Use of Obesity-Related Care by Psychiatric Patients

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Objective: The objective of this study was to assess receipt of obesity care by patients with and without mental illness. Methods: The sample consisted of 254,051 obese primary care patients surviving through fiscal year (FY) 2006. Administrative data for Veterans Health Administration (VHA) patients who were obese in FY 2002 (body mass index ≥30) and received primary care in one of six selected VHA regions were included. Outcomes were receipt of obesity care and weight loss during FY 2002–FY 2006. Covariates included baseline mental illness (major depression, posttraumatic stress disorder, and substance use disorders; ICD-9-CM codes 290–311); psychotropic medications associated with weight gain; comorbidity; and demographic characteristics. Results: Most patients were male (95%), non-Hispanic white (80%), older than 50 (mean±SD=61±12) with comorbid hypertension (65%) and dyslipidemia (50%). One-fifth (20%) had mental illness, primarily depression (8%) or posttraumatic stress disorder (6%). Ten percent of the sample lost weight, and 7% gained ≥10% from baseline weight). Although one-third (34%) received obesity care during the study period, receipt of this care was more common among patients with psychiatric diagnoses (46% versus 31%). In multivariable analysis, psychiatric patients prescribed obesogenic psychotropic medications were more likely than other patients to receive obesity care (interaction effect). Conclusions: VHA efforts to help obese patients manage their weight appeared more common for patients prescribed obesogenic psychotropic medication, especially those with psychiatric diagnoses. The results of this study represent an unusual example in which psychiatric patients were relatively more likely to receive care addressing cardiometabolic risk factors. (Psychiatric Services 63:230–236, 2012; doi: 10.1176/appi.ps.201100221)

Undertreatment of general medical illness among mental health patients is a common theme for mental health researchers (1), although many patients with psychiatric conditions are at high cardiometabolic risk both a priori and from antipsychotic drug treatment of their psychiatric conditions (2) and may benefit from weight management (3). Addressing medication-associated weight gain, and changing medications to help manage cardiometabolic risk, are recommended (4); the evidence that clinicians may be doing this is limited (5).

Obesity has been conceptualized as a mental illness by some (6), and it is certainly a medical condition that may be best addressed both physiologically and psychologically. Obesity interventions can improve mental health (7) and physical well-being. Cardiovascular comorbidity and its treatment intertwine with mental illness as well; depression, anxiety, bipolar disorder, and schizophrenia appear to increase risk of cardiovascular disease, and mental health treatment may reduce this negative effect on heart health (8).

The publicly funded Veterans Health Administration (VHA) provides comprehensive care to veterans of U.S. military service, especially those most disadvantaged (9). VHA patients are older than U.S. residents in general and have an estimated obesity rate of 37%, where obesity is defined by a ratio of metric weight to height squared, or body mass index, of 30 or more (10). Previous research suggested that psychiatric disorders are not a deterrent to receiving obesity care in the VHA (11). Further exploration incorporating the role of obesogenic psychotropic medications, notably second-generation antipsychotics, is warranted.

We therefore explored whether psychiatric disorders and obesogenic psychotropic medications were related to receipt of obesity care among obese primary care patients. We hy-
pothesized that psychiatric patients would be equally likely to receive weight management care as their counterparts without mental illness and that increased likelihood would be associated with use of obesogenic psychotropic medications.

**Methods**

This retrospective study was approved by the Institutional Review Board for South Texas Veterans Health Care System before initiation. The baseline year was fiscal year (FY) 2002 (October 2001–September 2002) with follow-up data extracted from FY 2003 through FY 2006.

We examined VHA administrative databases to identify patients who met the following inclusion criteria: primary care visit in FY 2002; obese in FY 2002 per height and weight in the medical record, as extracted into the VHA Corporate Data Warehouse; VHA priority indicating veteran status; and survival through the study period (FY 2002–FY 2006).

Obesity was defined as a body mass index of 30 or more, calculated as the median weight multiplied by 703 and divided by modal height in inches squared (body mass index=[pounds×703]/[inches squared]) assessed at baseline. Modal height was assessed from all available values because annual recording of height was rare. Methodological details for assessing body mass index from VHA Corporate Data Warehouse data are reported elsewhere (12). “Primary care” was defined as an outpatient visit to primary care, geriatric primary care, women’s clinic, or internal medicine. Veteran priority status captures reasons the veteran is eligible for VHA care, including extent of disability connected to military service; determines copayments for VHA care; and correlates with both socioeconomic status and illness severity (13). Veterans also qualify for care on the basis of low income, catastrophic disablement, or special status such as former prisoner of war or deployment to Operations Enduring Freedom or Iraqi Freedom.

**Outcomes**

Obesity-related care was defined as counseling, medications, and bariatric surgery. Counseling was identified by visits to nutrition, diet, weight loss, or exercise clinics (outpatient clinic codes 123, 124, 139, 140, 372, 373, 708, and 709) or by Current Procedural Terminology codes (S9449, S9451, S9452, S9470, G0270, G0271, 97110, 97113, 97530, 97150, 97802, 97803, and 97804). Kinesiotherapy (stop code 214) visits were counted if they were accompanied by an obesity diagnosis (ICD-9-CM code 278, 259.9, or V77.8). Weight-loss medications encompassed orlistat, phentermine, and sibutramine. Bariatric surgery was defined by ICD-9-A procedure codes 43.89, 44.31, 44.38, 44.39, 44.68, 44.69, 44.95, 44.96, 44.97, 44.98, 45.51, and 45.91 (14). Because both bariatric surgery and prescription weight-loss medications were rare, characterizing a few hundred people per year, all obesity care practices (counseling, drugs, and surgery) were combined into a single dichotomous outcome indicating receipt of any obesity care during FY 2002–FY 2006. Outpatient care was summarized by counting the number of visit days in FY 2002. Long-term weight loss or gain was defined as a decrease or increase of at least 10% from baseline to final weight in the five-year study.

**Covariates**

Demographic measures included age as of October 1, 2001 (FY 2002), gender, marital status, and race-ethnicity. All available inpatient and outpatient data on race and ethnicity were used to determine most frequently reported race-ethnicity, yet 19% had no such data. After sensitivity analyses determined that the effects of interest were independent of race-ethnicity variables, of the missing race indicator, and of inclusion or exclusion of cases without valid race-ethnicity data, we dropped all measures of race from the final models so as to retain the entire sample in the multivariable models.

Clinical covariates included the following conditions associated with obesity and defined by ICD-9-CM codes (Table 1): hypertension, dyslipidemia, diabetes, congestive heart failure, other cardiovascular disease, low back pain, and cancers. Psychiatric comorbidity was identified by diagnosis on at least two different outpatient dates during FY 2002 for major depressive disorder, posttraumatic stress

### Table 1

**Definitions of comorbid conditions of obese primary care patients in six Veterans Integrated Service Networks**

<table>
<thead>
<tr>
<th>Condition</th>
<th>ICD-9-CM diagnosis code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hypertension</td>
<td>401–405</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>272.xx</td>
</tr>
<tr>
<td>Diabetes</td>
<td>250.xx</td>
</tr>
<tr>
<td>Low back pain</td>
<td>722.xx, 724.xx, 846.xx, 847.xx</td>
</tr>
<tr>
<td>Congestive heart failure</td>
<td>402.xx, 404, 414.19, 425.4, 428.xx, 429.1, 429.4, 997.1</td>
</tr>
<tr>
<td>Myocardial infarct</td>
<td>410.xx, 411.0, 411.1, 411.81, 412, 414.2, 414.8, 429.7, 429.71, 429.79</td>
</tr>
<tr>
<td>Arrhythmia</td>
<td>427, 427.0, 427.1, 427.2, 427.3, 427.31, 427.32, 427.4, 427.41, 427.42, 427.5, 427.8, 427.81, 427.89, 427.9, 429.4, 997.1, V12.53</td>
</tr>
<tr>
<td>Angina</td>
<td>411.1, 413, 413.0, 413.1, 413.9</td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>427.3, 427.31, 427.32</td>
</tr>
<tr>
<td>Other coronary artery disease</td>
<td>414.xx, 429.2, 429.9</td>
</tr>
<tr>
<td>Schizophrenia</td>
<td>295 excluding 295.5</td>
</tr>
<tr>
<td>Bipolar disorder</td>
<td>296.0–296.1, 296.4–296.8</td>
</tr>
<tr>
<td>Posttraumatic stress disorder</td>
<td>309.81</td>
</tr>
<tr>
<td>Major depressive disorder</td>
<td>296.2–296.3, 311</td>
</tr>
<tr>
<td>Substance use disorders</td>
<td>291, 292, 303, 304, 305 excluding 305.1 nicotine addiction</td>
</tr>
<tr>
<td>Other organic psychotic disorder</td>
<td>290, 293, 294</td>
</tr>
<tr>
<td>Other psychotic disorder</td>
<td>295.5, 297, 298, 299</td>
</tr>
<tr>
<td>Other neurotic and personality disorders</td>
<td>300, 301, 302, 306, 307, 308, 309 excluding 309.81, 310</td>
</tr>
</tbody>
</table>
function of demographic and clinical variables. Regression estimated the relative odds of obesity care during follow-up as a function of these predictors plus receipt of obesity care. Logistic regression estimated odds ratios (OR), which may be interpreted as supporting a positive association between a factor and the outcome when the OR is significantly greater than 1 (95% confidence interval [CI] excludes 1). An OR significantly less than 1, such as 0.5 or 0.33, indicates a negative or inverse association between factor and outcome. With our very large sample size, the study was overpowered, meaning that statistical significance was easily achieved with small effect sizes. Therefore, we focused on moderate (OR ≥ 1.5 or ≤ 0.67) to large effect sizes (OR ≥ 2.0 or ≤ 0.5) (17) with the caveat that increases of less than 100% (OR ≥ 2.0 or ≤ 0.5) may be an artifact of unmeasured confounding (18).

Results

From the six Veterans Integrated Service Network (VISN) regions studied, 254,051 primary care patients met the inclusion criteria of obesity during FY 2002, veteran status, and survival through FY 2006. Demographic characteristics are shown in Table 2. Women made up 5% of the cohort. Most patients were male (95%), non-Hispanic white (80%), married (65%), and older than age 50. Common comorbid conditions included hypertension, which affected 65% of the sample, dyslipidemia (50%), and diabetes (32%) (Table 3). One-fifth of the patients (20%) had a psychiatric diagnosis, most commonly major depressive disorder (8%). In addition, 4% of patients were prescribed psychotropic medications associated with weight gain.

Although all patients met criteria for obesity per body mass index (>30), which averaged 34.5±4.3, only 28% had a diagnosis of obesity. About 7% (N=16,591) gained at least 10% of body weight compared with baseline weight and about 10% of patients (N=26,083) lost at least 10% of body weight compared with baseline weight. Over the study period weight change averaged –34±2.9 body mass index units (about 1% of the baseline average), which for a six-foot person weighing 254 pounds would amount to two to three pounds. Psychiatric patients were initially somewhat heavier than other patients and, on average, had smaller weight loss over the five years but more variability, with 10% (N=4,861) gaining and 13% (N=6,418) losing at least 10% from baseline.

Approximately one-third of the cohort received obesity care during the five-year study period. Most veterans receiving obesity care did so in only one year of the study (21%, N=52,691), 8% (N=20,464) received care in two different years, and 6% (N=14,009) received obesity-related care.

Table 2

Characteristics of obese primary care patients in six Veterans Integrated Service Networks

<table>
<thead>
<tr>
<th>Measure</th>
<th>Nonpsychiatric patients (N=204,458)</th>
<th>Psychiatric patients (N=49,593)</th>
<th>Total (N=254,051)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (range 19–102 years) (M±SD) 62.0±12.0</td>
<td>54.7±10.9 60.6±12.2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body mass index (M±SD) 34.4±4.2</td>
<td>35.0±4.7 34.5±4.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in body mass index over 5 years (M±SD) –3.5±2.80</td>
<td>–2.7±3.50 –3.4±2.90</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Female 8,478 4.2 4,551 9.2 13,029 5.1</td>
<td>Male 195,980 95.9 45,042 90.8 241,022 94.9</td>
<td></td>
</tr>
<tr>
<td>Race-ethnicity</td>
<td>White 129,236 80.4 34,852 77.2 164,088 79.7</td>
<td>Black 15,818 9.8 5,032 11.2 20,850 10.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hispanic 14,097 8.8 4,770 10.6 18,867 9.2</td>
<td>Asian or Native American 1,522 1.0 455 1.1 2,007 1.0</td>
<td></td>
</tr>
<tr>
<td>Missing race-ethnicity data</td>
<td>43,785 21.4 4,454 9.0 48,239 19.0</td>
<td>Married 139,896 68.4 26,221 52.9 166,117 65.4</td>
<td></td>
</tr>
</tbody>
</table>

a Race-ethnicity reports exclude 48,239 cases with missing data.
during three to five years. Counseling visits were the most common obesity-related care, with only 0.4% (N=1,025) people receiving weight-loss prescriptions and a handful receiving bariatric surgery during the study years (Table 4). Overall, outpatient use averaged 24.6±26.3 visits for psychiatric patients and 9.1±8.7 visits for other patients.

An interesting finding was that receipt of obesity care was more common among patients with psychiatric diagnoses than among other patients (46% versus 31%) (Table 4). This was also true for patients with the specific conditions schizophrenia (50% received obesity care; N=2,796), bipolar disorder (52%; N=2,454), posttraumatic stress disorder (50%; N=7,152), and major depressive disorder (47%; N=9,819).

Initial multivariable models, which adjusted for clinical and demographic measures, confirmed this effect for specific psychiatric disorders (substance use disorders, major depressive disorder, posttraumatic stress disorder, schizophrenia, bipolar disorder, and other). Modest effects were described by ORs ranging from 1.1 to 1.5 for the specific disorders and led us to use the catch-all indicator for any psychiatric disorder (OR=1.5) (Table 5). Factors associated with receipt of obesity care included diabetes, with an OR of 2.0, which approximately doubled the odds of getting obesity care compared with patients without diabetes. Medications associated with weight gain showed a similar effect (OR=1.9). Among the factors analyzed, only older age, being married, and having atrial fibrillation were negatively associated with obesity care. Female gender and the remaining general medical comorbidities were associated with increased relative odds of obesity care.

The final model of obesity-related care included indicators for the interaction of psychiatric diagnosis (any) with receipt of obesogenic psychotropic medication. A total of 5,729 patients who were using obesogenic psychotropics did not have a psychiatric comorbidity, 44,475 had psychiatric comorbidity without receiving obesogenic psychotropics, and 5,118 had both psychiatric comorbidity and were using obesogenic psychotropics. Patients without psychiatric disorders who were not using obesogenic psychotropics formed the comparison group. In this model, increased relative odds of obesity care were associated with any psychiatric disorder (absent obesogenic psychotropics, OR=1.5), with receipt of obesogenic psychotropics (absent psychiatric comorbidity, OR=2.1), and with both psychiatric disorder and obesogenic psychotropics (OR=2.4).

Although 10% of patients (N=26,083) experienced a weight loss of at least 10% from baseline over the five-year study, psychiatric patients were more likely than nonpsychiatric patients to have this outcome (12.9% versus 9.6%, $\chi^2=478.4$, df=1, p<.001).

In the adjusted model of weight loss, the estimated effect for obesity-related care was marginal (OR=0.9, CI=0.92–0.97) and modest (OR=1.5, CI=1.47–1.53).
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diers who did not use primary care
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the years 2002–2006 was more likely
we found that these obese primary
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low rate of obesity diagnosis (28%
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tunities to receive obesity-related
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more-than-equitable receipt of obesi-
care by the mental health status of
these VHA patients, it may be worth-
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tions and weight trends into mortality
analyses for further investigation.
Obesity-related care may have the
best chance of addressing multiple
lifestyle-related conditions simulta-
nously, such as diet, exercise, and
obesity, all of which are risk factors
for six of the ten leading causes of
death. It would be interesting if out-
reach to address obesity had the po-
tential for improving engagement in
health care and, through that process,
survival.

Over the five-year period, 10% of
our cohort achieved significant
weight loss of at least 10% from bas-
line. Although this result is ad-
mirable, the remaining 90% of obese
patients did not lose weight. In ad-
dition, weight loss was inversely asso-
ciated with receipt of obesity care in
this retrospective analysis. The study
design did not permit assessing
causality; thus the association may be
the result of selective engagement in
obesity-related care by obese patients
whose weight was increasing. Obese
patients with stable weights may not
have felt motivated to attend counsel-
ing even if they received an appro-
iate referral. The expanding reach of
the VHA’s weight management
MOVE! program, implemented na-
tionwide in 2006, will possibly pro-
vide obesity-related counseling more
generally.

Patients with psychiatric disorders
tended to have a slightly higher initial
body mass index and to lose slightly
less weight over time. Although they
had good access to obesity-related
ounseling, whether effective weight
management should be tailored to pa-
tients with psychiatric comorbidity;
patients using obesogenic psychotro-
pic medications, or both remains

**Discussion**

Receipt of obesity-related care over
the years 2002–2006 was more likely
for obese primary care patients with
mental illness than for those without
mental illness, and the relative odds
of receiving this care more than dou-
bled for patients with mental illness
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five-year period). We should also note
that patients with psychiatric disor-
ders who did not use primary care
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criteria, which could account for

Table 5

Factors associated with receipt of obesity care by 254,051 obese primary care
patients in six Veterans Integrated Service Networks

<table>
<thead>
<tr>
<th>Factor</th>
<th>Model 1: no interaction</th>
<th>Model 2: with interaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OR  95% CI</td>
<td>OR  95% CI</td>
</tr>
<tr>
<td>Female</td>
<td>1.16  1.11–1.20</td>
<td>1.16  1.11–1.20</td>
</tr>
<tr>
<td>Age in fiscal year 2002</td>
<td>0.97  0.97–0.97</td>
<td>0.97  0.97–0.98</td>
</tr>
<tr>
<td>Married</td>
<td>0.85  0.83–0.86</td>
<td>0.85  0.83–0.86</td>
</tr>
<tr>
<td>Hypertension</td>
<td>1.20  1.18–1.23</td>
<td>1.20  1.18–1.23</td>
</tr>
<tr>
<td>Dyslipidemia</td>
<td>1.24  1.22–1.26</td>
<td>1.24  1.22–1.26</td>
</tr>
<tr>
<td>Diabetes</td>
<td>2.01  1.98–2.05</td>
<td>2.01  1.97–2.05</td>
</tr>
<tr>
<td>Arrhythmia</td>
<td>1.10  1.04–1.16</td>
<td>1.10  1.04–1.16</td>
</tr>
<tr>
<td>Atrial fibrillation</td>
<td>0.92  0.86–0.99</td>
<td>0.92  0.86–0.99</td>
</tr>
<tr>
<td>Angina</td>
<td>1.11  1.05–1.17</td>
<td>1.11  1.05–1.17</td>
</tr>
<tr>
<td>Congestive heart failure</td>
<td>1.27  1.22–1.33</td>
<td>1.27  1.22–1.33</td>
</tr>
<tr>
<td>Myocardial infarct</td>
<td>1.09  1.03–1.14</td>
<td>1.09  1.03–1.14</td>
</tr>
<tr>
<td>Other coronary artery disease</td>
<td>1.23  1.19–1.27</td>
<td>1.23  1.19–1.27</td>
</tr>
<tr>
<td>Low back pain</td>
<td>1.23  1.20–1.26</td>
<td>1.23  1.20–1.25</td>
</tr>
<tr>
<td>Cancer</td>
<td>1.14  1.10–1.19</td>
<td>1.14  1.10–1.18</td>
</tr>
<tr>
<td>Psychiatric disorder</td>
<td>1.50  1.47–1.53</td>
<td></td>
</tr>
<tr>
<td>Prescribed obesogenic psychotropic medication</td>
<td>1.85  1.78–1.93</td>
<td>2.42  2.28–2.57</td>
</tr>
<tr>
<td>Psychiatric disorder with obesogenic psychotropic medication</td>
<td>2.10  1.99–2.22</td>
<td>1.53  1.50–1.56</td>
</tr>
<tr>
<td>Obesogenic psychotropic medication, no psychiatric disorder</td>
<td>1.53  1.50–1.56</td>
<td>2.42  2.28–2.57</td>
</tr>
<tr>
<td>Psychiatric disorder, no obesogenic psychotropic medication</td>
<td>1.53  1.50–1.56</td>
<td>1.53  1.50–1.56</td>
</tr>
</tbody>
</table>

* Reference groups were the opposite of the listed characteristic or the absence of the listed condition.

1.5–1.6) for any psychiatric condition.

The interaction of psychiatric comor-
bidity and obesity-related care
achieved statistical significance but
was not of a meaningful magnitude
(psychiatric disorder plus obesogenic
psychotropic drugs, OR=1.4, CI=1.4–
1.5; psychiatric disorder without
obesogenic psychotropic drugs, OR=1.6,
CI=1.5–1.6).

**Discussion**

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ders who did not use primary care
were excluded by the study eligibility
criteria, which could account for

some of the “equity” observed.

Given the high prevalence of obesity
among VHA patients, estimated at
37% in 2000 (10), and the morbidity
associated with obesity—chiefly from
diabetes and hypertension—in-
creased delivery of effective obesity
care is needed. Although the level of
weight management counseling for
obese primary care patients we ob-
served in the VHA is consistent with
that of other health care systems,
ranging from 25% (19,20) to 65%
of obese or overweight primary care pa-
patients (21), all obese patients should
receive counseling. In addition, the
low rate of obesity diagnosis (28%
[70,318] in this sample of patients
who all met criteria per their body
mass index) is a potential barrier to
the provision of obesity care because
these services may be available only
to patients with a diagnosed problem.

Patients with severe mental illness
appear to derive a survival benefit
from health care system contact, es-
pecially regular outpatient care
(22,23), although psychiatric patients
may be less likely to attend primary

and specialty clinics in general (24). We
found that these obese primary
care patients with psychiatric comor-
bidity had much higher rates of out-
patient use than their counterparts
without mental illness—thereby po-
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vide obesity-related counseling more
generally.
to be seen. The interaction of psychiatric condition with obesogenic psychotropics suggests that clinicians should consider the potential metabolic disturbances associated with medications their patients are taking, especially when contemplating a revised medication regimen. Referral to weight management services may also be appropriate when medication changes are implemented. In exploratory post hoc analyses, we found that patients on the four different obesogenic antipsychotics were equally likely to receive obesity care, lose weight, or gain weight (results not shown).

Overall, we noted very low rates of use of weight loss medications and bariatric surgery, which may be attributable in part to the preponderance of men in the VHA patient population; women are more likely to engage in weight loss programs, use weight loss drugs, and undergo bariatric surgery (25–27). This gender difference has also been noted in an active-duty military sample (28). We should note, however, that weight loss medications were subject to certain formulary restrictions, and only a few approved bariatric surgery centers existed in the VHA during the study period (29). The VHA recommends provision or facilitation of referrals for these treatments when clinically appropriate. Although bariatric patients in general may have an increased risk of psychological complications and psychiatric patients may have poorer outcomes, evidence is equivocal, and the consensus is that a psychiatric disorder in and of itself is not a contraindication for surgery (30).

Limitations of this secondary data analysis include the lack of qualitative measures or chart notes regarding physician counseling, inability to assess out-of-system weight-loss programs, and use of selected regions or VISNs. VHA patients reflect historical military recruitment trends such that results should not be generalized to obese women or obese U.S. residents in general. VHA patients are less affluent and less healthy than U.S. residents (9) and may be more similar to other disadvantaged groups such as Medicaid patients. In addition, we did not have measures of smoking status or history in our analyses, although smoking is associated with psychiatric disorders and weight gain (when trying to quit) and is thus a potential confounder. Various pathways for smokers, quitters, and non-smokers could be explored in future research.

Conclusions
The VHA has established as a priority the elimination of health care disparities, including those related to mental illness. Our findings suggest that the VHA is addressing obesity in an equitable manner among patients with and without psychiatric illness who access primary care. An update of this analysis examining data from later years after more complete implementation of the VHA’s weight management program would be welcome to see whether these findings are sustained and to determine the extent of overweight and weight management among the new veterans from Operations Enduring Freedom and Iraqi Freedom. These newest veterans are more likely than older veterans to gain weight in spite of treatment (11), and they are also more likely to seek treatment for depression or posttraumatic stress disorder (31). We hope that postdeployment initiatives being tested in the VHA will help veterans of Iraq and Afghanistan manage overweight effectively, because many will be prescribed obesogenic psychotropic medications.

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