Posttraumatic Stress Disorder Screening Practices: A 2010 Internet Assessment of Customary Care

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Objective: Posttraumatic stress disorder (PTSD) is a signature injury of war among returning soldiers and US National Guard and Reserve members, with symptoms even more likely on rescreening. Studies that examine health care provider screening and referral practices outside the military for these patients are needed. The objective of this study was to assess health care provider PTSD practices and barriers to care.

Method: A 25-item, anonymous Internet questionnaire was developed as an educational needs assessment survey based on the US Department of Veterans Affairs and Department of Defense PTSD guideline and the companion, primary care–directed PTSD Screening and Referral for Health Care Providers of the National Center for PTSD. The assessment design included patient vignettes followed by multiple-choice questions and was distributed on the Internet to health care providers free of charge and without compensation. Of 1,338 participant health care providers, mainly from primary care and mental health specialties, 507 responded to the questions. Participant privacy was maintained for the self-assessment survey, and all responses were deidentified and analyzed in aggregate. Overall participant responses and subgroups of primary care and mental health questionnaire responses were scored against guidelines. Participant data responses to survey questions were collected from August 20, 2010, to October 3, 2010.

Results: Gaps in screening skills compared with guidelines were shown, as PTSD diagnosis questions were correctly answered by 51% of primary care and 56% of mental health providers. Real-world screening and referral differed from guidelines, as only 24% of primary care and 48% of mental health providers have a system in place to routinely screen for mental health in their patients who are returning service members. Only 25% of primary care providers had access to referral to mental health services, showing large gaps in care. Stigma associated with mental disorders was the practice barrier most frequently cited by health care providers.

Conclusions: The study identified gaps in PTSD screening and linkage to care among health care providers. Further training efforts and resources are needed to screen patients and to reduce barriers to care.

Prim Care Companion CNS Disord
2011;13(5): doi:10.4088/PCC.11m01171

Submitted: *February 18, 2011; accepted May 9, 2011.*
Published online: *September 22, 2011.*
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The prevalence of posttraumatic stress disorder (PTSD) in the United States is approximately 8%,[1] with higher rates among returning service members.[2–4] Recent surveys of soldiers and US National Guard and Reserve members who returned from active duty found a PTSD prevalence of 12% to 25%, with symptoms even more likely on rescreening,[3] along with persistent, significant functional impairment.[5] Since over 2 million men and women have served in Afghanistan and/or Iraq, improved screening for PTSD and other mental health disorders of returning veterans has become a renewed focus in community and primary care settings, as well as a national priority.[6,7] However, surveys show that less than half of patients who need care actually seek it.[2,8,9] We are not aware of any studies that examine PTSD screening and referral practices outside the military for patients who return from active duty. While studies have documented patients' barriers to care,[10] we are not aware of any studies of the barriers that health care providers experience.

Survival of environmental disasters also causes high rates of PTSD and increased need for mental health screening. For example, 11% of workers screened after the World Trade Center attacks had probable PTSD.[11] Increased PTSD symptoms of up to 19%[12] were reported after hurricanes Katrina and Rita.[13] Delivery of care was widely disrupted, and mental health care use declined for veterans.[14]

The goal of this descriptive study was to assess customary PTSD screening and referral practices of US health care providers using an anonymous, self-administered Internet questionnaire. The study assessed gaps and barriers in current PTSD screening and referral practices compared with the established guideline from the US Department of Veterans Affairs and Department of Defense and the companion, primary care-directed PTSD Screening and Referral for Health Care Providers of the National Center for PTSD.[15,16]

METHOD

Design

A 25-item, anonymous Internet assessment questionnaire in multiple-choice question format was developed on the basis of an evidence-based Department of Veterans Affairs and Department of Defense PTSD guideline written by the department working group and

Clinical Points

- Gaps in posttraumatic stress disorder (PTSD) diagnosis and referral for returning soldiers exist in both primary care and mental health practices.
- The Primary Care PTSD Screen and Short Posttraumatic Stress Disorder Rating Interview are quick effective tools to make screening routine in clinical practice.
- Barriers to PTSD diagnosis can be overcome by reducing stigma associated with mental health care.

intended for all health care providers in the Veterans Affairs setting. In addition, recommendations from the National Center for PTSD directed toward health care providers in the primary care setting were considered (Table 1).[15–17] The main points of these guidelines are awareness of the knowledge gap and problem of underrecognition, improvement of routine primary care screening, collaborative decision making using effective communication, diagnosis of symptoms and comorbidities, and appropriate referrals for coordinated and sustained follow-up of patients.

The assessment used 2 patient vignettes. Patient vignettes are valid assessments of clinical practices, which studies have shown are comparable to chart reviews.[18,19] Cases and questions were designed to assess gaps by addressing clinical points in the guideline regarding screening and referral.[15]

The first case described a soldier who had recently returned from combat duty to assess practices in combat-related stress. The second case described a police officer after Hurricane Katrina to assess environmental disaster–related stress. Stress disorder can result from other common traumas such as illness, abuse, and violence as noted in the guidelines; however, these traumas were not included in the 2 case descriptions used. Questions tested PTSD knowledge (6 questions) and screening practices (7 questions) in multiple-choice, single-best-answer format. Additional questions assessed use of screening tools, perceptions of self-efficacy, and barriers to care (7 questions) in multiple-choice format. Demographic questions identified practice setting, patient load, proportion of service members in the practice, and linkage to referral (5 questions).

Polling results were displayed giving immediate feedback to each participant after every question. This feedback showed bar graph averages of aggregate responses from all participants. The features of interactivity and comparison to peers are effective Internet teaching methods for health care professionals.[20] The program is freely available online at http://www.medscape.com/viewarticle/727096.

Participants

Participants were actively recruited through newsletters emailed to registered members of the health care information Web site (http://www.medscape.com) and through online placement with integrated search terms. Participants were informed that the self-assessment tested knowledge and practices and that data would identify clinical practice gaps. Registration at the Internet site as a US health care provider, which is free of charge, was an inclusion criterion, and no compensation was offered for survey participation. No clinical specialties were excluded because any provider is highly likely to care for patients with prior trauma. The most relevant participant subgroups for analysis were defined as psychiatry/mental health and primary care providers (family medicine and internal medicine) because these providers care for the majority of patients with PTSD.[16] Although veterans also may seek professional help from a member of the clergy, this group was not available in the study population.

Measurements

Participant data responses to survey questions were collected from August 20, 2010, to October 3, 2010. All data were deidentified and aggregated to maintain confidentiality of participants' information and sorted based on profession or specialty. In planning the design, a response of 100 providers was considered sufficient to identify existing gaps in care and to extrapolate to similar health care provider practices. A response of 507 eligible participants was achieved within the study period, and all responses were used in the analysis and reporting. Responses were scored by concordance with the guideline for hypothesis testing.[15] Overall mean scores and primary care and mental health provider subgroups were reported to identify any gaps.

RESULTS

Participant Characteristics

During the 6-week study period, 1,338 health care providers accessed the Internet PTSD assessment online. Of these, approximately 22% (n = 289) to 38% (n = 507) of participants responded to 1 or more of the multiple-choice questions, and the rate of response varied by

Table 1. Posttraumatic Stress Disorder (PTSD) Assessment Tool: 2 Patient Cases and 25 Interactive Questions Based on the Guideline of the Department of Veterans Affairs (VA) and Department of Defense[a,b]

Patient Case/Assessment Questions	Appropriate Response	Source
Patient Case Vignette 1: Ms A, 36 years old, visits your office for the first time for a routine annual examination. Her physical examination shows that she is in good health. During the visit, she mentions that she is in the National Guard and returned from active duty in Iraq 3 months ago		
(1) What is the prevalence of PTSD diagnosis among those who were on active duty upon return to civilian life in the United States?	12%–25%	Milliken et al (2007)[3]
(2) Ms A does not complain of any emotional symptoms at this visit and tells you that she screened negative for mental health problems when she left active duty 3 months ago. Would you screen for PTSD at this visit?	Yes	Quinlan et al (2010)[7] Veterans Affairs/Department of Defense (2010)[15]
(3) Which of the following short screens for PTSD have you used in your own clinical practice?	Beck Anxiety Inventory-Primary Care SPAN SPRINT SPRINT-E Primary Care PTSD Screen Short-form PTSD Checklist Short screening scale for PTSD Trauma Screening Questionnaire Davidson Trauma Scale	Multiple responses allowed; Veterans Affairs/Department of Defense (2010)[15]
(4) Approximately how long does it take to administer the Primary Care PTSD Screen?	≤2 min	Prins et al (2004)[21]
(5) During the examination, when asked, Ms A says she tries not to think about her active duty experiences now that she is back home. She describes trouble sleeping, being bothered by even small noises, and waking up frequently at night for the past month. She lives alone. When asked, she reluctantly describes feeling tired and out of touch with her home life and friends, but denies being troubled by nightmares or flashbacks. Which of the following does this indicate to you?	A positive PTSD screen result	Veterans Affairs/Department of Defense (2010)[15]
(6) In your practice setting, do you currently have a system in place to routinely identify mental health problems in your patients who are service members returning from active duty?	Yes Planned but not implemented No	Self-report
(7) If Ms A screens positive on a short screen for PTSD, which of the following would be your next step to reach a diagnosis?	Assess with a structured interview for PTSD and/or other mental disorders	Veterans Affairs/Department of Defense (2010)[15]
(8) Do you currently have access to referral to specialist mental health services for your patients?	Yes No My practice specializes in mental health	Self-report
(9) What proportion of your patients do you estimate have ever served in the military on active duty?	0%–5% 6%–10% 11%–20% 21%–50% >50%	Self-report
Patient Case Vignette 2: Mr B, 40 years old, visits your office for the first time with his sister, who describes his symptoms to you for him. She tells you that he complains of frequent headaches, which his sister believes to be migraines, and that he has stopped going to work. During the visit, she also tells you that her family relocated to your community from New Orleans, Louisiana, where her brother was a police officer for 10 years		
(10) Would you screen Mr B for PTSD at this visit?	Yes	Centers for Disease Control and Prevention (2006)[12] Veterans Affairs/Department of Defense (2010)[15] Weisler et al (2006)[13]
(11) Would you screen Mr B for depression at this visit?	Yes	Centers for Disease Control and Prevention (2006)[12] Weisler et al (2006)[13]
(12) The degree of functional impairment that PTSD causes is related to other impairments in which of the following ways?	PTSD causes impairment similar to that of major depression	Veterans Affairs/Department of Defense (2010)[15]

(continued)

doi:10.4088/PCC.11m01171

Table 1 (continued). Posttraumatic Stress Disorder (PTSD) Assessment Tool: 2 Patient Cases and 25 Interactive Questions Based on the Guideline of the Department of Veterans Affairs (VA) and Department of Defense[a,b]

Patient Case/Assessment Questions	Appropriate Response	Source
(13) Mr B's sister had discussed his headaches. Which of the following would be your next step if Mr B is currently taking opioid medication to control migraine-related pain?	Mitigate potential for opioid misuse, abuse, or overdose	Bray et al (2010)[22] Stetka (2010)[23]
(14) You question Mr B with the items from the Primary Care PTSD Screen, and his responses and input from his sister indicate a positive screen. What is your next step?	Speak with him privately, review screen results, and screen for suicidal ideation	Veterans Affairs/Department of Defense (2010)[15]
(15) Which of the following tools would you use to screen for mental health status if you were not sure of PTSD symptoms after the initial screen?	Mini International Neuropsychiatric Interview Primary Care Evaluation of Mental Disorders PTSD Checklist Other assessment	Self-report
(16) Which of the following is most likely when discussing health status with a patient who has PTSD?	Patient will present with somatic complaints	Veterans Affairs/Department of Defense (2010)[15]
(17) Which of the following distinguish PTSD from acute stress disorder?	Presence of symptoms 1 month or longer after a traumatic event	Veterans Affairs/Department of Defense (2010)[15]
(18) How confident are you in your ability to screen for PTSD in your own practice?	Not at all confident	Self-report
(19) How confident are you in your ability to diagnose PTSD in your own practice?	Somewhat confident Confident Very confident	
(20) If Mr B refuses a referral to a mental health professional after a positive Primary Care PTSD Screen, what is your next step?	Discuss referral for evaluation rather than treatment	Veterans Affairs/Department of Defense (2010)[15]
(21) Which of the following barriers to identifying PTSD in your clinical practice do you most frequently encounter related to patient factors?	Reluctance or refusal of the patient to discuss symptoms Reluctance of the patient to discuss positive PTSD screen results Stigma associated with a mental health disorder Lack of educational resources for patients Need for educational resources in a language your patient understands	Self-report; multiple responses allowed
(22) Which of the following barriers to identifying PTSD in your clinical practice do you most frequently encounter related to systems?	Insufficient time with patients for effective screening Lack of insurance coverage for treatment Reimbursement issues Lack of availability of referral to specialized mental health care Lack of access to VA care for mental health	Self-report; multiple responses allowed
(23) What is your current practice setting?	Community mental health center VA hospital Academic hospital/community hospital Group practice Private practice Other	Self-report
(24) Approximately how many patients do you currently screen for PTSD each week?	0–5	Self-report
(25) Approximately how many patients do you newly diagnose with PTSD each month?	6–10 11–20 21–50 51–100 >100	

[a]Based on the guideline of Veterans Affairs/Department of Defense.[15]
[b]The Internet assessment patient case–based questions and the appropriate answers used to score the assessment are shown. The full, interactive assessment is available online at http://www.medscape.com/viewarticle/727096. The most appropriate response is based on the current guideline and recommendations as cited in Brown and Weisler.[17]
Abbreviations: SPAN = Startle, Physically upset by reminders, Anger, Numbness; SPRINT = Short Posttraumatic Stress Disorder Rating Interview; SPRINT-E = SPRINT-Expanded.

doi:10.4088/PCC.11m01171
PSYCHIATRIST.COM
Prim Care Companion CNS Disord 2011;13(5)

Table 2. Health Care Provider Groups Represented Among Assessment Participants (N = 1,338)

Health Care Profession	Primary Care, n[a]	Mental Health, n[b]	All, n[c]	% of Sample
Physician	165	230	508	38
Nurse/nurse practitioner	30	95	238	18
Health business/administration			242	18
Psychologist			113	10
Social worker			61	5
Physician assistant			52	4
Medical student			47	3
Counselor			18	1
Pharmacist			14	1
Other[d]			45	3
Total			1,338	100

[a]Includes family medicine and internal medicine specialists.
[b]Includes psychiatry.
[c]Other specialties identified by more than 1 participant but less than 5% of participants were administration, allergy, cardiology, case management, critical care, dermatology, emergency medicine, endocrinology, education/teaching, geriatrics, human immunodeficiency virus/acquired immunodeficiency syndrome, home care, infectious diseases, nephrology, neurology, obstetrics/gynecology, occupational health, oncology, ophthalmology, orthopedic surgery, pain management, pathology, pharmacotherapy, physical medicine, preventative medicine, public health, pulmonary medicine, quality management, research, surgery, and urology.
[d]Other professions identified by participants included less than 1% each of chiropractor, clinical case manager, clinical nurse specialist, clinical researcher, health business, health information technology, laboratory technician, medical educator, nutritionist, optometrist, paramedic, pharmacist, physical therapist, podiatrist, rehabilitation specialist, senior executive, and senior manager.

Table 3. Posttraumatic Stress Disorder (PTSD) Medical Knowledge Among Assessment Participants[a,b]

Medical Knowledge Item (total respondents)	Appropriate Responses: Primary Care	Mental Health	All Providers
Prevalence of PTSD diagnosis among those who were on active duty upon return to civilian life in the United States is 12%–25% (n = 507)	38 (39)	69 (43)	226 (45)
Administration of the PC-PTSD takes approximately 2 minutes or less[c] (n = 456)	43 (51)	71 (55)	224 (49)
The presence of 3 of 4 symptoms in the 4-item screener (nightmares, avoidance, hyperresponsiveness, and detachment) is considered a positive screen result (n = 462)	53 (62)	70 (54)	272 (59)
Presence of symptoms 1 month or longer after a traumatic event distinguishes PTSD from acute stress disorder (n = 304)	42 (67)	72 (80)	207 (68)
A patient who has PTSD will present with somatic symptoms rather than emotional symptoms when discussing health status (n = 306)	59 (94)	86 (95)	274 (90)
PTSD causes functional impairment similar to that of major depression (n = 307)	57 (90)	86 (95)	283 (91)
Mean medical knowledge, %	67	75	67

[a]Data are presented as n (%) unless otherwise specified.
[b]Participants were not required to respond to all questions; therefore, the number of respondents varies by question.
[c]Responses of "2 minutes" and "2 minutes or less" were considered. Overall, nearly half of respondents overestimated the time required to administer the PC-PTSD.
Abbreviation: PC-PTSD = Primary Care PTSD Screen.

question. Participation was highest for physicians; the next largest professional groups represented were health business administration professionals, nurses and nurse practitioners, and psychologists (Table 2). The top clinical specialties represented were mental health and primary care providers.

Clinical practice settings included community mental health centers (33%), Veterans Affairs hospitals (19%), private practice (14%), group practice (12%), academic hospitals (13%), and community hospitals (9%). These settings are representative of those that returning service members and disaster survivors utilize. Inclusion of providers outside the military was important, as most patients with symptoms of PTSD present initially to primary care providers, and many may not have easy access to military facilities for care.[20]

Gaps in Knowledge and Confidence

Gaps in knowledge of PTSD epidemiology, symptom presentation, and diagnostic criteria were identified by comparison with the US Department of Veterans Affairs and Department of Defense guideline (Table 3).[15] Appropriate responses were selected by 67% of primary care providers, 75% of respondents in mental health specialties, and 67% of respondents overall, demonstrating gaps of 25% to 33% compared with the guideline. Appropriate responses on individual questions ranged from 39% to 94%. Intraquestion variability between primary care providers and mental health groups was small (12% or less).

Prevalence of PTSD among soldiers was identified by 39% of primary care providers, 43% of mental health providers, and 45% of respondents overall, demonstrating a large gap. Approximately half of respondents knew that the Primary Care PTSD Screen (PC-PTSD) takes 2 minutes or less, as noted in the guideline,[15,21] and half overestimated the time required for this multiple-choice question. The largest group estimated 5 minutes, and 18% estimated 6–10 minutes. Sixty-two percent of primary care providers, 54% of mental health providers, and 59% of respondents overall recognized a positive screen (presence of 3 of 4 symptoms on the 4-item PC-PTSD). In contrast, nearly all respondents knew that patients present with somatic symptoms and experience functional impairment similar to that of major depression.

The majority of respondents reported low levels of confidence in their own PTSD diagnoses on a scale from "not at all confident" to "very confident" (n = 300). Overall, 59% selected "somewhat confident" or "not at all confident" in screening, while 61% were "somewhat confident" or "not at all confident" in

diagnosis. Only 25% were "confident," and 15% to 17% were "very confident" in screening and diagnosis.

Gaps in Screening Skills

Posttraumatic stress disorder screening practice questions were correctly answered by 51% of primary care providers, 56% of mental health providers, and 53% of respondents overall, showing a large gap compared with the guideline (Table 4).[15] The range of appropriate response rates between questions was wide, from 13% to 89%. Intraquestion variability between primary care providers and mental health specialties was small (less than 14%).

In the first case of a soldier who had recently returned from active duty, 78% of primary care practitioners, 88% of mental health practitioners, and 81% of respondents overall would screen for PTSD, indicating agreement with the guideline. After the polling responses of peers were displayed and answer explanations were shown, a second case was presented of a police officer in New Orleans, Louisiana, during Hurricane Katrina. In this case, 87% of primary care practitioners, 89% of mental health practitioners, and 88% of respondents overall would screen for PTSD. Nearly all respondents chose to screen for depression: 95% of primary care practitioners, 100% of mental health practitioners, and 99% of respondents overall. The patient described was using opioid medication for headache pain, a potential risk for medication misuse, abuse, or diversion.[22,23] Approximately one-third of respondents chose to mitigate the potential for misuse, abuse, or overdose of opioid: 39% of primary care practitioners, 36% of mental health practitioners, and 32% of respondents overall (Table 4).

Relatively few participants selected steps that the guideline recommends following the positive PTSD screen.[15] Twenty-seven percent of primary care providers, 41% of mental health providers, and 31% of respondents overall used the structured interview for diagnosis. Even fewer respondents chose to review positive screens with the patient privately: 16% of primary care providers, 20% of mental health providers, and 18% of respondents overall. When the patient refuses mental health referral, few identified an effective method of communication (19% overall).

Real-World Screening and Referral

Of respondents, only 24% of primary care providers, 48% of mental health providers, and 35% of respondents overall (n = 563) have a system in place to routinely screen for mental health in their patients who are returning service members. This finding identifies a large gap in systems of health care. Approximately half of the respondents use PTSD screening tools in their practices: 43% of primary care providers and 55% of respondents overall (n = 467). Among those who do use screening tools, the PC-PTSD was the most often used among the 9 listed, followed by the short form of the PTSD Checklist[24] and the Short Screening Scale for PTSD.[25] Only 25% of primary care respondents, 32% of mental health respondents, and 28% of respondents overall (n = 302) had access to referral to mental health services, showing large gaps in care.

Approximately 33% of respondents indicated that 6% to 10% of their patients served in the military, and 28% reported that over 10% served. Providers may have patients who served in the military yet be unaware of this aspect of their history. Overall, respondents reported screening relatively few patients for PTSD; only 23% of providers screened 6 to 10 patients per week. Similarly, 15% of respondents diagnosed PTSD in more than 5 patients per month.

Barriers in identifying PTSD in clinical practice averaged 2 to 3 barriers per participant and included both patient-related and systems-related barriers (n = 289). One of the multiple-choice response options, stigma associated with a mental disorder, was reported 3 times as often as any of the other barriers (n = 303). Causes of perceived stigma are an important area of further study. Additional barriers in order of frequency were need for patient educational resources (n = 104), insufficient time with patients for effective screening (n = 93), lack of availability of referral (n = 88), and lack of access to Veterans Affairs care (n = 75).

Table 4. Posttraumatic Stress Disorder (PTSD) Screening and Practices of Assessment Participants[a,b]

Screening Practice Item (total respondents)	Appropriate Responses: Primary Care	Mental Health	All Providers
Screen for PTSD in assessment patient case 1 (n = 504)	76 (78)	120 (88)	409 (81)
Screen for PTSD in assessment patient case 2 (n = 308)	54 (87)	83 (89)	270 (88)
Screen for depression in assessment patient case 2 (n = 309)	60 (95)	92 (100)	306 (99)
For a patient with a positive PTSD screen, assess with a structured interview to diagnose PTSD (n = 487)	25 (27)	55 (41)	153 (31)
For a patient taking opioids, mitigate potential for misuse, abuse, or overdose (n = 304)	24 (39)	32 (36)	98 (32)
After a positive PTSD screen, review the results privately with the patient and screen for suicidal ideation (n = 304)	10 (16)	18 (20)	55 (18)
After a positive PTSD screen for a patient who declines mental health referral, discuss evaluation rather than treatment (n = 302)	8 (13)	19 (21)	58 (19)
Mean screening practice knowledge, %	51	56	53

[a]Data are presented as n (%) unless otherwise specified.
[b]Participants were not required to respond to all questions; therefore, the number of respondents varies by question.

DISCUSSION

Results of the Internet assessment of customary care in PTSD screening among US health care providers show gaps in practices compared with guideline recommendations.[15] Large gaps exist in use of mental health screening tools developed for primary care, systematic screening, and linkage to care. Each of these items is an area of focus in the current PTSD screening guidelines for both military-associated and primary care settings. Confidence in screening and diagnosis was low. While many trauma types are causes of stress disorder, this assessment focused on those screening practice choices relevant to combat and environmental disaster stress: a soldier recently returned from combat duty and a police officer working in New Orleans, Louisiana, during Hurricane Katrina. In the assessment, PTSD screening, diagnosis, and referral practices failed to meet expectations based on the guideline.[15] As PTSD is one of the signature injuries of war, providers need to improve PTSD screening and referral to help heal psychological wounds of returning service people.[10,26]

Strengths and Limitations of the Study

Strengths of the study include the use of patient vignettes, a valid and reliable measure of practice choices[18] that eliminates interpatient variability of practice-based assessments. The cross-section of settings sampled is one strength of the study, as many soldiers returning from combat utilize general medical care outside the military.[9] A limitation of the study is selection bias in self-directed learning, as those interested in PTSD would participate. Self-report of practices may be a limitation to the reliability of data; however, large gaps in care indicated that providers did not select strictly socially desirable responses. Further, the study did not assess screening for other causes of trauma, for example, illness, sexual abuse, or domestic violence.

Customary Care Gaps in Screening for PTSD

Because more soldiers report mental health concerns at later screening times, identification of PTSD in the community setting and in primary care has taken on heightened importance.[3,5] This assessment's results reveal that most providers lack systems for routine PTSD screening of returning soldiers. Low rates of screening may relate to the overwhelming task of screening for multiple items in the primary care setting; over 100 items are recommended by the US Preventative Services Task Force, for example. Use of the Patient Centered Medical Home principles may help improve screening, with single or multistage approaches. Mental health screening can be simplified by use of clinical tools in practice; however, results show limited use of existing tools. The Electronic Preventive Services Selector application from the US Preventive Services Task Force includes screening for depression, suicidality, and illicit drug use, but at the time of this study, omitted PTSD screening.

Many providers did not use the short PC-PTSD screen recommended by the guideline; they overestimated the time required and failed to identify a positive screen. The PC-PTSD is best suited for screening and is validated for use in primary care with soldiers returning from combat.[27] Therefore, the results indicate that training on its use is needed. The 12-item Short Posttraumatic Stress Disorder Rating Interview (SPRINT-E) was specifically created to measure postdisaster distress, including symptoms such as depression, suicidality, stress vulnerability, and functional disability; however, results show that this tool is unfortunately rarely used in practice.[28] The SPRINT-E is also useful for determining the need for referral or treatment, and increased practice skills are needed in this area.

Most providers understood that patients with PTSD are highly likely to present with somatic symptoms.[15] These symptoms are often treated with pain medication, yet surprisingly few providers mitigated potential for misuse, abuse, or overdose of opioid pain medication. Misuse can increase impulsivity, increasing risks for accident, injury, or suicide, which is a particular concern in returning soldiers.[23,29] Approximately 14% of active-duty military members are reported to be receiving opiate medications, and high rates of opiate use are common after discharge. Concomitant use of alcohol and benzodiazepines increases adverse drug events risk, including suicide and accidental drug poisoning deaths, and both are particular concerns for returning soldiers. Therefore, mitigating the risk for opioid misuse as well as alcohol and other types of drug abuse is an important area in which health care providers need additional training. At the same time, clinicians need to be sensitive to pain relief needs for soldiers who may have also suffered physical injuries that cause pain.

Gaps in Patient Communication

Patients may fear that mental health problems will damage their military future or delay return to their family.[9] The guideline stresses the importance of providing privacy to discuss positive results of a PTSD screen.[15] A positive screen result means that the patient may have the disorder, not that he or she definitely has it; therefore, diagnosis with a structured interview for PTSD and other mental disorders is needed. Yet, few providers used the structured interview or ensured patient privacy when discussing the screen results. Furthermore, few participants identified effective communication to increase acceptance of a referral by focusing on evaluation rather than on treatment. Skill improvement in these areas may help overcome patient-related barriers to care.

Real-World Barriers to PTSD Screening

Several studies show that survivors of trauma and returning soldiers are reluctant to seek care and often experience barriers to care.[9,10,30] In the study reported here, health care providers reported stigma associated with a mental disorder as the greatest barrier to care, similar to the previous reports of patient barriers. This finding emphasizes the importance of working to understand and reduce stigma associated with mental health care, an important area of future study.[9] A need for patient education including languages that patients understand highlights a need to improve available resources. The overwhelming burden of screening needs in the primary care setting argues for adopting systems of screening to save time and increase efficiencies in health care delivery. Systems barriers encountered were interrelated; for example, providers are unlikely to screen if they overestimate the time required to use screening tools and when linkage to care is not available for accurate diagnosis and follow-up treatment.

CONCLUSIONS

This practice assessment identified gaps in PTSD knowledge, screening, diagnosis, and linkage to care among US health care providers compared with the guideline.[15] Recently, primary care providers have been encouraged to screen returning service members for stress disorders in addition to substance abuse, suicidality, and depression.[7] Clinicians need to be aware that suicide rates are increasing in the US Army including the Reserve component, with 239 suicides in 2009 alone and 1,713 attempted suicides.[29] Posttraumatic stress disorder, comorbid mood and substance abuse disorders, and traumatic brain injury all further increase the risk of suicide, unintentional drug poisoning deaths, or motor vehicle accident deaths. Additional educational training resources are needed in the health care community to evaluate patients for PTSD following combat experience and disaster exposure in order to implement guideline recommendations.

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Potential conflicts of interest: **Dr Weisler** receives or has received research support from Abbott, AstraZeneca, Biovail, Bristol-Myers Squibb, Burroughs Wellcome, CeNeRx, Cephalon, Ciba-Geigy, CoMentis, Dainippon-Sumitomo, Eisai, Eli Lilly, Forest, GlaxoSmithKline, Janssen, Johnson & Johnson, Lundbeck, McNeil, MediciNova, Merck, National Institute of Mental Health, Neurochem, New River, Novartis, Organon, Parke Davis, Pfizer, Pharmacia, Repligen, Saegis, Sandoz, Sanofi, Sanofi-Synthelabo, Schwabe/Ingenix, Sepracor, Shire, Synaptic Pharmaceutical, Sunovion, Takeda, TAP, Transcept Pharma, TransTech, UCB, Upjohn, Vela, and Wyeth; is or has been a speaker for Abbott, AstraZeneca, Biovail, Bristol-Myers Squibb, Burroughs Wellcome, Cephalon, Ciba-Geigy, Eli Lilly, Forest, GlaxoSmithKline, Janssen, Johnson & Johnson, Novartis, Organon, Pfizer, Sanofi, Sanofi-Synthelabo, Shire, Solvay, Sunovion, Validus, and Wyeth Ayerst; is or has been a consultant for Abbott, AstraZeneca, Biovail, Bristol-Myers Squibb, Cephalon, Corcept, Eli Lilly, Forest, GlaxoSmithKline, Johnson & Johnson, Medscape Advisory Board, Organon, Otsuka, Pfizer, Pharmacia, Sanofi, Sanofi-Synthelabo, Shire, Solvay, Sunovion, Transcept Pharma, TransTech, Validus, and Wyeth; and is or has been a financial stockholder of Bristol-Myers Squibb, Cortex, Merck, and Pfizer. **Dr Brown** reports no conflicts of interest related to the subject of this article.
Funding/support: None reported.

REFERENCES

1. Vieweg WV, Julius DA, Fernandez A, et al. Posttraumatic stress disorder: clinical features, pathophysiology, and treatment. *Am J Med*. 2006;119(5):383–390.
2. Hoge CW, Auchterlonie JL, Milliken CS. Mental health problems, use of mental health services, and attrition from military service after returning from deployment to Iraq or Afghanistan. *JAMA*. 2006;295(9):1023–1032.
3. 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.
4. Tanielian T, Jaycox L, eds. *RAND Center for Military Health Policy Research. Invisible Wounds of War: Psychological and Cognitive Injuries, Their Consequences, and Services to Assist Recovery*. Santa Monica, CA: RAND Corporation; 2008.
5. Thomas JL, Wilk JE, Riviere LA, et al. 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.
6. Hoge CW, Terhakopian A, Castro CA, et al. Association of posttraumatic stress disorder with somatic symptoms, health care visits, and absenteeism among Iraq war veterans. *Am J Psychiatry*. 2007;164(1):150–153.
7. Quinlan JD, Guaron MR, Deschere BR, et al. Care of the returning veteran. *Am Fam Physician*. 2010;82(1):43–49.
8. Fikretoglu D, Guay S, Pedlar D, et al. Twelve month use of mental health services in a nationally representative, active military sample. *Med Care*. 2008;46(2):217–223.
9. Kim PY, Thomas JL, Wilk JE, et al. Stigma, barriers to care, and use of mental health services among active duty and National Guard soldiers after combat. *Psychiatr Serv*. 2010;61(6):582–588.
10. Hoge CW, Castro CA, Messer SC, et al. Combat duty in Iraq and Afghanistan, mental health problems, and barriers to care. *N Engl J Med*. 2004;351(1):13–22.
11. Stellman JM, Smith RP, Katz CL, et al. Enduring mental health morbidity and social function impairment in World Trade Center rescue, recovery, and cleanup workers: the psychological dimension of an environmental health disaster. *Environ Health Perspect*. 2008;116(9):1248–1253.
12. Centers for Disease Control and Prevention (CDC). Health hazard evaluation of police officers and firefighters after Hurricane Katrina, New Orleans, Louisiana, October 17–28 and November 30–December 5, 2005. *MMWR Morb Mortal Wkly Rep*. 2006;55(16):456–458.
13. Weisler RH, Barbee JG 4th, Townsend MH. Mental health and recovery in the Gulf Coast after hurricanes Katrina and Rita. *JAMA*. 2006;296(5):585–588.
14. Druss BG, Henderson KL, Rosenheck RA. Swept away: use of general medical and mental health services among veterans displaced by Hurricane Katrina. *Am J Psychiatry*. 2007;164(1):154–156.
15. Veterans Affairs/Department of Defense Clinical Practice Guideline. Management of Posttraumatic Stress. http://www.healthquality.va.gov/Post_Traumatic_Stress_Disorder_PTSD.asp Accessed July 13, 2011.
16. United States Department of Veterans Affairs, National Center for Posttraumatic Stress Disorder. PTSD Screening and Referral: For Healthcare Providers. http://www.ptsd.va.gov/professional/pages/screening-and-referral.asp Accessed July 13, 2011.
17. Brown JJ, Weisler RH. Posttraumatic Stress Disorder Screening: A Clinical Practice Assessment. Medscape 2010. http://www.medscape.com/viewarticle/727096_print Accessed July 13, 2011.
18. DeSanto-Madeya S. Using case studies based on a

nursing conceptual model to teach medical-surgical nursing. *Nurs Sci Q*. 2007;20(4):324–329.
19. Peabody JW, Luck J, Glassman P, et al. Measuring the quality of physician practice by using clinical vignettes: a prospective validation study. *Ann Intern Med*. 2004;141(10):771–780.
20. Cook DA, Levinson AJ, Garside S, et al. Instructional design variations in Internet-based learning for health professions education: a systematic review and meta-analysis. *Acad Med*. 2010;85(5):909–922.
21. Prins A, Ouimette P, Kimerling R, et al. The Primary Care PTSD Screen (PC-PTSD): development and operating characteristics. *Prim Care Psychiatry*. 2004;9(1):9–14.
22. Bray RM, Pemberton MR, Lane ME, et al. Substance use and mental health trends among US military active duty personnel: key findings from the 2008 DoD Health Behavior Survey. *Mil Med*. 2010;175(6):390–399.
23. Stetka B. Unintentional drug poisoning deaths: a national epidemic. Medscape Psychiatry and Mental Health 2010. http://www.medscape.com/viewarticle/724186_ Accessed July 13, 2011.
24. Ruggiero KJ, Del Ben K, Scotti JR, et al. Psychometric properties of the PTSD Checklist-Civilian Version. *J Trauma Stress*. 2003;16(5):495–502.
25. Breslau N, Peterson EL, Kessler RC, et al. Short screening scale for *DSM-IV* post-traumatic stress disorder. *Am J Psychiatry*. 1999;156(6):908–911.
26. Hoge CW, McGurk D, Thomas JL, et al. Mild traumatic brain injury in US Soldiers returning from Iraq. *N Engl J Med*. 2008;358(5):453–463.
27. Bliese PD, Wright KM, Adler AB, et al. Validating the Primary Care Posttraumatic Stress Disorder Screen and the Posttraumatic Stress Disorder Checklist with soldiers returning from combat. *J Consult Clin Psychol*. 2008;76(2):272–281.
28. Norris FH, Hamblen JL, Brown LM, et al. Validation of the Short Posttraumatic Stress Disorder Rating Interview (expanded version, Sprint-E) as a measure of postdisaster distress and treatment need. *Am J Disaster Med*. 2008;3(4):201–212.
29. US Army. Army Health Promotion, Risk Reduction and Suicide Prevention Report 2010. http://www.army.mil/-news/2010/07/28/42934-army-health-promotion-risk-reduction-and-suicide-prevention-report/index.html?ref=home-headline-link0 Accessed July 13, 2011.
30. Rodriguez JJ, Kohn R. Use of mental health services among disaster survivors. *Curr Opin Psychiatry*. 2008;21(4):370–378.