53
Unstable housing	0.97	0.79	1.18	0.94	0.75	1.17	1.13	0.69	1.84
Sleep problems	1.71	1.49	1.97	1.77	1.52	2.08	1.40	1.02	1.93
Anxiety screen positive	1.68	1.42	1.97	1.70	1.42	2.03	1.70	1.15	2.49
Depression screen positive	1.29	1.07	1.55	1.25	1.01	1.53	1.55	1.01	2.38

LCL indicates lower confidence limit; OR, odds ratio; UCL, upper confidence limit; VHA, Veterans Health Administration.

*Results from multivariable logistic regression models.

depression. These issues are frequently associated with service in US overseas operations in the Middle East, and demand for effective treatment of these problems plays a major role in the use of VHA resources and expansion of capacity through partnerships (eg, Cohen’s Veterans Network²³) and VCP. VHA offers evidence-based clinical practice guidelines for the treatment of depression, PTSD, and substance use disorders and has implemented leading-edge treatment modalities.^{24–29} Community providers are less likely than VHA mental health providers to be trained in evidence-based psychotherapies or to be experienced with postdeployment issues.³⁰ On the other hand, psychotherapists already providing care for PTSD reported being interested in joining the VCP network of care in the early days of VCP implementation; providers who were veterans were also interested in joining the VCP network.³¹ These community-based providers may be well-equipped and well-motivated to develop rapport with and provide high-quality care to veterans. Whether guideline-concordant care is provided outside the VHA remains to be investigated; one study of Texas providers found that less than half provided evidence-based psychotherapy to their patients with PTSD.³²

Interestingly, male veterans who were African American were more likely to use the VCP to access care immediately post military, relative to their white counterparts. This may be related to where they live and how convenient it is to access the VHA. Minority veterans may more commonly live farther away from VHA facilities or may tend to use very busy VHA facilities, leading to increased referral into the VCP. Alternatively, there may be intrapersonal or cultural reasons that are related to minority race/ethnicity for choosing to pursue the VCP when it is an option.

A moderate inverse association of tobacco use with seeking healthcare through the VCP at follow-up was noted for women veterans but failed the multiple comparisons adjustment. This weak signal deserves further consideration given smoking’s pervasive ill effects on health and because smoking may seem like a nonurgent health issue.³ VHA offers smoking cessation support at no cost, including free nicotine-replacement products, and VHA-mediated services (VCP) would also include these benefits.

Although men and women had equivalent concern about housing loss, only women with this concern showed reduced healthcare use; this correlation was observed a year post separation, most robustly among women with mental or behavioral health problems. The effect was not observed with respect to VHA care or VCP care. VHA outreach to women veterans could be tailored to highlight housing help available in the VHA, to help women address health issues when basic needs such as shelter are threatened.^{33,34} Possibly, the effect of unstable housing on women's healthcare use differs from that on men's because men either are more likely to engage with VHA's outreach to the homeless or have stronger networking capacity with fellow veterans.

Implications for Practice and/or Policy

Failure to use healthcare at 1-year follow-up was associated with housing concerns for women but not for men. This was true for subgroups with identified need for healthcare as well as for low-risk groups such as the employed. The implication is that transition services need to be gender-tailored for the 10% or 12% of veterans with unstable housing; this could be implemented via outreach in the first 15 months post separation. Sleep problems, depression, and anxiety remain drivers of healthcare use; whether expert treatment is provided in the community is unknown and should be assessed.

Limitations

All data were self-reported. The separating cohort in fall 2016 does not necessarily represent earlier cohorts. Measures such as distance from a healthcare facility were not analyzed. Results may be subject to type 1 error inflation due to multiple comparisons; the potential is mitigated by our focus on effect sizes. We also subjected *P* values from our 6 models to step-down Bonferroni adjustment processes; changes were noted for ORs with wide CIs. Initial sampling weights adjusted only for branch, rank, and gender. Response bias related to factors known to affect survey participation, such as mental or physical illness or disadvantaged social status, could not be addressed. However, in the sample that enrolled, follow-up response-bias weighting took such factors and attrition from baseline into account. The response rate

TABLE 4. Factors Associated With Reporting Use of VCP to Access VHA-Paid Community Healthcare

	Total Cohort			Men			Women		
	OR	95% LCL	95% UCL	OR	95% LCL	95% UCL	OR	95% LCL	95% UCL
VCP Healthcare: Baseline									
Age in decades	1.17	1.02	1.34	1.18	1.01	1.38	1.14	0.82	1.57
Female	0.86	0.63	1.17	–	–	–	–	–	–
Hispanic	1.29	0.93	1.79	1.29	0.89	1.86	1.24	0.60	2.56
African American	1.96	1.44	2.68	1.96	1.37	2.80	1.91	1.00	3.63
Other minority race	1.48	1.04	2.11	1.64	1.11	2.43	0.67	0.29	1.57
Married/partnered	0.99	0.69	1.41	0.98	0.65	1.47	1.00	0.50	1.99
Single parent	0.94	0.62	1.42	0.86	0.52	1.42	1.17	0.57	2.43
Army	1.70	1.32	2.18	1.67	1.26	2.20	1.83	1.05	3.21
Officer	0.59	0.40	0.87	0.59	0.38	0.90	0.57	0.23	1.39
Obese at separation	1.22	0.92	1.61	1.28	0.94	1.73	0.85	0.42	1.69
Nicotine dependence	0.95	0.71	1.29	0.99	0.72	1.36	0.75	0.31	1.82
Binge alcohol use	0.86	0.61	1.19	0.88	0.62	1.25	0.73	0.26	2.10
Social support score	1.00	0.99	1.02	1.00	0.98	1.01	1.02	0.99	1.06
Looking for work	1.29	0.99	1.68	1.29	0.97	1.73	1.27	0.71	2.28
In school	1.38	1.06	1.79	1.48	1.10	1.97	0.92	0.53	1.60
Unstable housing	1.09	0.76	1.58	1.15	0.77	1.71	0.77	0.28	2.10
Sleep problems	1.43	1.04	1.98	1.49	1.04	2.14	1.18	0.59	2.37
Anxiety screen positive	1.41	1.01	1.97	1.34	0.93	1.94	2.02	0.91	4.48
Depression screen positive	1.18	0.83	1.68	1.23	0.83	1.82	0.95	0.41	2.18
VCP Healthcare: Follow-up									
Age in decades	1.42	1.27	1.57	1.46	1.30	1.65	1.31	1.04	1.65
Female	1.44	1.14	1.81	–	–	–	–	–	–
Hispanic	0.99	0.75	1.31	1.09	0.79	1.48	0.66	0.34	1.27
African American	0.98	0.74	1.29	0.91	0.65	1.28	1.15	0.67	1.96
Other minority race	1.10	0.82	1.46	1.12	0.81	1.55	0.93	0.51	1.70
Married/partnered	0.86	0.66	1.13	0.81	0.59	1.11	1.06	0.63	1.79
Single parent	0.94	0.67	1.32	0.83	0.54	1.29	1.18	0.67	2.09
Army	1.40	1.15	1.70	1.33	1.06	1.66	1.74	1.16	2.61
Officer	0.72	0.55	0.94	0.79	0.58	1.07	0.48	0.26	0.87
Obese at separation	1.09	0.86	1.37	1.08	0.84	1.39	1.20	0.70	2.06
Nicotine dependence	1.04	0.83	1.30	1.16	0.90	1.48	0.46	0.22	0.94
Binge alcohol use	1.00	0.78	1.28	1.03	0.79	1.34	0.96	0.50	1.86
Social support score	1.01	0.99	1.02	1.00	0.99	1.02	1.02	1.00	1.05
Looking for work	1.30	1.06	1.60	1.32	1.04	1.67	1.25	0.83	1.90
In school	1.44	1.17	1.76	1.49	1.18	1.89	1.24	0.81	1.89
Unstable housing	1.19	0.89	1.60	1.30	0.93	1.80	0.88	0.44	1.76
Sleep problems	2.06	1.59	2.67	2.26	1.67	3.05	1.46	0.86	2.48
Anxiety screen positive	1.40	1.07	1.83	1.27	0.93	1.74	2.06	1.24	3.42
Depression screen positive	1.37	1.03	1.83	1.38	0.99	1.93	1.43	0.81	2.49

LCL indicates lower confidence limit; OR, odds ratio; UCL, upper confidence limit; VCP, Veterans Choice Program; VHA, Veterans Health Administration.

is low, although this issue is mitigated by the fact that the surveys closed when preplanned incentives were expended.

CONCLUSIONS

Nineteen years into the operations in the Middle East and despite decreasing deployment numbers, US veterans separating from military service continue to seek care for symptoms of anxiety, depression, and sleep disturbance. The appearance of equal access to VHA care for women and men is misleading because women generally use healthcare more than men do. Thus, VHA may be underserving new women veterans. Additional efforts to enhance access to healthcare for women veterans should build on existing VHA-community partnerships to strengthen capacity for delivery of evidence-based mental health care in both VHA and non-VHA settings. ■

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Source of Funding: This research was managed by the Henry M. Jackson Foundation for the Advancement of Military Medicine (HJF) and collaboratively sponsored by Bob Woodruff Foundation, Health Net Federal Services, The Heinz Endowments, HJF, Lockheed Martin Corporation, May and Stanley Smith Charitable Trust, National Endowment for the Humanities, Northrop Grumman, Philip and Marge Odeen, Prudential, Robert R. McCormick Foundation, Rumsfeld Foundation, Schultz Family Foundation, Walmart Foundation, Wounded Warrior Project Inc, and the Veterans Health Administration Health Services Research and Development Service (award #FOP-15-464).

Author Disclosures: Dr Copeland is employed by and has grants received and pending from the Veterans Health Administration. The remaining authors report no relationship or financial interest with any entity that would pose a conflict of interest with the subject matter of this article.

Authorship Information: Concept and design (LAC, EPF, DV); acquisition of data (EPF, DV, DFP, YIN); analysis and interpretation of data (LAC, EPF, DV); drafting of the manuscript (LAC, DV, DFP); critical revision of the manuscript for important intellectual content (LAC, EPF, DV, YIN); statistical analysis (LAC); provision of patients or study materials (YIN); and obtaining funding (LAC, DV, DFP).

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No	30,371	354.4	73.8	5318	184.5	68.2	35,689	338.8	72.9
Yes	10,782	277.6	26.2	2478	128.6	31.8	13,260	293.5	27.1
Probable depression									
No	33,800	352.3	82.1	6024	193.5	77.3	39,825	324.0	81.4
Yes	7352	237.9	17.9	1772	111.5	22.7	9124	255.8	18.6
Suicidality									
No	37,669	344.6	91.5	7070	207.0	90.7	44,740	296.0	91.4
Yes	3500	172.0	8.5	726	74.2	9.3	4225	185.4	8.6