


## ORIGINAL ARTICLE

# US Military Veteran Perspectives on Eating Disorder Screening, Diagnosis, and Treatment: A Qualitative Study

Robin M. Masheb<sup>1,2</sup>  | Jennifer L. Snow<sup>1</sup> | Sarah E. Siegel<sup>3</sup> | Lindsay F. Munro<sup>1</sup> | Joy Huggins<sup>4</sup> | Alison B. Hamilton<sup>5,6</sup> | Shira Maguen<sup>4,7</sup>

<sup>1</sup>VA Connecticut Healthcare System, West Haven, Connecticut, USA | <sup>2</sup>Department of Psychiatry, Yale School of Medicine, New Haven, Connecticut, USA | <sup>3</sup>Department of Psychiatry and Behavioral Sciences, Stanford University, Stanford, California, USA | <sup>4</sup>San Francisco VA Health Care System, Mental Health Service, San Francisco, California, USA | <sup>5</sup>VA Greater Los Angeles Healthcare System, Los Angeles, California, USA | <sup>6</sup>Psychiatry and Biobehavioral Sciences, University of California-Los Angeles, Los Angeles, California, USA | <sup>7</sup>Department of Psychiatry and Behavioral Sciences, University of California-San Francisco, San Francisco, California, USA

**Correspondence:** Robin M. Masheb ([robin.masheb@yale.edu](mailto:robin.masheb@yale.edu))

**Received:** 6 March 2024 | **Revised:** 20 June 2024 | **Accepted:** 21 June 2024

**Action Editor:** Ruth Striegel Weissman

**Funding:** This study was supported by HSR&D project [IIR 17-223] Eating Disorder Screening and Diagnostic Tools for the Veteran Healthcare System (MPIs: Masheb and Maguen). A.B.H. is supported by a VHA HSR&D Research Career Scientist Award [RCS 21-135]. This project was also supported in part by the Veterans Affairs Health Services Research & Development (CIN 13-407) (HSR&D) Center of Innovation (COIN) Pain Research, Informatics, Multimorbidities, and Education (PRIME) Center, West Haven, CT, HSR&D project [IIR 15-349] Weight Loss Treatment and CBT for Veterans with Binge Eating (PI: Masheb), and DoD CDMRP [W81XWH2110794] Building an Equitable and Accessible System of Eating Disorder care for VA, DoD, and underrepresented Americans with eating disorders (EASED Study) (PI: Masheb).

**Keywords:** diagnosis | eating disorder | screening | treatment | veteran

## ABSTRACT

**Objective:** We aimed to explore US veteran perspectives on eating disorder screening, diagnosis, patient–provider conversations, and care in the Veterans Health Administration (VHA).

**Method:** Rapid qualitative analysis of 30–45 min phone interviews with 16 ( $N = 16$ ) veterans with an electronic health record ICD-10 eating disorder diagnosis, who received care at one of two VHA healthcare systems in Connecticut or California. Topics covered included: conversations with providers about eating disorder symptoms, diagnosis, and referral to treatment; feedback about an eating disorder screener, and; reflections on eating disorders among veterans and VHA's effort to address them.

**Results:** Most veterans reported difficulty understanding and defining the problems they were experiencing and self-diagnosed their eating disorder before discussing it with a provider. Treatment referrals were almost universally for being overweight rather than for an eating disorder, often leading veterans to feel misunderstood or marginalized. Overall, veterans were enthusiastic about the screener, preferred screening to be conducted by primary care providers, and noted that conversations needed to be non-stigmatizing. There was consensus that VHA is not doing enough to address this issue, that group support and therapy could be beneficial, and that resources needed to be centralized and accessible.

**Discussion:** For the most part, veterans felt that, at best, eating disorders and disordered eating are overlooked, and at worst, conflated with overweight. The majority of veterans got referred for weight loss or weight management services but would welcome the opportunity to be screened for, and referred to, eating disorder treatment.

The content of this research is solely the authors' responsibility and does not necessarily represent the official views of the VA or the Veterans Health Administration. Study sponsors had no role in study design; collection, analysis, and interpretation of data; writing of the report; or the decision to submit the report for publication.

## Summary

- Eating disorders are prevalent psychiatric disorders affecting individuals regardless of gender, race/ethnicity, age and weight status, and a major public health burden in the United States.
- Procedures to systematically screen, diagnose, and treat eating disorders are lacking in US healthcare systems.
- Results show that more effort is needed to identify and destigmatize these conditions and ensure eating disorder resources are available and accessible in the VHA.

## 1 | Introduction

Eating disorders are prevalent psychiatric disorders and a major public health burden in the United States, given their association with high rates of morbidity and mortality (Hudson et al. 2007; Ogg et al. 1997; Strother et al. 2012). The impact of eating disorders in the United States is substantial and estimated to be nearly \$400 billion (Fiscal Year 2018–2019) when considering both economic costs and reduced well-being (Streatfeild et al. 2021). Although eating disorders have not been traditionally thought of as having relevance to US military or veteran populations, evidence shows that poor eating habits under stressful military conditions can set the foundation for disordered eating behavior and significant weight gain post-military (Maguen et al. 2013; Mitchell et al. 2014; Rosenberger and Dorflinger 2013).

There is discordance between the rates of clinician-diagnosed eating disorders in Veterans Health Administration (VHA) electronic health records (Maguen et al. 2012) and the proportions of probable eating disorders observed with standard self-report measures, the latter suggesting as many as 9% of men US veterans and 19% of women US veterans may be affected (Mitchell et al. 2021). With new research and an emphasis on understanding eating disorders in underrepresented populations (Strother et al. 2012; Halbeisen, Brandt, and Paslakis 2022), US veterans have emerged as both a high-risk and underserved group (Bartlett and Mitchell 2015; Masheb et al. 2021).

There is a critical need for accurate screening of, and treatment for, eating disorders in underserved groups. For context, among college students, a widely known high-risk eating disorder population, <20% with an eating disorder receive treatment (Fitzsimmons-Craft et al. 2019). Identification and referral for treatment have the potential to help mitigate high rates of comorbid disease, elevated mortality and suicide rates, and healthcare costs (Ágh et al. 2016; Button, Chadalavada, and Palmer 2010; Rosling et al. 2011). Yet, the most widely used screeners for use in primary care settings include the Eating Disorder Screen for Primary Care (EDS-PC) (Cotton, Ball, and Robinson 2003) and the SCOFF (Morgan, Reid, and Lacey 2000). Both are 4–5 item measures that were validated in low- to normal-weight English medical clinic patients and/or university students (Cotton, Ball, and Robinson 2003; Morgan, Reid, and Lacey 2000). While these measures can

be helpful for screening in the populations for which they were developed, applicability for more diverse populations, with the full range of DSM-5 eating disorders, has been called into question (Nagata and Golden 2022). Meta-analysis of 25 validation studies of the SCOFF demonstrated that while the screen is a simple and useful tool for young women at risk for AN and BN, there is not enough evidence to support utilizing the SCOFF for screening for the range of DSM-5 eating disorders in primary care and community-based settings (Kutz et al. 2020).

To date, research on screening for eating disorders in veterans has included the use of existing screening items in women (Maguen et al. 2018), a single-item measure to screen for binge eating (Dorflinger, Ruser, and Masheb 2017), and preferences for screening (Hardin et al. 2022). Given the limited work in this area, the objective of the present study was to better understand veteran perspectives on screening, diagnosis, patient–provider conversations, and care in the VHA system. Drawing on in-depth qualitative interviews of veterans with eating disorder diagnoses, we focused on barriers and facilitators of screening, diagnoses, and patient–provider conversations. We also sought to get veteran feedback on the use of a screening prototype currently being developed for future VHA implementation.

## 2 | Methods

All eligible veteran participants had a healthcare visit at either the West Haven, CT, or San Francisco, CA, VHA healthcare system within the past 5 years where an eating disorder ICD-10 diagnosis was recorded by a clinician in the electronic health record. A Consort Diagram showing enrollment is included in Figure 1. We identified 195 potentially eligible veterans using VHA's electronic health record system and sorted them based on site and recency of diagnosis. E-mail and text opt-in requests were sent to potentially eligible veterans starting with the most recent diagnoses and 88 individuals were contacted to reach our final sample of 16 interviews. Of 88 contacted veterans, 27 consented to be screened, of which four were not eligible (three did not endorse having an eating disorder, and one had trouble hearing over the phone), one declined after hearing more about

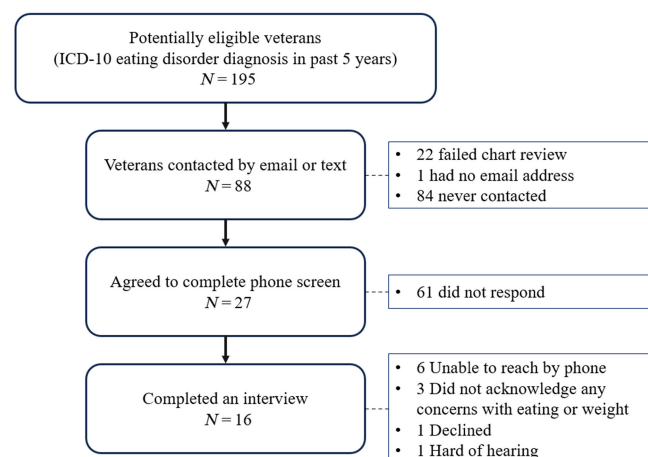


FIGURE 1 | CONSORT flow diagram showing enrollment.

the study, six were lost to follow-up, and 16 completed the interview. We planned to interview as many veterans as needed to reach saturation up to 25 veterans. We assessed saturation after our first 10 interviews and then after every two and determined we had reached adequate saturation after 16 interviews. We tracked sample characteristics for site and gender and the exactly balanced sample was incidental. All eligible veterans answered “yes” to “Have you had concerns about your eating or weight in the past 5 years?” although not all acknowledged having a formal eating disorder diagnosis. Most veterans did not make a distinction between concerns about eating and concerns about weight.

We conducted 30- to 45-min one-on-one phone interviews, which covered three main topics. First, we captured veterans' experiences speaking to clinicians about diagnosing and treating eating and weight concerns, particularly in military service and VHA care. Second, we solicited general feedback and recommendations for implementing a screening tool for eating disorders in VHA, providing participants a set of seven draft screening items reflecting each of seven eating disorder domains (distress, restriction, purging, loss of control, night eating, self-evaluation, and weight) to prompt discussion. The development of items for this screener was guided by statistical modeling frameworks and interviewer feedback that included patient-centered and culturally attuned adaptations. For comparison, both the SCOFF and our screener included items assessing the construct of binge eating. While the word “control” was used in the SCOFF item (Do you worry you have lost CONTROL over how much you eat?) our draft screener used “without thinking” (Do you ever eat an extremely large amount of food WITHOUT THINKING?). Given that the screener is in development, we did not solicit specific feedback about the items. Finally, we asked for general impressions about eating disorders as a health priority within VHA. Interviews were conducted by one of the principal investigators (R.M.M.), observed by the qualitative analyst (J.L.S.), recorded on secure VHA-encrypted computers, and then transcribed.

Rapid data analysis was chosen for this project as it is an action-oriented approach to qualitative data used to inform practice (Hamilton and Finley 2019). The process requires a team to summarize key points from qualitative data into matrices that are then systematically reduced into relevant themes. The analysis team included six interdisciplinary members with varied eating disorders and weight expertise, led by the study's principal investigators (R.M.M. and S.M.). The team included two psychologists (R.M.M. and S.M.), one dietician (L.F.M.), one qualitative analyst (J.L.S.), and two research coordinators and were trained by a rapid qualitative methods expert (A.B.H.) who also provided guidance throughout the analysis. Four analysts (J.L.S., S.E.S., L.F.M., and J.H.) performed a rapid qualitative analysis (Hamilton and Finley 2019; Hamilton 2013; Nevedal et al. 2021; Palinkas, Mendon, and Hamilton 2019) independently summarizing interview transcripts into structured note templates (see Data S1 for Transcript Summary Template) using the interview guide's domains, including direct quotes under each domain. The four analysts summarized the same three transcripts and participated in a consensus-forming discussion. The summary template was then refined to ensure analysts were well-aligned.

All analysts used the refined template to summarize two more transcripts, followed by another consensus-forming discussion. The template was finalized and used to summarize all 16 transcripts. The templated summaries were then consolidated into a matrix (see Data S1 for Transcript Summary Template).

The research team used the summary matrix to outline emergent themes. All six research team members, including the principal investigators and four analysts, reviewed the summary matrix and independently generated an initial list of themes. The entire research team then participated in a validation and consensus-forming activity that solidified a final set of themes. During this meeting, team members were well-aligned in interpreting the summary matrix with each of the final themes meeting a threshold for inclusion by appearing in a minimum of five out of six individual summaries. The interview transcripts were revisited to validate the final themes and select additional representative quotes. Both the CT and San Francisco, CA, VHA Human Studies Institutional Review Boards approved this study.

### 3 | Results

We interviewed eight veterans from each participating VHA site; eight participants were men and eight were women. Demographic and clinical characteristics of the 16 participants are available in Table 1.

The Data S1 summarizes interview content related to eating disorder screen, diagnosis, and conversations. Four themes emerged from the interviews: self-initiated diagnoses and care,

**TABLE 1** | Participant demographics and self-report characteristics.

Demographic and clinical characteristics	N
Region	
Connecticut	8
California	8
Gender	
Male	8
Female	8
Age	Mean = 53.8 years (Range 25–73 years)
Mental health diagnosis	
PTSD	8
Depression	5
Anxiety	4
Self-reported eating disorder diagnosis	
Yes	13
No	1
Unsure	2

limited treatment access, positive response to the proposed screener, and the need for accessible treatment options.

### 3.1 | Self-Initiated Diagnoses and Care

Many veterans reported difficulty understanding and defining the problems they were experiencing. One veteran, who reported binge eating and restricting since high school, mentioned that “nobody really understood like, if I wasn’t purging, then it’s not a problem. But I felt like, for so long, that I had a problem. I just didn’t know what it was” (VET09, female). Most veterans reported self-diagnosing their eating disorder before initiating conversations with providers about eating and weight concerns. For example, one veteran knew she had an eating disorder and brought the issue to her provider, stating, “I just self-diagnosed the bulimia and then I told my provider, then that’s when she said, yeah, I have bulimia” (VET13, female). The majority of veterans mentioned recognizing their disordered eating behaviors in non-healthcare settings. One veteran stated, “I think I saw a commercial ... so, I follow a website that sent me—like a questionnaire and then it said that—and then it gave me a referral to a place that I could go and talk to someone about it ... Never actually had a conversation with a doctor who we talked about the actual diagnosis” (VET12, male).

When veterans raised concerns about eating and weight, it was mostly with Primary Care Physicians (PCPs) or mental health providers. This conversation was often, but not always, about weight gain and desire for weight loss, like one veteran who “brought it up because it’s something that has been heavily on my mind and just with me all the time because I was very unhappy with my weight” (VET05, female). Another veteran seeking weight loss said, “I think I brought it up. I think I mentioned it first. I asked him if there’s something we could do about my weight, because it was just so ridiculously out of control” (VET17, male).

Sometimes, veterans brought up their eating disorders after experiences in the military reignited symptoms, like one veteran who purged as a high school wrestler and was healthy for a while before his bulimia returned during military service. He said, “I believe I initiated it. ... and kind of brought that up ... that experience that I had, basically it like, you know, reignited this disease, I guess it’s a disease. Reignited it, like triggered it in my head, ... so I brought that up with her” (VET08, male).

Many veterans initiated conversations because they were seeking help. One veteran said, “I opened it up to her because I think I really need help because my son saw me again, and he said, mom I think you have bulimia, that’s what he said. And I was like, no, I don’t. It’s just my tummy hurting, that’s it, and well, he said, you should talk to your doctor then” (VET13, female).

In the few cases when providers brought up eating and weight issues, it was always related to weight loss. One veteran reported, “[Doctors] always comment on my weight. Well, if you lose weight, then you won’t have these issues. Like, you won’t have to pain your back. You won’t have this” (VET09, female). Similarly, another veteran spoke about the way his PCP brought up conversations about weight:

So, you really need to lose the weight. So, they were constantly, I wouldn’t use the word badgering, but I would use the word trying to impress upon me the need to lose the weight, not just to feel better about myself but to also to kind of aspire to a better way, a healthier lifestyle ... So, most of the time, I would say 90% of the time, it was them bringing it up to me, not me initiating the conversation (VET04, male).

A few veterans did find out about their eating disorder after conversations with medical providers. Two veterans were diagnosed with binge eating disorder (BED) while undergoing assessments with a clinician while exploring bariatric surgery. Another veteran learned that using laxatives to control body weight and shape were symptoms of bulimia nervosa after conversations she initiated with her PCP. She said, “So it was kind of weird to learn that the laxative side of it ended up qualifying, I guess, as an eating disorder” (VET10, female).

### 3.2 | Need for More Accessible Care Options

Few veterans received any treatment at all, and only two received eating disorder-specific treatment from the VHA, one of which was a VHA-funded study of cognitive-behavioral therapy for BED. Most reported the VHA was not doing enough, if anything, for veterans with eating disorders. Several veterans mentioned being referred to the community as VHA eating disorder care was not available to them. One veteran described how “when I discussed that I wanted to talk to somebody about an eating disorder, they had to refer me to an outside provider” (VET01, male). Many described having to advocate for themselves and actively track down resources that were perhaps available but not accessible. “Everything that I’ve gotten to try and help my eating and weight and stuff like that, that’s all been initiated and chased down by me” (VET02, female). Many also felt disillusioned with how difficult it was to navigate the system, with one veteran describing the process as “just a run around to the point where I was just, oh, I can’t” (VET05, female). A veteran told a story about being referred out to a specialty service and attempting to make contact and her calls never being returned (VET14, female). Obstacles to care were not due just to an absence of VHA eating disorder specialty care, as another veteran reported an inability to access recommended in-patient care in the community due to financial, time, and caregiving barriers (VET05, female). VHA treatment referrals were most often for VHA’s national weight management program, MOVE!, or nutrition services, which veterans generally felt were not the right fit. One veteran described their experience with nutrition services referral: “I’ve been to those at the VHA, and they just tell me stuff I already know ... it’s like, just a bombardment of what you should be doing and shouldn’t be doing ... it’s frustrating” (VET09, female). A couple of veterans only tried MOVE! as a requirement before being prescribed weight management medication: “I didn’t get a lot out of it. But it was like you had to be in that program to see that doctor to get [weight-loss] medication” (VET05, female). For one veteran, the MOVE! program triggered distress and a negative focus on weight, stating, “That was super like, gave me a ton of anxiety because I had to weigh myself every day. And to me, that—if I

got on the scale and I had gained a pound, I was just—I couldn't let go of that thought for the day" (VET03, female).

During military service, most veterans who addressed eating disorder concerns with medical and mental health providers were referred to non-eating specific substance abuse or 12-step programs. These veterans described the programs as inappropriate for addressing their needs and concerns since abstinence and sobriety do not work for eating. One veteran said, "People have to eat. So, it changes the way you have to approach when you're overeating. You don't have to do drugs ... you don't have to drink alcohol, but everybody has to eat" (VET02, female). Another veteran put it like this, "I know that they would have us go to AA meetings which was really pretty accurate about the whole situation because it was like needing a fix, except that alcohol you can say, okay, I'm never drinking again but you can't do that with food" (VET14, female).

Veterans reported a mix of supportive and non-supportive providers, and often the latter were associated with weight stigma and shame. One veteran who had negative experiences with providers during military service described, "They started getting really—their judgment and their comments started to sting. They weren't supportive. They were—I think they were denigrating ... they helped me hate me" (VET02, female). On the other side, one veteran reported a positive VHA provider experience. "He was really like, thorough, and I guess kind of caring. He—you know, he fought for me a lot with my diagnosis ... so I really kind of just appreciated everything about him" (VET10, female).

Veterans had various specific recommendations for what the VHA could do or do better, which included more accessible treatment options for eating disorders and opportunities to talk about these issues with clinicians and other veterans. Many mentioned "a group session, where you're hearing other people's war stories" (VET08, male). The most salient recommendation was to make sure resources were accessible and ideally centralized, as described by one veteran: "I would put up a center for veterans like me, even though it's just small center that can help or a place someone can monitor us. If I don't have a lot of money, then I can just go to a center and get the help" (VET13, female). Finally, for some veterans, eating disorder treatments were conflated with weight loss treatments. One veteran described a 10-year journey that included many different treatments, from weight management medications to bariatric surgery (VET18, male).

### 3.3 | Positive Response to Proposed Screener

Veterans universally and enthusiastically approved of the draft seven-item screening tool presented by the research team. Many felt "it would be a good—it'd be a great initial meeting type thing" (VET01, male). Overall, the questions resonated with participants, with one veteran stating, "I think, for me, that's like perfectly tailor made for my issues" (VET08, male). Veterans appreciated the screener as an opportunity to discuss issues that do not always come up during busy care encounters. One veteran explained, "Sometimes you don't think of stuff. ... maybe you need something to jog your memory about something, so I think those questions are relevant for that" (VET05, female).

While overall most veterans liked the screener, several commented that some questions did not apply to their specific difficulties or difficulties that others with eating disorders might have. Most often, this feedback was related to questions about low-prevalence behaviors such as vomiting. One veteran, who described her eating disorder as more a control-seeking problem than a food problem, said the screener "targets, definitely, people with eating disorders, but that's not—I think like, for me, I could fly under the radar, because I didn't have food issues." (VET10, female).

When asked about who should initiate a screener and how and when it should be conducted, most preferred a PCP. They specifically mentioned doing the screener at an initial intake visit or when the veteran raises concerns about eating or weight. One described:

The initial intake would be the time that I'd want to be asked those questions, so we can really develop a rapport, to start. So, you know, we have a baseline of what my problems are. Myself personally, I'd like it right off the bat. Let's sit down and have a good conversation about what my problems are (VET11, male).

Several mentioned that the provider should bring it up because these issues can be embarrassing and often avoided in discussion. This veteran noted, "Well, the provider's got to bring it up, because—you know, being this heavy, it's embarrassing. It really is. It's embarrassing ... I had pretty much just given up" (VET01, male). Several veterans expressed that providers should only discuss weight if it had a direct impact on health, with one veteran explaining, "if it's affecting my health or if I have complaints about it then I think the providers should bring it up, but otherwise, maybe not" (VET05, female).

Veterans stressed that these conversations are often difficult and that the provider's approach is critical to getting a veteran to open up about these issues. One veteran described a positive experience she had with a provider introducing the subject:

She broached the subject of my weight, and she says: 'I very carefully stepped into this arena.' And she said: 'Are you in a mental space where you and I can talk about your weight and the impact on your overall health?' That right there ... that changed the—I mean, absolutely. I was completely accepting to sitting and talking with her (VET02, female).

Some veterans expressed that the screener may not have been helpful for them since they were actively trying to hide their eating disorders from everyone, including healthcare providers. One veteran said, "It was invasive for anybody to ask anything that touched on it because I knew what I was doing, and I was trying to hide it" (VET14, female). However, even this veteran felt the questions would be good for someone ready to discuss their issues.

## 4 | Discussion

In this sample, most veterans reported initiating conversations with their providers about eating and weight concerns and

self-diagnosing their eating disorder rather than being diagnosed in the healthcare setting. Provider-initiated conversations tended to focus on weight-related health concerns rather than eating disorder symptoms. Treatment referrals were almost universally for weight loss or weight management rather than for an eating disorder, often leading veterans to feel misunderstood or marginalized. One setting that was an exception was surgical, as bariatric evaluations did lead to eating disorder identification. These results were consistent with the National Health and Medical Research Council, which has concluded that eating disorders are often misdiagnosed and ignored by healthcare professionals (Ralph et al. 2022).

There was enthusiastic support for an eating disorder screener, and veterans liked the draft screening questions we provided even though they did not think every item was relevant to their specific situation. This highlights the complexities of screening for DSM-5 Feeding and Eating Disorders, which is comprised of three distinct diagnoses (anorexia nervosa, bulimia nervosa, and BED) and a number of unspecified diagnoses with both shared and unique diagnostic criteria (American Psychiatric Association 2013).

Most participants preferred that a PCP conduct the screening at an initial intake visit or when concerns about eating or weight are raised. Several mentioned that the provider should bring it up because these issues are embarrassing and often avoided by both providers and veterans. These comments highlight the need to implement eating disorder screening in the healthcare setting in a way that is not stigmatizing or shaming.

Conventional wisdom suggests an association between eating disorders and underweight, yet data shows that, among Iraq and Afghanistan war-era veterans reporting symptoms consistent with a DSM-5 eating disorder diagnosis, mean BMI (30.6) was in the obese range (Masheb et al. 2021). It was surprising then that among participants with an eating disorder diagnosis in this study were typically referred for weight management or nutrition services, which veterans generally felt was not the right fit. Only one veteran mentioned receiving eating disorder-specific treatment in the VHA, with another receiving treatment through a research study. Most veterans reported the VHA was not doing enough or anything for veterans with eating disorders and that care was outsourced. In particular, we received comments indicating that care had to be self-initiated and that the system was hard to navigate. Veterans desired a range of different treatment modalities for eating disorders, from group sessions to 12-step meetings like Overeaters Anonymous to centers specific to these problems. Others conflated weight loss/management treatments with eating disorder treatments and expressed that care such as bariatric surgery and weight loss pharmacotherapy should be more readily available.

This study had important strengths and several limitations. To our knowledge, this is the first qualitative study capturing veterans' experiences and perceptions of screening, diagnosis, and care for eating disorders in the VHA healthcare system. The veteran sample was recruited from two different medical centers on opposite coasts of the United States, and balanced by gender with 50% female veteran participants despite being only 8% of VHA users in 2015 (Eibner et al. 2016). However, further quantitative

study of gender bias in assessment and diagnosis is needed in VHA. Research has shown that gender bias in current screening tools often leads to eating disorders being overlooked (Jennings and Phillips 2017), and that males are also less likely to receive a referral for specialty eating disorder treatment (MacCaughy, Wagner, and Rufino 2016), despite rates of eating disorders increasing faster for males than females (Gorrell and Murray 2019). Results from this bi-coastal study may not generalize to other regions of the country and to other veteran populations, such as those with an eating disorder who never received an eating disorder ICD-10 diagnosis or veterans who might have been screened for an eating disorder but, in fact, did not have one. Given that this was a qualitative study, we unfortunately do not have exact data on the age or timing of onset of symptoms, or duration of symptoms. We also note that slightly <20% of veterans contacted for this study participated. Some recommendations are difficult to implement. For example, primary care screening is costly and burdensome given the limited amount of time, and competing demands, primary care providers have with their patients (Tai-Seale, McGuire, and Zhang 2007).

Veterans represent an important high-risk eating disorder population in which vulnerable patients need to be identified. This qualitative study illuminated reasons why eating disorders are overlooked in primary care settings, and yet even when identified, why veterans did not receive appropriate care. This study also gave voice to veteran perspectives on conversations about eating disorders within VHA and with VHA providers. A mix of clinician support was reported with an emphasis on clinicians not being knowledgeable about how to identify eating disorders, or simply providing weight loss advice or referrals. Cases of weight shaming were reported, and veteran patients, as well as providers, conflated eating disorders and weight problems. Overall, there was enthusiastic support for both screening and eating disorder services.

To advance VHA eating disorder care, more research is needed to develop a screener for DSM-5 eating disorders that is validated in the veteran population. Additional research is needed on provider perspectives of the screening, diagnosis, and conversations around eating disorders. Training for providers is needed to educate them about the high prevalence of co-occurring overweight and eating disorders, the sequelae of weight stigma in the healthcare setting (Puhl 2023), and how misperceptions about gender in eating disorders lead to missed diagnoses. Implementation efforts are needed to confirm that providers can practice conversations and screenings to ensure that they are non-judgmental, are not burdensome to the healthcare system, and result in appropriate referrals. More effort is needed to make veterans and providers aware of the existing eating disorder resources in VHA and to ensure these resources are available and accessible. Findings, particularly about missed diagnoses and difficulty in receiving eating disorder treatment, have implications for other healthcare settings and patient groups.

#### Author Contributions

**Robin M. Masheb:** conceptualization, formal analysis, supervision, writing—original draft, writing—review and editing. **Jennifer L. Snow:** formal analysis, visualization, writing—original draft, writing—review

and editing. **Sarah E. Siegel**: formal analysis, visualization, writing–review and editing. **Lindsay F. Munro**: formal analysis, visualization, writing–review and editing. **Joy Huggins**: formal analysis, visualization, writing–review and editing. **Alison B. Hamilton**: conceptualization, writing–review and editing. **Shira Maguen**: conceptualization, formal analysis, writing–review and editing.

### Conflicts of Interest

The authors declare no conflicts of interest.

### Data Availability Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available due to privacy or ethical restrictions.

### References

- Ágh, T., G. Kovács, D. Supina, et al. 2016. “A Systematic Review of the Health-Related Quality of Life and Economic Burdens of Anorexia Nervosa, Bulimia Nervosa, and Binge Eating Disorder.” *Eating and Weight Disorders* 21, no. 3: 353–364.
- American Psychiatric Association. 2013. *Diagnostic and Statistical Manual of Mental Disorders (DSM-5®)*. Washington, DC: American Psychiatric Pub.
- Bartlett, B. A., and K. S. Mitchell. 2015. “Eating Disorders in Military and Veteran Men and Women: A Systematic Review.” *International Journal of Eating Disorders* 48, no. 8: 1057–1069.
- Button, E. J., B. Chadalavada, and R. L. Palmer. 2010. “Mortality and Predictors of Death in a Cohort of Patients Presenting to an Eating Disorders Service.” *International Journal of Eating Disorders* 43, no. 5: 387–392.
- Cotton, M. A., C. Ball, and P. Robinson. 2003. “Four Simple Questions Can Help Screen for Eating Disorders.” *Journal of General Internal Medicine* 18, no. 1: 53–56.
- Dorflinger, L. M., C. B. Ruser, and R. M. Masheb. 2017. “A Brief Screening Measure for Binge Eating in Primary Care.” *Eating Behaviors* 26: 163–166.
- Eibner, C., H. Krull, K. M. Brown, et al. 2016. “Current and Projected Characteristics and Unique Health Care Needs of the Patient Population Served by the Department of Veterans Affairs.” *RAND Health Quarterly* 5, no. 4: 13.
- Fitzsimmons-Craft, E. E., A. M. Karam, G. E. Monterubio, C. B. Taylor, and D. E. Wilfley. 2019. “Screening for Eating Disorders on College Campuses: A Review of the Recent Literature.” *Current Psychiatry Reports* 21, no. 10: 101.
- Gorrell, S., and S. B. Murray. 2019. “Eating Disorders in Males.” *Child and Adolescent Psychiatric Clinics of North America* 28, no. 4: 641–651.
- Halbeisen, G., G. Brandt, and G. Paslakis. 2022. “A Plea for Diversity in Eating Disorders Research.” *Frontiers in Psychiatry* 13: 820043.
- Hamilton, A. B. 2013. *Qualitative Methods in Rapid Turn-Around Health Services Research*. VA Women's Health Research Network.
- Hamilton, A. B., and E. P. Finley. 2019. “Qualitative Methods in Implementation Research: An Introduction.” *Psychiatry Research* 280: 112516.
- Hardin, S., D. Vogt, B. N. Smith, et al. 2022. “Male and Female Veterans' Preferences for Eating Disorders Screening.” *Journal of General Internal Medicine* 37, no. S3: 819–822.
- Hudson, J. I., E. Hiripi, H. G. Pope, and R. C. Kessler. 2007. “The Prevalence and Correlates of Eating Disorders in the National Comorbidity Survey Replication.” *Biological Psychiatry* 61, no. 3: 348–358.
- Jennings, K. M., and K. E. Phillips. 2017. “Eating Disorder Examination-Questionnaire (EDE-Q): Norms for a Clinical Sample of Males.” *Archives of Psychiatric Nursing* 31, no. 1: 73–76.
- Kutz, A. M., A. G. Marsh, C. G. Gunderson, S. Maguen, and R. M. Masheb. 2020. “Eating Disorder Screening: A Systematic Review and Meta-Analysis of Diagnostic Test Characteristics of the SCOFF.” *Journal of General Internal Medicine* 35, no. 3: 885–893.
- MacCaughy, C., R. Wagner, and K. Rufino. 2016. “Does Being Overweight or Male Increase a Patient's Risk of Not Being Referred for an Eating Disorder Consult?” *International Journal of Eating Disorders* 49, no. 10: 963–966.
- Maguen, S., B. Cohen, G. Cohen, E. Madden, D. Bertenthal, and K. Seal. 2012. “Eating Disorders and Psychiatric Comorbidity Among Iraq and Afghanistan Veterans.” *Womens Health Issues* 22, no. 4: e403–e406.
- Maguen, S., C. Hebenstreit, Y. Li, et al. 2018. “Screen for Disordered Eating: Improving the Accuracy of Eating Disorder Screening in Primary Care.” *General Hospital Psychiatry* 50: 20–25.
- Maguen, S., E. Madden, B. Cohen, et al. 2013. “The Relationship Between Body Mass Index and Mental Health Among Iraq and Afghanistan Veterans.” *Journal of General Internal Medicine* 28, no. S2: S563–S570.
- Masheb, R. M., C. M. Ramsey, A. G. Marsh, et al. 2021. “DSM-5 Eating Disorder Prevalence, Gender Differences, and Mental Health Associations in United States Military Veterans.” *International Journal of Eating Disorders* 54, no. 7: 1171–1180.
- Mitchell, K. S., R. Masheb, B. N. Smith, S. Kehle-Forbes, S. Hardin, and D. Vogt. 2021. “Eating Disorder Measures in a Sample of Military Veterans: A Focus on Gender, Age, and Race/Ethnicity.” *Psychological Assessment* 33, no. 2: 1226–1238.
- Mitchell, K. S., E. J. Wolf, A. F. Reardon, and M. W. Miller. 2014. “Association of Eating Disorder Symptoms With Internalizing and Externalizing Dimensions of Psychopathology Among Men and Women.” *International Journal of Eating Disorders* 47, no. 8: 860–869.
- Morgan, J. F., F. Reid, and J. H. Lacey. 2000. “The SCOFF Questionnaire: A New Screening Tool for Eating Disorders.” *Western Journal of Medicine* 172, no. 3: 164–165.
- Nagata, J. M., and N. H. Golden. 2022. “New US Preventive Services Task Force Recommendations on Screening for Eating Disorders.” *JAMA Internal Medicine* 182, no. 5: 471–473.
- Nevedal, A. L., C. M. Reardon, M. A. Opra Widerquist, et al. 2021. “Rapid Versus Traditional Qualitative Analysis Using the Consolidated Framework for Implementation Research (CFIR).” *Implementation Science* 16, no. 1: 67.
- Ogg, E. C., H. R. Millar, E. E. Pusztai, and A. S. Thom. 1997. “General Practice Consultation Patterns Preceding Diagnosis of Eating Disorders.” *International Journal of Eating Disorders* 22, no. 1: 89–93.
- Palinkas, L. A., S. J. Mendon, and A. B. Hamilton. 2019. “Innovations in Mixed Methods Evaluations.” *Annual Review of Public Health* 40: 423–442.
- Puhl, R. M. 2023. “Weight Stigma and Barriers to Effective Obesity Care.” *Gastroenterology Clinics of North America* 52, no. 2: 417–428.
- Ralph, A. F., L. Brennan, S. Byrne, et al. 2022. “Management of Eating Disorders for People With Higher Weight: Clinical Practice Guideline.” *Journal of Eating Disorders* 10, no. 1: 121.
- Rosenberger, P. H., and L. Dorflinger. 2013. “Psychosocial Factors Associated With Binge Eating Among Overweight and Obese Male Veterans.” *Eating Behaviors* 14, no. 3: 401–404.
- Rosling, A. M., P. Sparén, C. Norring, and A. L. von Knorring. 2011. “Mortality of Eating Disorders: A Follow-Up Study of Treatment in a Specialist Unit 1974–2000.” *International Journal of Eating Disorders* 44, no. 4: 304–310.

Streatfeild, J., J. Hickson, S. B. Austin, et al. 2021. "Social and Economic Cost of Eating Disorders in the United States: Evidence to Inform Policy Action." *International Journal of Eating Disorders* 54, no. 5: 851–868.

Strother, E., R. Lemberg, S. C. Stanford, and D. Turberville. 2012. "Eating Disorders in Men: Underdiagnosed, Undertreated, and Misunderstood." *Eating Disorders* 20, no. 5: 346–355.

Tai-Seale, M., T. G. McGuire, and W. Zhang. 2007. "Time Allocation in Primary Care Office Visits." *Health Services Research* 42, no. 5: 1871–1894.

### **Supporting Information**

Additional supporting information can be found online in the Supporting Information section.