# Executive Summary: Health Impact Review of HB 1716

**Concerning Veterans' Mental Health Services at Institutions of Higher Education**
**(2019 Legislative Session)**

**Evidence indicates that HB 1716 has the potential to increase access to and use of mental health services at institutions of higher education for student, faculty, and staff Veterans, as well as their spouses and dependents, which in turn has the potential to improve mental health outcomes and decrease mental health disparities.**

## BILL INFORMATION

**Sponsors:** Volz, Reeves, Graham, Kilduff, Steele, Shea, Schmick, McCaslin, MacEwen, Griffey, Stanford, Van Werven, Young, Orwall, Walsh, Sells, Slatter, Peterson, Leavitt, Riccelli, Smith

**Summary of Bill:**

- Requires all state universities, regional universities, and the state college to hire at least one full-time mental health counselor who has experience and training related to working with active members of the military or military Veterans.
- Requires the mental health counselor to prioritize work with student, faculty, and staff Veterans, as well as their spouses and dependents.
- Requires the mental health counselor to be accessible through, but not necessarily located in, each institutions' veteran resource center.

## HEALTH IMPACT REVIEW

**Summary of Findings:**
This Health Impact Review found the following evidence regarding the provisions in HB 1716:

- **A fair amount of evidence** that if state universities, regional universities, and the state college employ at least one full-time mental health counselor with experience working with active members of the military or military Veterans that this would increase access to and use of mental health services for student, faculty, and staff Veterans, as well as their spouses and dependents.
- **Very strong evidence** that increased access to and use of mental health services at institutions of higher education would likely improve mental health outcomes for student, faculty, and staff Veterans, as well as their spouses and dependents.
- **Very strong evidence** that improved mental health outcomes for student, faculty, and staff Veterans as well as their spouses and dependents would likely decrease health disparities.

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# Health Impact Review of HB 1716

**Concerning Veterans' mental health services at institutions of higher education**
**(2019 Legislative Session)**

January 29, 2019

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## Introduction and Methods

A Health Impact Review is an analysis of how a proposed legislative or budgetary change will likely impact health and health disparities in Washington State (RCW 43.20.285). For the purpose of this review 'health disparities' have been defined as the differences in disease, death, and other adverse health conditions that exist between populations (RCW 43.20.270). This document provides summaries of the evidence analyzed by State Board of Health staff during the Health Impact Review of House Bill 1716 (HB 1716).

Staff analyzed the content of HB 1716 and created a logic model depicting possible pathways leading from the provisions of the bill to health outcomes. We consulted with experts and contacted key informants about the provisions and potential impacts of the bill. We conducted an objective review of published literature for each pathway using databases including PubMed, Google Scholar, and University of Washington Libraries. More information about key informants and detailed methods are available upon request.

The following pages provide a detailed analysis of the bill including the logic model, summaries of evidence, and annotated references. The logic model is presented both in text and through a flowchart (Figure 1). The logic model includes information on the strength-of-evidence for each relationship. The strength-of-evidence has been defined using the following criteria:

- **Not well researched:** the review of literature yielded few if any studies or only yielded studies that were poorly designed or executed or had high risk of bias.
- **A fair amount of evidence:** the review of literature yielded several studies supporting the association, but a large body of evidence was not established; or the review yielded a large body of evidence but findings were inconsistent with only a slightly larger percentage of the studies supporting the association; or the research did not incorporate the most robust study designs or execution or had a higher than average risk of bias.
- **Strong evidence:** the review of literature yielded a large body of evidence on the relationship (a vast majority of which supported the association) but the body of evidence did contain some contradictory findings or studies that did not incorporate the most robust study designs or execution or had a higher than average risk of bias; or there were too few studies to reach the rigor of "very strong evidence;" or some combination of these.
- **Very strong evidence:** the review of literature yielded a very large body of robust evidence supporting the association with few if any contradictory findings. The evidence indicates that the scientific community largely accepts the existence of the association.

This review was subject to time constraints, which influenced the scope of work for this review. The annotated references are only a representation of the evidence and provide examples of current research. In some cases only a few review articles or meta-analyses are referenced. One article may cite or provide analysis of dozens of other articles. Therefore the number of references included in the bibliography does not necessarily reflect the strength-of-evidence. In addition, some articles provide evidence for more than one research question, so are referenced multiple times.

## Analysis of HB 1716 and the Scientific Evidence

### Summary of HB 1716

- Requires all state universities, regional universities, and the state college to hire at least one full-time mental health counselor who has experience and training related to working with active members of the military or military Veterans.
- Requires the mental health counselor to prioritize work with student, faculty, and staff Veterans, as well as their spouses and dependents.
- Requires the mental health counselor to be accessible through, but not necessarily located in, each institutions' veteran resource center.

### Health impact of HB 1716

Evidence indicates that HB 1716 has the potential to increase access to and use of mental health services at institutions of higher education for student, faculty, and staff Veterans, as well as their spouses and dependents, which in turn has the potential to improve mental health outcomes and decrease mental health disparities.

### Pathway to health impacts

The potential pathways leading from the provisions of HB 1716 to decreased health disparities are depicted in Figure 1. There is a fair amount of evidence that if state universities, regional universities, and the state college employ at least one full-time mental health counselor with experience working with active members of the military or military Veterans that this would increase access to and use of mental health services for student, faculty, and staff Veterans, as well as their spouses and dependents.[1-8] There is very strong evidence that increased access to and use of mental health services at institutions of higher education would likely improve mental health outcomes for student, faculty, and staff Veterans, as well as their spouses and dependents.[9,10] Further, there is very strong evidence that improved mental health outcomes for student, faculty, and staff Veterans as well as their spouses and dependents would likely decrease mental health disparities among these populations.[2,4,7,11-20]

Due to time limitations we only researched the most direct connections between provisions of the bill and decreased health disparities and did not explore the evidence for all possible pathways. For example, potential pathways that were not researched include:

- Evidence for how access to mental health services for student Veterans impacts academic performance and adjustment to campus life.[3,18]

### Magnitude of impact

Nationally, approximately 1 million current or former service members use Veterans Affairs educational benefits each year, and this number has been increasing over time.[3] A 2018 report by Disabled American Veterans (DAV) states that 51% of Veterans go on to higher education.[11] DAV also found that a higher percentage of female Veterans were enrolled in college compared to female non-Veterans across all age ranges (for example, 33.7% of female Veterans aged 18-34 were enrolled in college compared to 27% of non-Veterans).[11]

Six institutions of higher education in Washington State would be impacted by this legislation, including University of Washington, Washington State University, Eastern Washington

University, Western Washington University, Central Washington University, and The Evergreen State College. Each of these institutions has an established Veteran resource center. There are approximately 3,246 to 3,887 student Veterans in total across these schools (personal communication, February 2017). Since faculty and staff are not required to disclose their Veteran status, it is unclear how many faculty and staff Veterans would be directly impacted.

There are an additional 3,054 to 3,270 students who have self-reported as a dependent of a Veteran across these six institutions of higher education. However, these students may or may not be the dependent of a student, faculty, or staff Veteran at one of these schools. In addition, since the number of dependents reported is based on individuals accessing services at the Veteran resource centers, these numbers likely underestimate the actual number of spouses and dependents that would be impacted by this bill.

**Logic Model**

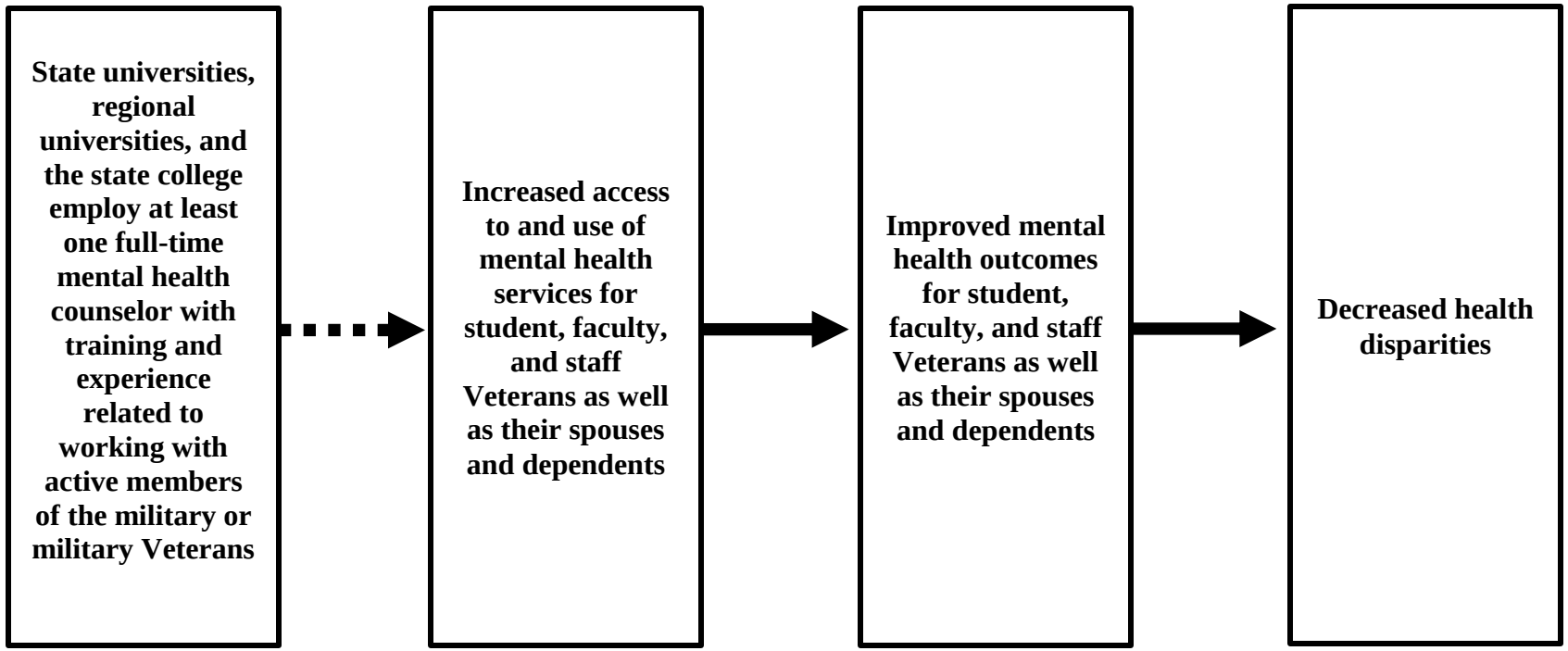


**Figure 1**

**Concerning Veterans' Mental Health Services at Institutions of Higher Education**

**HB 1716**

## Summaries of Findings

**Will employing at least one full-time mental health counselor with experience and training related to working with active members of the military or military Veterans at state universities, regional universities, and the state college increase access to and use of mental health services by student, faculty, and staff Veterans, as well as their spouses and dependents?**

There is a fair amount of evidence that if state universities, regional universities, and the state college employ at least one full-time mental health counselor with experience working with active members of the military or military Veterans this would increase access to and use of mental health services for student, faculty, and staff Veterans, as well as their spouses and dependents.

There is a body of evidence documenting barriers to accessing mental health services for active duty military personnel and Veterans. Military members and Veterans experience financial, structural, and social barriers in accessing mental health services.[3] Financial barriers include cost of care and requirements from the Department of Veterans Affairs (VA).[2,3] The VA requirements make up an eight level tiered priority system that is set up to, "ration care because of limited budgets and capacity."[2] The American Public Health Association noted that, "three of the eight tiers include an income eligibility requirement. Top priority goes to Veterans with 50% or more disability or those who are unemployable as a result of their disability. The second tier includes those with 30% to 40% disability. Former prisoners of war and medal winners are grouped in the third tier. Veterans in lower priority tiers may not be able to access care or may face copays for many types of care services."[2]

Structural barriers include long appointment wait times, difficulty scheduling appointments, and shortage of health care providers.[2-4] According to a VA audit, the number one barrier to timely access to care for Veterans is a lack of provider appointment slots, which may be attributed to a shortage of doctors in the VA and a growing veteran population.[2] Similarly, a barriers to care assessment among female Veterans found that full-time student Veterans reported "less satisfaction with getting an appointment as soon as needed" compared to other groups.[4] In addition, students, faculty, and staff at institutions of higher education may not be located near a VA facility, making access through the VA more difficult.[4]

Social barriers include military culture, mental health stigma, concerns about privacy/confidentiality, concerns that mental health treatment would be documented in military records, embarrassment, and fear of impact on career.[1-5] Female Veterans also reported avoiding care at the VA because of past sexual trauma.[4] A summary report on barriers to care notes that, "given the historically male dominated culture and patient base in VA facilities, women who already had misgivings about seeking care may be even more hesitant when faced with barriers of both mental health stigma and gender sensitivity issues."[4]

These barriers result in many active duty military members and Veterans not seeking the care they need. One author summarized previous research findings that, "56% to 87% of service members experiencing psychological distress after deployment report that they did not receive psychological help."[2] Similarly, 52% of female Veterans indicated a need for mental health care,

with 24% feeling hesitant to seek services.[4] Given these barriers, some researchers have concluded that community-based models of care may be a way to overcome issues of access to and use of mental health services for student, faculty, and staff Veterans.[8]

For example, analysis of a national survey found that the majority (52%) of student service members and student Veterans that have experienced combat-related trauma accessed mental health services in the past year.[3] Student service members and student Veterans that had experienced combat-related trauma and interpersonal violence were 4.5 times more likely to have accessed mental health services in the past year than non-trauma exposed students.[3] However, while service utilization is high among this population, campus-based mental health services appear to remain underutilized.[3] Similarly, while a study of student Veterans in the U.S. found that a large majority of student Veterans reported using on-campus services including the campus Veterans Affairs office (82%), office of financial aid (76%), and on-campus student health services (34%), only 14% of respondents reported using the counseling center.[6] The majority of student Veterans using counseling centers reported benefits and positive experiences from using this service.[6] Taken together, these findings suggest that students are already using their school's Veteran resource center and the addition of a mental health counselor to these centers may improve access to and use of services for this population.

A 2018 survey with military personnel found that 77% of respondents said they would prefer to see a psychologist who was a Veteran.[5] This finding held across all groups and demographics (including age, race/ethnicity, gender, education level, characteristics of military service, deployment history, and attitudes about psychotherapy in general).[5] In addition, willingness to seek mental health services was higher when the potential psychotherapist was a Veteran. The study authors concluded, "findings imply that having the opportunity to receive treatment by a psychotherapist who is a Veteran may remove barriers for treatment and encourage more service members and Veterans to seek and obtain the help that they need."[5] While there has been little research to understand the extent to which mental health counselors with military training are currently available on college campuses, a study of 80 universities in California found that only 4 campuses had mental health counselors with training or experience in military culture and only 30% of campuses offered combat-specific mental health training to students, faculty, or staff.[7] These findings suggest that increasing the availability of counseling staff with experience in military culture on college campus may improve access to and use of mental health services for student Veterans.

Lastly, discussions with staff from the Veteran resource center at each of the six institutions of higher education that would be impacted by HB 1716 indicated that, if there were a dedicated mental health counselor on campus, their counseling services would be greatly used (personal communication, February 2017). A number of staff also mentioned that other services that are currently available are at full capacity and that the addition of a full-time mental health counselor would be beneficial.

Taken together, there is a fair amount of evidence that adding at least one full-time mental health counselor with experience working with active members of the military or military Veterans would increase access to and use of mental health services for student, faculty, and staff Veterans, as well as their spouses and dependents.

**Will increased access to and use of mental health services at institutions of higher education improve mental health outcomes for student, faculty, and staff Veterans, as well as their spouses and dependents?**

There is very strong evidence that increased access to and use of mental health services at institutions of higher education would likely improve mental health outcomes for student, faculty, and staff Veterans, as well as their spouses and dependents. There is a large body of evidence supporting the positive association between using health services for the early detection and treatment of mental health disorders[10] and improved health outcomes. There is strong consensus in the scientific literature supporting this association, therefore we are providing only one example here. A large systematic review published by the Agency for Healthcare Research and sponsored by the Department of Defense and the Department of Veterans Affairs, which included 1,042 full-length articles, provided a set of guidelines regarding major depressive disorder.[9] One of the recommendations is that "patients with complex [major depressive disorder] (severe, chronic or recurrent) be offered specialty care by providers with mental health expertise in order to ensure better outcomes and effective delivery of evidence-based treatment strategies."[9] This recommendation is discussed in further detail and the relevant literature is cited with the findings that patients who were referred to mental health care settings with behavioral health specialists had significantly better outcomes than those who remained in an integrated primary care setting.[9] The Department of Defense and the Department of Veterans Affairs also issued other guidelines related to mental health, including guidelines for the management of concussion-mild traumatic brain injury and guidelines for the assessment and management of patients at risk for suicide, among others.[9] Overall, there is a large body of evidence supporting evidence-based treatment for mental health concerns for service members and Veterans.[10]

**Will improved mental health outcomes for student, faculty, and staff Veterans as well as their spouses and dependents decrease health disparities?**

There is very strong evidence that improved mental health outcomes for student, faculty, and staff Veterans as well as their spouses and dependents would likely decrease health disparities. A large body of evidence demonstrates a high burden of mental health issues among Veterans in the U.S. It is well-documented that Veterans have significantly higher levels of psychiatric illness, depression, anxiety, isolation, post-traumatic stress disorder (PTSD), substance use, alcohol problems, and self-harm than civilian counterparts.[2,11,12,15,20] For example, "Nearly 50% of combat Veterans from Iraq report that they have suffered from PTSD, and close to 40% of these same Veterans report 'problem alcohol use.'"[2]

Women who are actively deployed or exposed to combat situations have higher levels of PTSD, depression during pregnancy, and postpartum depression than women who have not served in the military.[20] In addition, women in the military and female Veterans also experience high levels of intimate partner violence and military sexual trauma.[20] The Department of Veterans Affairs has reported that approximately 20% of women Veterans reported a history of military sexual trauma, defined as "the experience of sexual harassment or attempted or completed sexual assault during military service."[20] A survey of female Veterans conducted by the Department of Veterans Affairs found that 57% of female Veterans experienced threat or force of sex while in the military, 34% of female Veterans experienced depression, 13% of female Veterans

experienced Post-Traumatic Stress Syndrome (PTSD), and 2% experienced Traumatic Brain Injury.[4]

Evidence also indicates that military families, including children, experience a number of stressors related to the demands of deployment.[19] Studies have examined the impact of deployment on spouses and families of military members and have demonstrated an increased risk of negative health effects such as stress, anxiety, depression, and behavioral problems and suicidal ideation among children and adolescents.[16,19]

Looking specifically at outcomes among students, a number of studies noted a higher risk of self-harm, PTSD, and depression for student Veterans compared to their civilian counterparts.[12,15,17,18] Overall, student Veterans experience higher risks of psychosocial, academic, and mental health concerns compared to non-Veteran students.[7,11] One study also found that those student service members/Veterans who identify as lesbian, gay, or unsure exhibit significantly greater rates of outcomes such as feeling hopeless or exhausted, overwhelming anxiety, and personal stressors compared to nonmilitary students.[12] Further, for student service members/Veterans binge drinking was positively correlated with symptoms such as depression, anxiety, and PTSD, and these associations were not seen among civilian students.[13,14]

Therefore, improving mental health outcomes for student, faculty, and staff Veterans, as well as their spouses and dependents, would likely decrease mental health disparities among this population.

## Annotated References

### Uncategorized References


1. **Bonar E. E., Bohnert K. M., Walters H. M., et al. Student and nonstudent national guard service members/veterans and their use of services for mental health symptoms. *Journal of American College Health.* 2015;63(7):437-446.**
Bonar et al. used data from 1,449 National Guard service members/Veterans (SM/V) who were attending a university in the midwestern U.S. to compare mental health symptoms and use of services among student and nonstudent service members/Veterans. Surveys were administered approximately 6 months after individuals returned from deployment between October 2011 and July 2013. Participants completed a number of surveys that assessed student status, patient health, mental health service use, perceived stigma and barriers to accessing care and screening for generalized anxiety disorder, posttraumatic stress disorder (PTSD), and alcohol use disorder. Among those service members/Veterans who screened positive for any of the mental health symptoms, both students and nonstudents had low levels of mental health service utilization (not statistically significantly different). Particularly among students, perceived barriers to care included concerns about treatment being documented in their military records (43%), embarrassment (31%), difficulty scheduling appointments (26.8%), and fear that it would harm their career (29%).

2. **Removing Barriers to Mental Health Services for Veterans (Policy Statement Number 201411). 2014; Available at: https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2015/01/28/14/51/removing-barriers-to-mental-health-services-for-veterans. Accessed.**
In this policy statement by the American Public Health Association (APHA), APHA presents an overview of the issue of mental illness among Veterans in the U.S. and presents recommendations to improving access to mental health care in this population. The article begins by presenting a problem statement and evidence from the literature. For example, the authors state that, "Veterans have disproportionate rates of mental illness, particularly posttraumatic stress disorder (PTSD), substance abuse disorders, depression, anxiety, and military sexual trauma. Nearly 50% of combat Veterans from Iraq report that they have suffered from PTSD, and close to 40% of these same Veterans report 'problem alcohol use'...Studies indicate that 56% to 87% of service members experiencing psychological distress after deployment report that they did not receive psychological help." There are a number of barriers that prevent Veterans from accessing care including long wait times, shortage of health care providers, social barriers, and requirements from the Department of Veterans Affairs (VA). According to a VA audit, the number one barrier to timely access to care for Veterans is a lack of provider appointment slots, which may be attributed to a shortage of doctors in the VA and a growing Veteran population. A number of action steps are recommended at the end of the policy statement including one that is most relevant to this review: "In cases in which VA services are not able to meet demands for care, services should be made available through licensed mental health providers external to the agency..."

3. **Artime T.M., Buchholz K.R., Jakupcak M. Mental Health Symptoms and Treatment Utilization Among Trauma-Exposed College Students. *Psychological Trauma: Theory, Research, Practice, and Policy.* 2018;Advance online publication: May 21, 2018.**

Artime, et al. used data from the 2015 American College Health Association National College Health Assessment to describe students impacted by interpersonal violence and student service members/Veterans with combat-related trauma to determine the impact on students' mental health and academics. They also looked at the use of mental health services among these two groups. Annually, approximately 1 million current or former service members use Veterans Affairs educational benefits and this number has been increasing over time. In general, trauma-exposed college students have reported mental health concerns, including Post Traumatic Stress Disorder (PTSD), anger, fear, withdrawl, shock, denial, guilt, confusion, nervousness, and distrust. Previous research has also documented that trauma-exposed college students may develop chronic mental health concerns, including depression, suicidal ideation, self-harm, poor self-esteem, interpersonal problems, substance use, and anxiety disorders. Trauma-exposure is also related to poor physical health, difficulty adjusting to campus life, and poorer academic performance (e.g. increased likelihood of college drop-out, lower GPA). They also cited previous research that 84% of trauma-exposed students sought mental health services, but only 5% sought services from campus counseling services. Previous assessments of the National College Health Asssessment suggest that student active duty military members and student Veterans are more likely than non-military/non-Veteran students to use mental health services, but that only 2% of student military members and Veterans used campus counseling services. Other research has found that 43% of student military members and Veterans stated the greatest barrier to accessing mental health services was a desire to avoid mental health treatment on their military record. Other barriers included mental health stigma, concerns about confidentiality, fear of the impact on career, difficulty getting an appointment, and cost of care. Artime et al. analyzed a national sample of 19,861 students. They found approximately 20% had experienced interpersonal violence, combat exposure, or both within the past 12 months. Among student Veterans/service members with combat-related trauma, 52% sought mental health services. Of student Veteran/services members with combat-related trauma and experience with interpersonal violence, 84% sought mental health services. Students experiecing both combat-related trauma and interpersonal violence were 4.5 times more likely than non-trauma exposed students to have sought mental health services in the past year. Overall, the authors found that "trauma-exposed students report poor mental health. Service utilization is high among this population, but campus-based mental health services appear to remain underutilized. Outreach efforts by student life professionals and campus clinicians targeting demographic subgroups could enhance utilization and accessibility of campus resources." In a clinical impact statement, the authors write, "results showed that certain groups of trauma-exposed students experience a number of negative impacts and are more likely to seek help from mental health professionals than the general population. Findings suggest that efforts should be made to improve the use of campus-based mental health services." The authors suggest that low use of campus services may be due to the fact that student Veterans have access to benefits through the VA.

4. **Affairs U.S. Department of Veterans. Study of Barriers for Women Veterans to VA Health Care: Final Report. 2015.**

The U.S. Department of Veterans Affairs, Women's Health Services completed a study to identify barriers female Veterans face in accessing health care through the VA. In 2011, then Secretary of Veteran Affairs, Eric Shinseki called for the formation of a Women Veterans Task Force to examine gaps and barriers in how the VA serves women Veterans and to develop a comprehensive action to plan to address these barriers. This study completed a Barriers to Care

survey with 8,532 women Veterans (13.2% response rate) who had and had not used VA health services in the past two years. They identified nine main barriers to acessing care. 1. Comprehension of eligibility requirement and scope of services; 2. Effect of outreach; 3. Driving distance to access care; 4. Clinic location and hours; 5. Chlidcare; 6. Acceptability of integrated care; 7. Gender insensitivity; 8. Mental health stigma; and 9. Safety and comfort. More specific to these barriers, approximately 72% of women who use the VA system do not use the nearest VA facility for care. Of these women, approximately 16% felt that "the women's services I need are not available" and 12% felt that "I do not feel the providers are good" at the nearest VA facility. As part of this question, full-time student Veterans reported "less satisfaction with getting an appointment as soon as needed" compared to other groups as a barrier to reciving care at the VA. The report explains, "women with the least amount of satisfaction with appointing were in the employment group *unable to work or unemlpoyed* and *other committments* (other including full-time homemaker, a full time student, or a full-time care giver to a child or adult parents). Women in these categories may find the least flexibility in adjusting their schedules to accomodate available appointment times." Of mental health care users, approximately one-third of all women with "other committments" ranked their experience getting a mental health appointment as soon as needed as a 1, 2, or 3 out of a 5 point scale (1=poor; 5= outstanding). In addition, the survey found that 71% of female Veterans experienced unwanted sexual attention while in the military, 57% of female Veternas experienced threat or force of sex while in the military, 34% of female veterans experienced depression, 13% of female Veterans experienced Post-Traumatic Stress Syndrome (PTSD), and 2% experienced Traumatic Brain Injury. Overall, 52% of female Veterans indicated a need for mental health care, with 24% of women feeling hesitant to seek mental health services. In addition, 19% of users and 8% of non-users reported avoiding the VA because of past sexual trauma. The authors note, "given the historically male dominated culture and patient base in VA facilities, women who already had misgivings about seeking care may be even more hesitant when faced with barriers of both mental health stigma and gender sensitivity issues." Lastly, while most women felt that safety and comfort factors in VA facilities were adequate, women with disabilities and women who had experienced military sexual trauma expressed less satisfaction with safety and comfort in facilities.

5. **Johnson T.S., Ganz A., Berger S., et al. Service Members Prefer a Psychotherapist Who Is a Veteran. *Frontiers in Psychology*. 2018;9.**

Johnson et al. conducted online surveys with 77 military personnel to test the hypothesis that military members and Veterans would be more likely to seek mental health services if the potential psychotherapist was also a Veteran. This study is the first to empirically investigate this hypothesis. The authors hypothesize that, due to pervasive mental health stigma in military culture, "service members [may] be relectant to seek mental health help within the military system, but they may be willing to consider a therapist who is not a member of the military...However, using the services of a non-military psychologist may also have percieved setbacks...[service members] often feel that civilians who have not experienced combat are unable to understand what they have gone through." The authors also note that non-military mental health professions may lack cultural competence, language, or understanding of military culture. Their survey found that 91% of military personnel had never sought mental health treatment before joining the military; 58% reported seeking care after joining the military. They found that 77% of respondents said they would prefer to see a psychologist who was a Veteran. This finding held across all groups and demographics (including age, race/ethnicity, gender,

education level, characteristics of military service, deployment history, attitudes about psychotherapy in general). In addition, willingness to seek mental health services was higher when the potential psychotherapist was a Veteran. The authors concluded, "findings imply that having the opportunity to recieve treatment by a psychotherapist who is a Veteran may remove barriers for treatment and encourage more service members and Veterans to seek and obtain the help that they need. This can be done by communicating these findings to the military population and by encouraging therapists who have military experience to make this fact known to their potential clients."

6. **Cate C. *Student Veterans' College Experiences: Demographic Comparisons, Differences in Academic Experiences, and On Campus Service Utilization*, University of California, Santa Barbara; 2011.**

Cate compared student Veterans with similar populations to determine the effects of student Veterans' experience on academic performance, college experience, and use of on-site services. Data was collected through surveys that were sent out to members of Student Veterans for America (SVA). Included in the survey data were measures for PTSD (using the Los Angeles Symptom Checklist), measures for deployment-related health factors (using the Deployment Risk and Reliance Inventory), and measures for health and well-being (using the Patient Health Questionnaire). The author compared student Veterans' age, marital status, and race/ethnicity with those of traditional college students and with those currently in the military. Results confirm that student Veterans' demographics more likely represent the average college student than demographics of those receiving benefits from the Department of Veterans Affairs (DVA); this included a greater proportion of Hispanic Veterans attending college than are listed as receiving benefits from the DVA, 11.4% and 5.9%, respectively, and a smaller proportion of African American Veterans attending college than are listed as receiving benefits from the DVA, 3.8% and 11.4%, respectively. The results from the academic demographics of the sample show that the majority of student Veterans transferred from a 2-year college (57.5%); the main reason for this being relocation for personal reasons and relocation due to military assignment. Nearly three quarters (72.6%) of the sample were undergraduate students. Nearly 86% of the sample reported that their overall health was good to excellent; however, nearly 36% reported being diagnosed with at least one mental health diagnosis. A large majority of student Veterans reported using on-campus services including the Veteran's Affairs Office (82%), Financial Aid (76%), and on-campus student health services (34%). Only 14% of respondents reported using the counseling center; however, a majority of those student Veterans' reported benefits and positive experiences from using this service. This present study provides evidence that student Veterans significantly differ from traditional students and the author suggests that post-secondary schools should be cautious about combining all students into the same category when considering on-campus services.

7. **Niv N., Bennett L. Veterans' Mental Health in Higher Education Settings: Services and Clinician Education Needs. *Psychiatric Services.* 2017;68(6):636-639.**

Niv and Bennett conducted phone interviews with directors of mental health services at 80 California colleges to determine what services are availble for student Veterans and to identify gaps in training. The authors summarize past research showing that Veteran students experience higher risks of psychosocial, academic, and mental health concerns compared to non-Veteran students. Of the participating schools, 18 did not offer any mental health services, and half of the

schools did not ask about Veteran status. Only 4 of the schools employed a mental health counselor with training or experience in military culture. In addition, less than 30% of participating schools provide combat-related education to students, faculty, and staff, and directors identified the need for numerous veteran-related mental health training topics.

8. **Currier J. M., McDermott R. C., Sims B. M. Patterns of help-seeking in a national sample of student veterans: a matched control group investigation. *General hospital psychiatry.* 2016;43:58-62.**
Currier, McDermott, and Sims investigated the methods that student Veterans use to seek help for mental health-related concerns. They matched 945 Veteran to 2,835 non-Veteran students from 57 institutions of higher education using data from the Health Mind Study (HMS) out of the University of Michigan School of Public Health between 2011 and 2015. The authors selected Veterans who had completed assessments of help-seeking and then matched them by gender, age, and race to non-Veteran students. After analysis, researchers found that both groups seek professional help from clinicians at comparable rates; however, Veteran students were more likely to seek help from a religious counselor than their non-Veteran counterparts. Both groups were more likely to seek help from nontraditional sources. While about 21% of Veteran students expressed moderately severe levels of depression, there was a 1:2 ratio of help-seekers to help-rejecters. The authors conclude that these findings represent a real need for community-based models of mental healthcare for student Veterans.

9. **Department of Veterans' Affairs/Department of Defense Clinical Practice Guideline for the Management of Major Depressive Disorder. 2016; Available at: https://www.guideline.gov/summaries/summary/50325. Accessed February 21, 2017.**
The National Guideline Clearinghouse is a publicly available database produced by the Agency for Healthcare Research and Quality in partnership with the American Medical Association and the American Association of Health Plans Foundation. The database contains evidence-based clinical practice guidelines for a wide range of topics that all meet a specific set of criteria for inclusion. This particular guideline from the Department of Defense and the Department of Veterans Affairs includes a number of recommendations that are organized into five sections: identification, assessment and triage, treatment setting, management, and other treatment considerations. Each recommendation is given a strength rating based on the balance of potential desirable versus undesirable outcomes. The basis for this guideline regarding major depressive disorder (MDD) is based on a literature review that included 1,042 full-length articles. For example, one of the recommendations under treatment is, "we recommend that patients with complex MDD (severe, chronic or recurrent) be offered specialty care by providers with mental health expertise in order to ensure better outcomes and effective delivery of evidence-based treatment strategies." This recommendation is then discussed in further detail and the relevant literature is cited with the findings that patients who were referred to mental health care settings with behavioral health specialists had significantly better outcomes than those who remained in an integrated primary care setting.

10. **Association American Psychological. Evidence-Based Practice in Psychology: APA Presidential Task Force on Evidence-Based Practice. 2006;61(4):271-285.**
The American Psychological Association (APA) created a policy indicating that the evidence-base for a psychological intervention should be evaluated using both efficacy and clinical utility

as criteria. The Association President appointed the APA Presidential Task Force on Evidence-Based Practice, and the task force published this document with the primary intent of describing psychology‟s commitment to evidence-based psychological practices. This document also references many research articles providing evidence for the efficacy of a number of psychological treatments and interventions. The reference list for this document highlights the growing body of evidence of treatment efficacy from the 1970s through 2006. Note that this does not indicate that all treatments are effective, but rather than there is a very large body of evidence supporting that evidence-based treatments are available.

11. **DAV. Women Veterans: The Journey Ahead. 2018.**
This 2018 report by DAV (Disabled American Veterans) summarizes findings and recommendations for the Department of Veterans Affairs to improve services specific to female Veterans related to health care, mental health, community care, shelter, legal concerns, education, disability benefits, and financial security. The report found that female Veterans were more likely to use mental health services than male Veterans, though both men and women experience barriers to accessing mental health care. Although specific to female Veterans, DAV included a recommendation to "remove existing barriers and improve access to mental health programs" and explore innovative programs for providing care. The report also provides information about male and female student Veterans. It notes that, following the GI bill, approximately 51% of Veterans go on to higher education. In 2015, 149,375 female Veterans used VA education benefits and a higher percentage of female Veterans were enrolled in college compared to non-Veterans across all age ranges (for example, 33.7% of female Veterans aged 18-34 were enrolled in college, compared to 27% of female non-Veterans). However, the report notes that "Veterans as a whole face a large number of challenges in postsecondary education...mental health issues may pose particular problems for student Veterans." The report notes that student Veterans are at greater risk of alcohol problems, fights, and isolation. In addition, traumatic brain injury may pose both physical and congitive challenges for student Veterans. The report also notes that male and female student Veteras are, "often hesitant to seek out help when they have a problem, whether it concerns mental health or academics" and suggests that institutions take a more pro-active role in reaching out to student Veterans.

12. **Barry A. E. Student service members/veterans participating in higher education: What we know to date. *Journal of American College Health.* 2015;63(7):415-417.**
In this special issue, Barry presents an overview of what is known about student service members/Veterans participating in higher education. It is estimated that 1 out of every 3 persons deployed in support of Operation Enduring Freedom and Operation Iraqi Freedom will experience a traumatic brain injury, posttraumatic stress disorder, or a major depressive episode. These kinds of mental health issues, including generalized anxiety, have been shown to have a direct negative effect on the academic adjustment of these students. When comparing outcomes of students service members/Veterans and their civilian counterparts, student service members/Veterans exhibit a higher likelihood of self-harm. Student service members/Veterans who identify as lesbian, gay, or unsure exhibit significantly greater rates of outcomes such as feeling hopeless or exhausted, overwhelming anxiety, and personal stressors. The author concludes that at a minimum, "...providers in the primary care setting and counseling centers on campus screen for the presence of mental health conditions among student service members/Veterans and be trained and ready to employ best practices in the treatment of mental

health conditions, such as depression, anxiety, and posttraumatic stress, and able to refer to and coordinate with other mental health professionals in Veterans Administration primary care settings."

13. **Barry A.E., Whiteman S., Wadswroth S.M., et al. The alcohol use and associated mental health problems of student service members/veterans in higher education.** ***Drugs: Education, Prevention and Policy.*** **2012;19(5):415-425.**
Using a sample of student service members/Veterans and civilian students attending institutions of higher education in the Midwest, Barry et al. examined whether student service members/Veterans drink more frequently or in higher quantities than their non-service peers and whether the links between drinking and health-related outcomes are different for these two populations. The total study sample included 145 student service members/Veterans and 136 civilian students. The results from the analysis demonstrated that there was no difference between students in terms of their frequency of drinking in the past year or binge drinking. For student service members/Veterans, binge drinking was positively correlated with symptoms such as depression, anxiety, and posttraumatic stress disorder. This association was not see among civilian students. The authors conclude that given these results, it is important for colleges and universities to undertake deliberate and significant efforts to assess the health of students service members/Veterans on campus and provide services that will allow them to effectively transition from military life to college life.

14. **Barry A.E., Whiteman S.D., MacDermid Wadsworth S. Student service members/veterans in higher education: A systematic review.** ***Journal of Student Affairs Research and Practice.*** **2014;51(1).**
This systematic review by Barry et al. includes 13 empirical investigations that examined outcomes among student service members/Veterans in institutions of higher education. Looking at only the most relevant findings, a number of studies looked at the association between alcohol use and mental health-related outcomes and found that compared to civilian students, binge drinking among student service members/Veterans was positively associated with problem drinking, psycho-somatic symptoms, and posttraumatic stress disorder (PTSD). One study also noted that symptoms of PTSD among student service members was predicted by documented combat exposure but social support predicted fewer symptoms. Further research has examined health-risk behaviors among student service members/Veterans compared to their civilian peers and has shown that student service members/Veterans are more likely to behave in ways that are risky to their health. For example, "...when compared to civilian peers and non-Operation Enduring Freedom (OEF) and Operation Iraqi Freedom (OIF) Veterans, OEF/OIF Veterans (n = 406) were more likely to use smokeless tobacco, have been in a physical fight, ridden a motorcycle, and carried a weapon within the past year." Given these differences, the authors conclude that institutions of higher education need to be prepared to meet the unique health needs of their student service members/Veterans population and the data presented within should serve as a call to action for policy makers and practitioners alike.

15. **Blosnich J. R., Kopacz M. S., McCarten J., et al. Mental health and self-directed violence among student service members/veterans in postsecondary education.** ***Journal of American College Health.*** **2015;63(7):418-426.**

This study used the Fall 2011 National College Health Assessment to examine the prevalence of psychiatric diagnoses and suicide-related outcomes among a sample of student service members/Veterans. The study sample included 27,774 respondents from 44 institutions of higher education and of these, 706 (or 2.6%) identified as service members/Veterans. Compared to their civilian counterparts, a significantly higher proportion of student service members/Veterans reported a psychiatric diagnosis (20.4% vs. 27.0%) but these two populations did not significantly differ in terms of crude prevalence of suicidal ideation, suicide attempt, or self-harm. However, after adjusting for covariates and demographic characteristics, there was no difference between student service members/Veterans and students without military service in terms of psychiatric diagnosis, suicidal ideation, or suicide attempt. There was a significantly increased odds of self-harm among student service members/Veterans compared to other students after adjusting. The authors recommend that college campuses need to focus outreach initiatives on the mental health needs of student service members/Veterans and help them to identify appropriate services.

16. **Green S., Nurius P. S., Lester P. Spouse psychological well-being: A keystone to military family health.** ***Journal Of Human Behavior In The Social Environment.*** **2013;23(6).**
Green et al. aimed to understand the predictors of military spouse psychosocial vulnerability in a sample of female civilian spouses. The sample population consisted of 171 families with an active duty Army and Marine Corps parent from two West Coast, U.S. military bases. Study interviewers obtained information about deployment factors, socioeconomic resources, social support, psychological health, family strain, stressors, and environment. The authors found that military spouses who were at greatest risk for psychological distress were more likely to report low levels of social support. Further, family stressors, strain, and resources were all predictive of psychological health even after controlling for deployment and socioeconomic factors. The authors also point to the pressure that is felt by overburdened spouses and the potential benefit of problem solving and goal setting in order to not only break down larger goals, but also to manage the stress that prohibits them from utilizing services.

17. **Kazis Lewis, Miller Donald, Clark Jack, et al. Health-related quality of life in patients served by the Department of Veterans Affairs.** ***Archives of Internal Medicine.*** **1998;158:626-632.**
Kazis et al. used data from the Veterans Health Study, a 2-year prospective survey of the VA patient population receiving ambulatory care in the greater Boston, Massachussetts area, to determine an association between Veteran status and health-related quality of life (HRQoL). The authors also compared HRQoL to medical history, depression, sociodemographic information (age, educational attainment, race, marital status, and income), and military experience. A total sample of 1,667 VA ambulatory patients were selected, of which 18% were 22-49 years old, 29% were 50-64 years old, and 52% were 65-90 years old. Depression was most common in the youngest group (51%) compared to the other age groups. This was also true for chronic low-back pain and alcohol-related disorders. Seven out of the eight measures for HRQoL, with exception to physical health, were lowest (worse health) among the youngest age group; however, all age groups scored lower than their nonveteran counterparts. While education and income added relatively little power to the overall model, other demographic data such as age and income explained almost half of the variance in mental health.

18. **Schonfeld L., Braue L. A., Stire S., et al. Behavioral health and adjustment to college life for student service members/veterans. *Journal of American College Health.* 2015;63(7):428-436.**

Schonfeld et al. conducted a cross-sectional design using surveys to explore whether student service members/Veterans experience mental health problems and whether such problems may have an effect on self-reported adjustment problems to civilian life. A total of 173 student service members/Veterans from a large southwestern university responded. Demographic and military information were compared to behavioral health status data from several measurement tools including the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), the Posttraumatic Stress Disorder Checklist Civilian Version (PCL-C), the Patient Health Questionnaire-9 (PHQ-9), and the Veterans RAND 12 Item Health Survey (VR-12). The authors found while the majority of student service members/Veterans appear to be well-adjusted, there was still a significant percentage who experience mental and emotion problems, with PTSD and depression being the most prevalent. Overall, 28.3% of participants reported having a challenging time adjusting to college life after the military.

19. **Trautmann J., Alhusen J., Gross D. Impact of deployment on military families with young children: A systematic review. *Nursing outlook.* 2015;63(6):656-679.**

In this systematic review, Trautmann et al. aimed to describe the impact of deployment on the mental health of military families with young children post September 11th. The authors searched for literature published between 2001 and 2014 and found 26 studies that fit within their inclusion criteria. Evidence indicates that frequent and lengthier deployments are associated with increased stress and depressive symptoms among parents, poorer general well-being, and particularly high rates of mental health problems among military spouses raising young children alone during deployments. Among children the authors found that kids who are separated from a deployed parent experience higher rates of emotional and behavioral problems. The literature also suggests that deployment is associated with increased health care utilization and child maltreatment and neglect. The authors conclude by indicating that more research is necessary to better understand the mental health needs of military families, particularly those with infants and young children, so that evidence-based interventions can be tailored to best suit their needs.

20. **Gynecologists American College of Obstetricians and. Health Care for Women in the Military and Women Veterans: Committee Opinion. Committee on Health Care for Underserved Women. 2012.**

In this report, the American College of Obstetricians and Gynecologists (ACOG), Committee on Health Care for Underserved Women summarizes the unique health care needs of women serving in the military and women Veterans. They also provide recommendations to provide more comprehensive care to female activity duty service members and Veterans. ACOG acknowledges that "military services, particularly deployment to war zones and combat exposure, can increase the risk of mental health problems, and Veterans (including women Veterans) have significantly elevated rates of psychiatric illness, including depression, post traumatic-streess disorder (PTSD), and substance [use] compared to their civilian counterparts." Women in the mililtary experience high prevelance of posttraumatic stress disorder, intimate partner violence, and military sexual trauma. In addition, women who are actively deployed or exposed to combat situations have higher levels of posttraumatic stress disorder, depression during pregnancy, and postpartum depression than women who have not served in the military.

ACOG recommends providers screen for intimate partner violence, including history of sexual assault, sexual trauma, and posttraumatic stress disorder. The Department of Veterans Affairs requires screening of all Veterans for military sexual trauma, and 20% of women Veterans reported a history of military sexual trauma, defined as "the experience of sexual harassment or attempted or completed sexual assault during military service" and can be perpetrated by military personnel, civilians, commanding officers, subordinates, strangers, friends, or intimate partners. ACOG recommends that providers refer all Veterans who have experienced military sexual trauma to a Veterans Health Administration since treatment and care is provided free of charge.