DEPARTMENT OF THE ARMY
HEADQUARTERS, UNITED STATES ARMY MEDICAL COMMAND
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REPLY TO
ATTENTION OF

MCZX

OTSG/MEDCOM Policy Memo 12-035

10 APR 2012

Expires 10 April 2014

MEMORANDUM FOR COMMANDERS, MEDCOM REGIONAL MEDICAL COMMANDS

SUBJECT: Policy Guidance on the Assessment and Treatment of Post-Traumatic Stress Disorder (PTSD)

1. References:

a. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text Revision (DSM-IV-TR). Arlington VA. 2000; Draft DSM-V definition is available at http://www.dsm5.org/ProposedRevisions/Pages/proposedrevision.aspx?rid=165.

b. Veterans Affairs (VA)/Department of Department (DoD) Clinical Practice Guideline for Management of Post-Traumatic Stress, VA, DoD, The Management of Post-Traumatic Stress Working Group, Version 2.0, October 2010.

c. Wilk JE, Hoge CW. WRAIR/APIRE Army Behavioral Health Practice and Treatment Study: Status of Workforce and Characteristics of Patients. Paper presentation at Annual Meeting of the American Psychiatric Association, Honolulu, HI, May 2011.

d. Adler AB, Wright KM, Bliese PD, Eckford R, Hoge CW. A2 Diagnostic Criterion for Combat-Related Post-Traumatic Stress Disorder. J Traumatic Stress 2008; 21:301-308.

e. Castro CA, Adler AB. Reconceptualizing Combat-Related Post-Traumatic Stress Disorder as an Occupational Hazard. In: Adler AB, Bliese PD, Castro CA, eds. *Deployment Psychology*. Washington, DC: American Psychological Association; 2011:217-242.

f. Hoge CW. Interventions for War-Related Post-Traumatic Stress Disorder: Meeting Veterans Where They Are. *JAMA* 2011; 306:549-551.

g. Kim PY, Britt TW, Klocko RP, Riviere LA, Adler A. Stigma, negative attitudes about treatment, and utilization of mental healthcare among soldiers. *Military Psychology* 2011; 23: 65-81.

h. Brown, MC, Creel AH, Engel CC, Herrell RK, Hoge CW. Factors associated with interest in receiving help for mental health problems in combat Veterans returning from deployment to Iraq. *J Nerv Mental Dis* 2011;199:797-801.

i. Marx BP, Holowka DW. PTSD Disability Assessment. PTSD Research Quarterly 2011;22(4):1-6. See also: Institute of Medicine, PTSD compensation and military service. National Academies Press 2007 (pages 172-173); and Dohrenwend BP, et. al. The psychological risks of Vietnam for US Veterans: a revisit with new data and methods. *Science, 313:* 979-982.

j. Friedman MJ, Keane TM, Resick PA. Handbook of PTSD: Science and Practice. The Guilford Press, New York, 2007.

k. Krystal JH, Rosenheck RA, Cramer JA, et al; for the Veterans Affairs Cooperative Study No. 504 Group. Adjunctive risperidone treatment for antidepressant-resistant symptoms of chronic military service-related PTSD: a randomized trial. *JAMA* 2011;306(5):493-502.

l. OTSG/MEDCOM Policy Memo 11-076, 11 Sep 11, subject: Optimal Use of Psychological/Neuropsychological Assessment.

m. OTSG/MEDCOM Policy Memo 11-010, 22 Feb 11, subject: Administrative Separation of Soldiers for Personality Disorder (PD) under Chapters 5-13 and 5-17, or other Designated Physical or Mental Conditions under Chapters 5-17.

n. OTSG/MEDCOM Policy Memo 10-040, 9 Jun 10, subject: Screening Requirements for Post-Traumatic Stress Disorder (PTSD) and mild Traumatic Brain Injury (mTBI) for Administrative Separations of Solders.

o. Department of Veteran Affairs. New Regulations on PTSD Claims, 12 Jul 10.

p. Memorandum from Assistant Secretary of Defense for Health Affairs. Atypical Antipsychotics: Guidance for Providers Prescribing Atypical Antipsychotic Medication, February 22, 2012.

2. Purpose: To provide policy guidance on the assessment and treatment of PTSD.

3. Proponent: The proponent for this policy is the Assistant Chief of Staff, Health Policy and Services, Behavioral Health Division (BHD).

4. Responsibilities:

a. Medical Treatment Facility (MTF) Commanders will ensure that all care providers comply with this policy.

b. Behavioral healthcare providers are responsible for understanding the pertinent facts in 6a-h and complying with the policies specified in paragraphs 7a-7f.

c. All other medical care providers are responsible for complying with the policies specified in paragraphs 7a-7f, with particular attention to the sections in paragraph 7f pertaining to pharmacotherapy.

5. Background: PTSD is an important health condition estimated to occur in 3-6% of Service Members (SMs) with no deployment experience and in 5-25% of SMs who have been deployed to combat zones, with combat frequency and intensity being the strongest predictor of the condition. The majority of SMs with PTSD do not receive treatment for this condition. The availability of consistent evidence-based assessment and treatment services for PTSD is a high priority for the US Army Medical Department.

6. Pertinent Facts for Understanding and Interpreting this Policy.

a. The VA/DoD Clinical Practice Guideline (CPG) for the Management of Post-Traumatic Stress (VA/DoD PTS CPG), published in October 2010, is an authoritative evidence-based document that includes an extensive review of the literature, and detailed algorithms to aid clinicians in the assessment, clinical decision-making, and treatment of PTSD and related conditions. The guideline is relevant for all healthcare professionals who are providing or directing treatment services to patients with PTSD at any VA/DoD healthcare setting.

b. The use of standardized and validated PTSD clinical screening tools, such as the PTSD Checklist, may be particularly useful in identifying who might benefit from further clinical evaluation or in monitoring treatment response, but are not diagnostic. Structured PTSD assessments, such as the Clinician-Administered PTSD Scale, also cannot replace a clinician differential diagnostic interview. A variety of other psychological tests, such as the Minnesota Multiphasic Personality Inventory-2 (MMPI-2), may be helpful in diagnostic clarification in some patients, but are also not themselves sufficient to make a diagnosis of PTSD. No standardized screening or assessment tool is available that can replace a comprehensive clinical interview that assesses the full spectrum of both PTSD and non-PTSD symptoms within the broader bio-psycho-social context.

c. The accepted medical definition for PTSD is codified in the fourth edition (text revision) of American Psychiatric Association Diagnostic and Statistical Manual for Mental Disorders (DSM-IV-TR). However, the DSM-IV-TR is well over a decade old, and is currently undergoing revision. There is considerable new evidence that certain aspects of the definition are not adequate for individuals working in military and other first responder occupations. In particular, the A2 criterion has been shown to be inadequate in defining the response to trauma for SMs and other first responders (e.g., police, firefighters), who undergo rigorous training in how to respond to multiple

traumatic events as part of their occupations (e.g., Adler 2008, Castro 2011). They often do not endorse "fear, helplessness, or horror," the typical response of civilian victims to random traumatic events. Although they may experience fear internally they are trained to fall back on their training skills, may have other responses such as anger, or may express helplessness in less direct ways, such as frustration with rules of engagement or leadership decisions over which they had no control that put them in dangerous situations. As a result, the DSM-V committee has recommended removal of the A2 criterion. This committee has also recommended changes to the A1 criterion for exposure to a traumatic event, broadening the definition to be more inclusive of the types of repetitive threats experienced by first responders that have been shown to be risk factors for PTSD symptoms.

d. Considerable variation exists in clinical diagnostic practice that is within the standard of care and related to a number of factors such as: (1) the severity, chronicity, episodic, or situational nature of symptoms; (2) co-existing conditions that have the same or similar symptoms (e.g., major depression, other anxiety disorders, alcohol/substance use disorders); (3) the occupational context (e.g., early PTSD symptoms that are deployment-related may be diagnosed under a less stigmatizing combat stress reaction V-code; PTSD symptoms that impair social functioning in garrison may also be adaptive in a deployed military context); (4) the stigmatizing effects of certain diagnoses; (5) patient preferences (for example, a career Officer or Non-Commissioned Officer may not want a diagnosis of PTSD documented in their medical record); (6) clinician perspectives; and (7) other factors. There is evidence from one survey of Army BH providers that it is not uncommon within MTFs for SMs who have the diagnosis of PTSD (and are receiving treatment for it) to not be given this as the coded ICD-9 diagnoses for that visit. The visit may instead be coded as an Anxiety Disorder Not Otherwise Specified, sleep disorder, V-code diagnoses (including a generic deployment-related health condition), or other condition. In this survey, reducing stigma and protecting future career prospects was listed as the leading reason for this, and reflects a current standard of practice within military treatment settings.

e. Military healthcare providers understand that caution is required in attributing current PTSD-like symptoms to certain diagnoses that can result in harmful clinical, occupational, or administrative consequences for the SM, particularly malingering, personality disorders, or adjustment disorders. These conditions are often perceived as judgmental or pejorative, can result in administrative separations (or Uniform Code of Military Justice action in the case of malingering), and/or can influence how other medical care providers approach or treat patients when they see one of these diagnoses in the problem list. Patient-centered care within a culture of trust requires that care providers focus on patients' primary concerns, and these diagnoses, when inappropriately used, can damage therapeutic rapport and interfere with successful care.

f. Although there has been debate on the role of symptom exaggeration or malingering for secondary gain in DoD and VA PTSD Disability Evaluation System (DES) processes, there is considerable evidence that this is rare and unlikely to be a major factor in the vast majority of disability determinations. Strong evidence comes from an internal 2005 study by the VA Office of the Inspector General showing that of 2,100 VA disability cases rated at 50% or higher, only 13 (0.6%) had evidence that they were potentially fraudulent (Marx, 2011). These findings were later corroborated in a study by Dohwenrend, who found virtually no evidence of attempts by veterans to inflate disability claims (Marx, 2011). Several other studies have shown that compensation seeking and disability benefits are associated with improved treatment outcomes (Marx, 2011). As a result of these and other studies, the VA recently relaxed policies that required veterans to provide proof of specific combat-related traumatic stressors, essentially accepting that deployment to a war-zone is sufficient to meet the A1 criterion. This is consistent with evidence from peer-reviewed studies showing that the perception of threat (distinct from the level of actual threat) is an independent predictor of PTSD symptoms, and is also consistent with the DSM-V committee's current recommended definition change.

g. The majority of SMs with PTSD do not seek treatment, and many who do seek treatment drop out before they can benefit (Hoge 2011). There are many reasons for this, including stigma, other barriers to care, and negative perceptions of mental healthcare. Lack of trust in military BH professionals has been identified as one important predictor of SMs not utilizing services (Kim 2011, Brown 2011). Therefore, it is critical that Army BH professionals do everything they can to advocate for and provide care in a patient-centered manner that reassures patients that they will not be judged and that their primary concerns will be addressed. In addition, within the military occupational context, it is well known that many SMs refrain from getting needed treatment in an effort to avoid interfering in some way with their careers until symptoms become overwhelming, or they face significant stressors, such as transition out of the military. As a result there may be lack of previous documentation of the condition at times when individuals first get evaluated during DES processes, and this should not be misinterpreted as evidence of secondary gain. The current Integrated Disability Evaluation System (IDES) is intended to be non-adversarial and supportive of SMs and Veterans at whatever stage of their illness and treatment that they may be in when it is deemed that they need clinical evaluation for a condition that is potentially medically unfitting for continued military service.

h. Evidence-based treatment for PTSD has evolved significantly. In addition to increased availability of effective psychotherapy and medication treatment options, there is greater awareness of the occupational context of PTSD in the military, the associated neuro-endocrine and autonomic nervous system dysregulation, and the very strong association of PTSD with generalized physical health problems, all of which have implications for providing high-quality patient-centered care (Hoge 2011).

7. Policy:

a. Clinicians should use the 2010 VA/DoD CPG for the Management of Post-Traumatic Stress in the assessment and treatment of patients presenting with symptoms of traumatic stress. The entire guideline is available at http://www.healthquality.va.gov/Post_Traumatic_Stress_Disorder_PTSD.asp. For example, the algorithm from the guideline (enclosure 2) provides a general approach to the initial assessment, including consideration of co-existing conditions. Enclosures 3 and 4 show the psychotherapy and pharmacotherapy evidence tables from this CPG. The assessment and treatment of PTSD must be individualized based on the clinical judgment of the treating providers.

b. The decision to use standardized screening or assessment tools, such as the PTSD Checklist, is at the discretion of the treating healthcare provider, and in accordance with local MTF policies. The PTSD Checklist is particularly useful in documenting and monitoring the patient's response to care over the course of treatment.

c. The DSM-IV-TR criteria should be followed in diagnosing PTSD, but with certain caveats regarding the A1 and particularly the A2 criterion within the military occupational context, based on the evidence discussed in paragraph 6c above. If a Soldier, for example, meets all of the DSM-IV-TR symptom and impairment criteria for PTSD (criteria B, C, D, E, and F), and had an A1 criterion traumatic event (which may include history of deployment to a war zone where they perceived their life or the lives of team members to be in great danger), but does not meet the A2 criterion (response to the trauma of "fear, helplessness, or horror"), clinicians should strongly consider making a PTSD diagnosis rather than using a more generic diagnosis, such as Anxiety Disorder Not Otherwise Specified. Potential advantages of this include guiding evidence-based treatment, ensuring consistency of communication between providers, and enhancing patient understanding and acceptance of their condition. Whichever diagnosis is selected, the rationale for the diagnosis must be documented, including which DSM-IV-TR symptoms have been endorsed.

d. Although clinicians have broad discretion with regard to which diagnoses they record in the Electronic Health Record (AHLTA), it is critical that they thoroughly document symptoms, functional impairment, differential diagnosis, and clinical decision making processes in the AHLTA note(s). In situations where providers use less stigmatizing ICD-9 diagnostic codes when clinically indicated (e.g., to facilitate therapeutic alliance, acceptability of treatment, or likelihood of continued treatment engagement), they should provide explicit information in the note so that other clinicians can understand their diagnosis and treatment decisions.

e. Cautionary note on diagnoses. Diagnostic labels, which become part of the permanent record, should be used to facilitate patient-centered care, and particular

caution is required in attributing current symptoms that may be associated with a prior traumatic experience or PTSD to certain diagnoses (i.e., personality disorder, adjustment disorder, malingering). Clinicians must adhere to the following requirements:

(1) Personality Disorder: A personality disorder diagnosis should not be given unless there is reliable and sufficient objective evidence that the condition truly represents a pervasive and enduring pattern of behavior, usually beginning in adolescence. When a personality disorder is diagnosed as part of clinical care, the condition must be listed as a focus of treatment in the treatment plan, and clinicians must carefully consider whether the diagnosis will be more beneficial than harmful for the individual. For diagnosis as part of an administrative separation process, an evaluation for PTSD is required, and OTSG approval is required per OTSG/MEDCOM policies 11-010 and 10-040.

(2) Adjustment Disorder: An adjustment disorder diagnosis should not be given if there is evidence that the individual has another specific Axis I disorder that explains the symptoms, or the symptoms reflect an exacerbation of a pre-existing Axis I or II condition. Bereavement is also a DSM-IV exclusion criterion. Administrative separation for an adjustment disorder for any Soldier who has ever been deployed to an imminent danger pay area requires an evaluation for PTSD, as well as OTSG approval per OTSG/MEDCOM Policy Memos 11-010 and 10-040.

(3) Malingering: Although the influence of secondary gain is an important clinical consideration in the differential diagnosis, the diagnosis of malingering should not be made unless there is substantial and definitive evidence from collateral or objective sources that there are false or grossly exaggerated symptoms that are consciously produced for external incentives. Poor effort testing on psychological/ neuropsychological tests does not equate to malingering, which requires proof of intent, per OTSG/MEDCOM Policy 11-076. In addition, this diagnosis requires the signatures of two credentialed care providers, including a supervisor, Department Chief, or Deputy Commander for Clinical Services (OTSG/MEDCOM Policy 11-076).

f. Treatment of PTSD should be in accordance with the 2010 VA/DoD CPG. Primary care and specialty care providers should be particularly aware of the following key treatment considerations, supported by this guideline:

(1) All patients treated for PTSD should be offered an A-level treatment option (strong recommendation, benefits substantially outweigh harm). There is insufficient evidence that A-level trauma-focused psychotherapy is necessarily more effective than A-level pharmacotherapy for PTSD, and both options individually or combined are consistent with the standard of care. However, in practice, patients often have preferences for non-medication options, and may have co-existing concerns, such as

grief, guilt, or relationship problems, which lead themselves to psychotherapy approaches.

(2) A-level psychotherapy for PTSD in the VA/DoD CPG (see enclosure 3) is defined as "trauma-focused psychotherapy that includes components of exposure and/or cognitive restructuring; or stress inoculation training" provided on an individual basis. The components of trauma-focused PTSD psychotherapy include: (a) narration (e.g., imaginal exposure), (b) cognitive restructuring, (c) in-vivo exposure, (d) relaxation or stress modulation skills, and (e) psycho-education.

(3) The components of trauma-focused psychotherapy may be delivered using manualized packages such as Prolonged Exposure Therapy, Cognitive Processing Therapy, or Eye Movement Desensitization and Reprocessing (EMDR), or other strategies (e.g., written narration, life narrative techniques, Brief Eclectic Psychotherapy, Stress Inoculation Training, or other forms of trauma-focused cognitive behavioral therapy), all of which have been shown to have generally equivalent effectiveness. Because of the complexity of PTSD and co-existing conditions, strict fidelity to treatment protocols is often challenging, and clinicians are not required to adhere to a specific treatment manual as long as they document their clinical decision-making and approach to delivering the core components of trauma-focused therapy in the patient's AHLTA record. Selection of the approach should be based on clinical considerations (e.g., severity of symptoms and co-existing conditions), patient preferences, clinician expertise, and other factors. Matching evidence-based components to patient preferences is likely to help in fostering engagement and willingness to remain in treatment, which ultimately is one of the strongest predictors of overall treatment efficacy.

(4) For pharmacotherapy, Selective Serotonin Reuptake Inhibitors (SSRIs) and Serotonin Norepinephrine Reuptake Inhibitors (SNRIs) are the only medication classes that received an A-level evidence recommendation for treatment of PTSD (enclosure 4). Although only paroxetine and sertraline have received Federal Drug Administration (FDA) approval for PTSD, there is no evidence that other SSRI and SNRI medications perform less well in the treatment of PTSD and may be used with appropriate informed consent and documentation in the AHLTA record.

(5) A variety of other medications have been given less than A-level recommendations for the treatment of PTSD, but two medication classes, benzodiazepines and atypical antipsychotics, warrant particular caution in the new CPG:

(a) Benzodiazepines: Benzodiazepines now carry a D-level recommendation in the CPG (harm outweighs benefits) for both PTSD and acute stress disorder, are considered to be relatively contraindicated, and should be avoided. The CPG states, "Although benzodiazepines have been frequently used "as needed" and continuously for

anxiety disorders, including to augment evidence-based treatment modalities in PTSD, there is evidence to suggest that benzodiazepines may actually potentiate the acquisition of fear responses and worsen recovery from trauma. Benzodiazepine use should be considered relatively contraindicated in combat veterans with PTSD because of the very high co-morbidity of combat-related PTSD with alcohol misuse and substance use disorders (upwards of 50 percent co-morbidity) and potential problems with tolerance and dependence. Once initiated in combat veterans, benzodiazepines can be very difficult, if not impossible, to discontinue, due to significant withdrawal symptoms, compounded by the underlying PTSD symptoms." If benzodiazepines are initiated or continued in patients with PTSD, there should be informed consent and clear documentation of the clinical rationale supporting the decision (e.g., risks of discontinuation after long-term use, other evidence-based options have been exhausted).

(b) Atypical antipsychotics: There has been increasing concern about the "off-label" use of atypical (second-generation) antipsychotics in the management of symptoms associated with PTSD, and caution is warranted. There are numerous concerns with potential long-term adverse health effects (e.g., weight gain, glucose dysregulation, cardiac effects, extrapyramidal effects), and these medications have shown disappointing results in clinical trials in the treatment of PTSD. Risperidone specifically has been given a D-level recommendation in the VA/DoD CPG (harm outweighs benefits) based on the results of a large multicenter VA cooperative study. While other atypical antipsychotics, such as quetiapine, have not undergone the same level of rigorous testing (resulting in an insufficient (I-level) evidence recommendation), they carry similar clinical concerns. Care providers who use these medications for off-label indications must clearly document their rationale for concluding that the potential benefits outweigh the known risks and that informed consent has been conducted.

(6) Because of the high co-morbidity of PTSD with generalized physical and mental health problems, multidisciplinary approaches to care are encouraged. This may include primary care-based interventions, group interventions, and adjunctive strategies. MTFs may elect to provide adjunctive services in the treatment of PTSD in accordance with local credentialing policies, as long as the core treatment plan includes A-level individual trauma-focused psychotherapy or pharmacotherapy treatment. These adjunctive services may include group therapy, couples/family therapy, imagery rehearsal therapy, psychodynamic therapy, hypnosis, alcohol/substance use disorder treatment, grief counseling, psychoeducation, art therapy, complementary and alternative medicine modalities (e.g., bio/neurofeedback, mindfulness, yoga, acupuncture, massage, others), and other strategies. Goals of adjunctive services, if used, should be aligned as much as possible with trauma-focused treatment goals, for example, in improving sleep, reducing co-existing pain, modulating physiological hyperarousal, producing a relaxation response, or facilitating narrative exposure.

8. The policy in Sections 7a-f is summarized in enclosure 1. A perspective paper supporting this policy published in JAMA is included in enclosure 5.

FOR THE COMMANDER:

Herbert A. Coley

HERBERT A. COLEY
Chief of Staff

5 Encls
1. Summary of policy
2. From 2010 VA/DoD PTS CPG (page 56)
3. Psychotherapy evidence table from 2010 VA/DoD PTS CPG (page 115)
4. Pharmacotherapy evidence table from 2010 VA/DoD PTS CPG (page 149)
5. Hoge CW. JAMA 2011 Review of PTSD treatment (in public domain)

Enclosure 1. Summary of policy (Sections 7a-f)

7a. Use the 2010 VA/DoD CPG for the Management of Post-Traumatic Stress (http://www.healthquality.va.gov/Post_Traumatic_Stress_Disorder_PTSD.asp).

7b. The PTSD checklist (PCL) is particularly useful in documenting and monitoring the patient's response to care over the course of treatment.

7c. The DSM-IV-TR criteria should be followed in diagnosing PTSD, but with certain caveats regarding the A1 and particularly the A2 criterion in the military occupational context. For example, if all DSM-IV-TR criteria are met in a service member, except for A2 ("fear, helplessness, or horror"), clinicians should strongly consider making a PTSD diagnosis rather than using a more generic diagnosis, such as Anxiety Disorder Not Otherwise Specified. The rationale for the diagnosis must be documented, including which DSM-IV-TR symptoms have been endorsed.

7d. It is critical that clinicians thoroughly document symptoms, functional impairment, differential diagnosis, and clinical decision making processes in the AHLTA note(s). In situations where providers use less stigmatizing ICD-9 diagnostic codes when clinically indicated, they should provide explicit information in the note so that other clinicians can understand their diagnosis and treatment decisions.

7e. Cautionary note on diagnoses. Diagnostic labels, which become part of the permanent record, should be used to facilitate patient-centered care, and particular caution is required in attributing current symptoms that may be associated with a prior traumatic experience or PTSD to certain diagnoses (i.e., personality disorder, adjustment disorder, malingering). Clinicians must adhere to the requirements specified in policy paragraphs 7e(1), 7e(2), and 7e(3).

7f. Treatment of PTSD should be in accordance with the 2010 VA/DoD CPG. Primary care and specialty care providers should be particularly aware of the following key treatment considerations:

(1) All patients treated for PTSD should be offered an A-level treatment option (strong recommendation, benefits substantially outweigh harm).

(2) The components of A-level trauma-focused PTSD psychotherapy include: (a) narration (e.g., imaginal exposure), (b) cognitive restructuring, (c) in-vivo exposure, (d) relaxation or stress modulation skills, and (e) psycho-education.

(3) The components of trauma-focused psychotherapy may be delivered using manualized packages or other strategies.

(4) Selective Serotonin Reuptake Inhibitors (SSRIs) and Serotonin Norepinephrine Reuptake Inhibitors (SNRIs) are the only medication classes that received an A-level evidence recommendation.

(5) Two medication classes, benzodiazepines and atypical antipsychotics, warrant particular caution in the new VA/DoD PTS CPG:

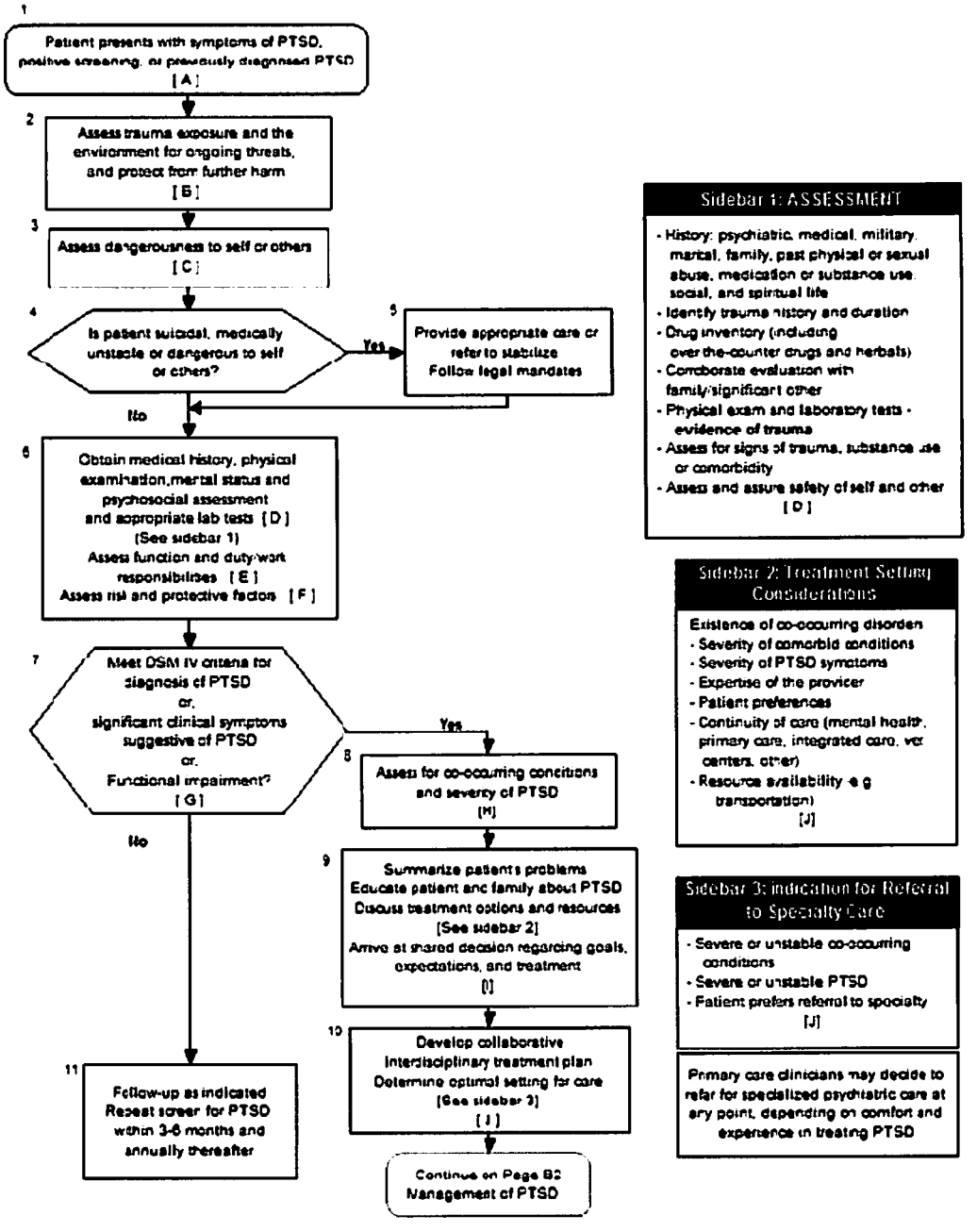
(a) Benzodiazepines: Benzodiazepines now carry a D-level recommendation (harm outweighs benefits) for both PTSD and acute stress disorder, are considered to be relatively contraindicated, and should be avoided.

(b) Atypical Antipsychotics. Risperidone now carries a D-level recommendation in the VA/DoD CPG (harm outweighs benefits). Other atypical antipsychotics, such as quetiapine, have not undergone the same level of rigorous testing, but carry similar clinical concerns.

(6) Because of the high co-morbidity of PTSD with generalized physical and mental health problems, multidisciplinary approaches to care are encouraged. This may include primary care-based interventions, group interventions, and adjunctive strategies.

Enclosure 2. From 2010 VA/DoD PTS CPG, (page 56)

VA/DoD Clinical Practice Guideline for Management of Post-Traumatic Stress
Module B: Assessment and Diagnosis of PTSD **B-1**



Enclosure 3. Evidence-Based PTSD Psychotherapies, From 2010 VA-DoD PTS CPG, 2010 (page 115).

Table I-4 Psychotherapy Interventions for Treatment of PTSD

	Balance of Benefit and Harm			
SR	**Significant Benefit**	**Some Benefit**	**Unknown Benefit**	**None**
A	Trauma-focused psychotherapy that includes components of exposure and/or cognitive restructuring; or, Stress inoculation training			
C		Patient Education Imagery Rehearsal Therapy Psychodynamic Therapy Hypnosis Relaxation Techniques Group Therapy		
I		Family Therapy	WEB-Based CBT Acceptance and Commitment Therapy Dialectical Behavioral Therapy	

SR = Strength of Recommendation (see Appendix A)

Enclosure 4. Pharmacotherapy for PTSD from 2010 VA/DoD PTS CPG (page 149)

Table I - 6 Pharmacotherapy Interventions for Treatment of PTSD

	Effect = Balance of Benefit and Harm			
SR	Significant	Some Benefit	Unknown	No Benefit
A	SSRIs SNRIs		-	-
B	-	Mirtazapine Prazosin (for sleep/nightmares) TCAs Nefazodone [Caution]* MAOIs (phenelzine) [Caution]*	-	-
C			Prazosin (for global PTSD)	
D	-	-	-	Benzodiazepines [Harm] Tiagabine Guanfacine Valproate Topiramate Risperidone
I	-	-	Atypical antipsychotic (Except risperidone) Conventional antipsychotics Buspirone Non-benzodiazepine hypnotics Bupropion Trazodone (adjunctive) Gabapentin Lamotrigine Propranolol Clonidine	-

*SR = Strength of recommendation (see Appendix A); * Attention to drug to-drug and dietary interactions*

Enclosure 5. Hoge CW. JAMA 2011 Review of PTSD Treatment (in public domain).

Interventions for War-Related Posttraumatic Stress Disorder

Meeting Veterans Where They Are

Charles W. Hoge, MD

A DECADE OF CONFLICT IN AFGHANISTAN AND IRAQ has caused a substantial mental health burden for war veterans and their families, particularly posttraumatic stress disorder (PTSD). (The term *veterans* in this article includes personnel still remaining in service.) The postdeployment PTSD prevalence in US infantry personnel has averaged 10% to 20%, often coexisting with depression, substance misuse, and other concerns.[1]

In response, the US Departments of Defense and Veterans Affairs (VA) have implemented numerous programs in the areas of population screening, education (eg, stigma reduction), and clinical care. The VA has mandated that all veterans treated for PTSD have access to either prolonged exposure therapy or cognitive processing therapy (CPT).[2]

However, veterans remain reluctant to seek care, with half of those in need not utilizing mental health services.[3,4] Among veterans who begin PTSD treatment with psychotherapy or medication, a high percentage drop out, commonly 20% to 40% in randomized clinical trials (RCTs)[5,6] but considerably higher in routine practice.[3] The rate of recovery of 60% to 80% among treatment completers declines to around 40% when noncompleters are accounted for (using intention-to-treat analyses).[5,7]

With only 50% of veterans seeking care and a 40% recovery rate, current strategies will effectively reach no more than 20% of all veterans needing PTSD treatment. Thus, interventions that will have the greatest potential for improving care on a population level are those focused on enhancing the reach of treatment (eg, engagement, adherence, and acceptability).

Enhancing treatment reach requires moving beyond screening and other stigma-reduction approaches. Postdeployment screening has never been demonstrated to be effective in improving mental health (one program evaluation found paradoxical opposite associations),[4] and new research among veterans found negative perceptions of mental health care more important than stigma in predicting low service utilization.[8] Examples of such perceptions include lack of trust in mental health professionals, thinking less of others who seek care, or considering treatment ineffective, unhealthy, or a "last resort." Therefore, a high priority is to understand the reasons for these perceptions and meet veterans where they are.

Veterans frequently report dissatisfaction with care and disconnect between their experiences as warriors and perspectives they encounter trying to obtain the help they need. Conceptualizing PTSD within an occupational context that is much broader than the clinical definition can help bridge the gap.[9,10] Military personnel are members of professional workgroups, similar to police and other first responders, trained to respond to multiple traumatic events; they do not normally perceive themselves as victims, nor their reactions as pathological. The paradox of war-related PTSD is that reactions labeled "symptoms" upon return home can be highly adaptive in combat, fostered through rigorous training and experience. For example, hyperarousal; hypervigilance; and the ability to channel anger, shut down (numb) other emotions even in the face of casualties, replay or rehearse responses to dangerous scenarios, and function on limited sleep are adaptive in war.[10]

Improving evidence-based treatments, therefore, must be paired with education in military cultural competency to help clinicians foster rapport and continued engagement with professional warriors. This includes sensitivity and knowledge in attending to difficult topics, such as grief and survivor's guilt stemming from loss of team members, ethical dilemmas in combat, or situations associated with feelings of betrayal (eg, poor leadership, rape by fellow team member).[10] Strict fidelity to treatment protocols may not always support these goals, and clinicians must know how to apply evidence-based techniques in a patient-centered manner.

Fundamentally, all psychotherapies with an A-level recommendation for PTSD (good evidence that benefits outweigh harm by US Preventive Services Task Force criteria) involve 5 core components: (1) narration, (2) cognitive restructuring, (3) in vivo exposure, (4) stress inoculation (eg, relaxation) skills, and (5) psychoeducation.[7] Evidence indicates that as long as these components are applied, how

See also pp 493 and 503.

Author Interview available at www.jama.com.

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they are packaged is not important.[7,11] Eye movement desensitization and reprocessing, stress inoculation training, brief eclectic psychotherapy, written narration, and oral narrative exposure have all been found to have comparable effect sizes to more widely accepted protocols, such as CPT or prolonged exposure.[7,11] Narration, probably the most therapeutic component, can be written, oral past tense, "imaginal" present tense, or combined with eye movements, as long as patients remain willing to complete a sufficient number of sessions.[7] For example, one trial found no significant differences in 6-month outcomes comparing written narration with 2 CPT conditions (full CPT and the cognitive restructuring component of CPT).[12] The elegantly simple narrative technique consisted of patients writing alone about their worst traumatic experience for five 1-hour periods, followed on each occasion by reading their narrative to a therapist who provided supportive nondirective feedback.

There is also substantial evidence that lay counselors can deliver effective narrative treatment. In this issue of *JAMA*, Ertl and colleagues[13] continue their landmark work with war-devastated populations, in this case former child soldiers in Northern Uganda, demonstrating that narrative exposure therapy conducted by lay counselors with 6 weeks of training is effective in treating PTSD; effect sizes were comparable to those in trials of other trauma-focused therapies in western countries. Narrative exposure therapy is down-to-earth and specifically designed for multiple traumatic events (a potential advantage for veterans and first responders), consisting of helping participants construct a biographical life account from birth to present, including organizing fragmented traumatic memories chronologically. The results of this study confirm the value of narration in the presence of an empathetic nonjudgmental lay facilitator and provide a basis for recommending further exploration of narrative biographical techniques for veterans, including peer-to-peer programs.

Critics might argue that only CPT and prolonged exposure psychotherapies have been proven effective in veteran populations. However, the vast majority of RCTs informative in guiding PTSD treatment have not involved veterans. Those that have included veterans predominantly represented the most chronic specialty-care group, not the population needing care (and not being reached) shortly after return from deployment.[3,6] For example, in a frequently cited CPT trial of veterans, 80% of participants were taking a psychotropic agent, including 40% taking 3 or more medications and 40% taking a benzodiazepine or barbiturate.[3]

Among a wide range of medications used in veterans with PTSD, only selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs) have A-level evidence (2 SSRIs are approved for this indication).[7] Effect sizes in RCTs of SSRIs or SNRIs have generally been lower than those in psychotherapy trials, but this is likely due to the higher efficacy of placebo controls in double-blind studies than wait-list conditions in psychotherapy trials. Although head-to-head comparisons of medications vs psychotherapy are lacking (and much needed), RCTs that led to licensure of SSRIs showed within-group reductions in PTSD scores virtually identical to those seen in psychotherapy trials, and psychotherapy trials that included nonspecific supportive control conditions showed effect sizes comparable to those in medication trials.[6,7] Thus, SSRIs or SNRIs have a role, along with psychotherapy options, with patient preference the most salient consideration.

Studies of other medication categories used to augment SSRI treatment have generally been disappointing, with the exception of prazosin, an α_1-adrenergic receptor antagonist, that has shown benefit in improving sleep through reduction of physiological reactivity associated with nightmares.[7] Although benzodiazepines are widely prescribed, they are relatively contraindicated and should be discouraged. Any short-term alleviation of anxiety symptoms (which reinforces the perception of benefit) is offset by evidence that they can interfere with extinction of fear conditioning and worsen recovery.[7] Benzodiazepines are associated with tolerance and dependence and can become almost impossible to discontinue in combat veterans due to rebound exacerbation of symptoms (particularly sleep disturbance and anger).[7]

The off-label use of second-generation (atypical) antipsychotics has gained wide popularity, particularly quetiapine and risperidone. However, there are numerous concerns with long-term adverse health effects (eg, weight gain, glucose dysregulation, cardiac effects, or extrapyramidal effects). This issue of *JAMA* presents the largest RCT to date evaluating adjunctive risperidone in veterans with PTSD.[14] No clinically meaningful benefits were found in the risperidone group compared with the placebo group, and risperidone-treated patients more often reported weight gain, somnolence, fatigue, and hypersalivation. The results seriously call into question the use of atypical antipsychotics in PTSD treatment. Studies are needed to identify more effective treatments.

One area that should be given high priority, with broad clinical implications for veterans, is to better understand the relationship between PTSD and the normal physiology of combat. PTSD is associated with dysregulation of the autonomic nervous system and hypothalamic-pituitary-adrenal axis, compounded in the combat environment by prolonged extreme stress and chronic sleep restriction (infantry troops routinely report <6 hours of sleep per 24 hours, with reversed circadian cycles).[10] The expectation that this level of dysregulation will reset easily upon return home is unrealistic. The pathophysiology of combat and PTSD is strongly associated with generalized physical health problems, including chronic pain, postconcussive symptoms, neurocognitive impairment, self-medication with alcohol and substances, and related problems (eg, polypharmacy).[1,15,16]

The treatment of PTSD in veterans, therefore, must involve coordinated postdeployment care that addresses physiological hyperarousal and physical health concerns. Stepped collaborative care models with mental health and case management support within primary care offer the most evidence-

based approaches for chronic interrelated health problems, and also considerable promise for increasing treatment reach among veterans with mild to moderate symptoms or reluctance to accept specialty mental health services.[7,17,22] Augmenting treatments with complementary and integrative modalities, such as acupuncture, mindfulness, or yoga, likely also have a role (eg, to help produce a relaxation response, improve pain or sleep, or facilitate continued engagement).[7] Clinical research is needed to refine and validate these strategies.

In summary, significant improvements in population care for war veterans will require innovative approaches to increase treatment reach. Attention to the occupational context, combat physiology, and mental and physical comorbidities is essential. Validating and implementing collaborative care models based in primary care should be a high priority. Matching evidence-based components of therapy to patient preferences and reinforcing narrative processes and social connections through peer-to-peer programs are encouraged. Family members, who have their own unique perspectives, are essential participants in the veteran's healing process and also need their own support. Research is required to better understand the perceptions war veterans have concerning mental health care, acceptability of care, willingness to continue with treatment, and ways to communicate with veterans that validate their experiences as warriors.

Conflict of Interest Disclosures: The author has completed and submitted the ICMJE Form for Disclosure of Potential Conflicts of Interest. Dr Hoge reported receiving royalties from his book *Once a Warrior Always a Warrior*,[10] as well as book-related speaking engagements.

Disclaimer: The views expressed are those of the author and do not reflect an official position of the US Army or Department of Defense.

Online-Only Material: The author interview is available at http://www.jama.com.

REFERENCES

1. Thomas JL, Wilk JE, Riviere LA, McGurk D, Castro CA, Hoge CW. Prevalence of mental health problems and functional impairment among active component and National Guard soldiers 3 and 12 months following combat in Iraq. *Arch Gen Psychiatry*. 2010;67(6):614-623.

2. Department of Veterans Affairs. VHA Handbook 1160.01: Uniformed mental health services in VA medical centers and clinics. http://www1.va.gov/vhapublications/ViewPublication.asp?pub_ID=1762. September 11, 2008. Accessed June 5, 2011.

3. Tanielian T, Jaycox LH, eds. *Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. Santa Monica, CA: RAND Corp; 2008.

4. Milliken CS, Auchterlonie JL, Hoge CW. Longitudinal assessment of mental health problems among active and reserve component soldiers returning from the Iraq war. *JAMA*. 2007;298(18):2141-2148.

5. Monson CM, Schnurr PP, Resick PA, Friedman MJ, Young-Xu Y, Stevens SP. Cognitive processing therapy for veterans with military-related posttraumatic stress disorder. *J Consult Clin Psychol*. 2006;74(5):898-907.

6. Schnurr PP, Friedman MJ, Engel CC, et al. Cognitive behavioral therapy for posttraumatic stress disorder in women: a randomized controlled trial. *JAMA*. 2007;297(8):820-830.

7. Department of Veterans Affairs and Department of Defense. VA/DoD clinical practice guideline for management of post-traumatic stress. http://www.healthquality.va.gov/PTSD-FULL-2010c.pdf. October 2010. Accessed June 5, 2011.

8. Kim PY, Britt TW, Klocko RP, Riviere LA, Adler AB. Stigma, negative attitudes about treatment, and utilization of mental health care among soldiers. *Mil Psychol*. 2011;23:65-81.

9. Castro CA, Adler AB. Reconceptualizing combat-related posttraumatic stress disorder as an occupational hazard. In: Adler AB, Bliese PD, Castro CA, eds. *Deployment Psychology*. Washington, DC: American Psychological Association, 2011:217-242.

10. Hoge CW. *Once a Warrior Always a Warrior: Navigating the Transition From Combat to Home—Including Combat Stress, PTSD, and mTBI*. Guilford, CT: Globe Pequot Press; 2010.

11. Benish SG, Imel ZE, Wampold BE. The relative efficacy of bona fide psychotherapies for treating post-traumatic stress disorder: a meta-analysis of direct comparisons. *Clin Psychol Rev*. 2008;28(5):746-758.

12. Resick PA, Galovski TE, O'Brien Uhlmansiek M, Scher CD, Clum GA, Young-Xu Y. A randomized clinical trial to dismantle components of cognitive processing therapy for posttraumatic stress disorder in female victims of interpersonal violence. *J Consult Clin Psychol*. 2008;76(2):243-258.

13. Ertl V, Pfeiffer A, Schauer E, Elbert T, Neuner F. Community-implemented trauma therapy for former child soldiers in Northern Uganda: a randomized controlled trial. *JAMA*. 2011;306(5):503-512.

14. Krystal JH, Rosenheck RA, Cramer JA, et al; for the Veterans Affairs Cooperative Study No. 504 Group. Adjunctive risperidone treatment for antidepressant-resistant symptoms of chronic military service–related PTSD: a randomized trial. *JAMA*. 2011;306(5):493-502.

15. Andersen J, Wade M, Possemato K, Ouimette P. Association between posttraumatic stress disorder and primary care provider-diagnosed disease among Iraq and Afghanistan veterans. *Psychosom Med*. 2010;72(5):498-504.

16. Polusny MA, Kehle SM, Nelson NW, Erbes CR, Arbisi PA, Thuras P. Longitudinal effects of mild traumatic brain injury and posttraumatic stress disorder comorbidity on postdeployment outcomes in national guard soldiers deployed to Iraq. *Arch Gen Psychiatry*. 2011;68(1):79-89.

17. Engel CC, Oxman T, Yamamoto C, et al. RESPECT-Mil: feasibility of a systems-level collaborative care approach to depression and post-traumatic stress disorder in military primary care. *Mil Med*. 2008;173(10):935-940.

18. Zatzick DF, Koepsell T, Rivara FP. Using target population specification, effect size, and reach to estimate and compare the population impact of two PTSD preventive interventions. *Psychiatry*. 2009;72(4):346-359.

19. Kroenke K. Patients presenting with somatic complaints: epidemiology, psychiatric comorbidity and management. *Int J Methods Psychiatr Res*. 2003;12(1):34-43.

20. Gilbody S, Bower P, Fletcher J, Richards D, Sutton AJ. Collaborative care for depression: a cumulative meta-analysis and review of longer-term outcomes. *Arch Intern Med*. 2006;166(21):2314-2321.

21. Smith RC, Lyles JS, Gardiner JC, et al. Primary care clinicians treat patients with medically unexplained symptoms: a randomized controlled trial. *J Gen Intern Med*. 2006;21(7):671-677.

22. Dobscha SK, Corson K, Perrin NA, et al. Collaborative care for chronic pain in primary care: a cluster randomized trial. *JAMA*. 2009;301(12):1242-1252.