



Performance in Practice: *Clinical Tools to Improve the Care of Patients with Posttraumatic Stress Disorder.*

P T S D

Free – **5** hours of CME credit for completing the PIP survey

Copyright © 2009 by the American Psychiatric Association

ALL RIGHTS RESERVED. No part of this publication may be reproduced or transmitted in any form or by any means, graphic, electronic, or mechanical, including photocopying, taping, or information storage or retrieval systems, without permission in writing from the publisher.

Duffy FF, Craig T, Moscicki EK, West JC, and Fochtman LJ. Performance in Practice: **Clinical Tools to Improve the Care of Patients with Posttraumatic Stress Disorder.**

Focus Spring 2009; 7: 186-203

To earn CME credit for this Survey Program, psychiatrists should use the Sample Real Time Performance in Practice Tool (Appendix B) as indicated. After using the performance in practice tool, participants should fully complete the survey on page 35 and send the survey page by mail to APA CME 1000 Wilson Boulevard, Suite 1825 Arlington VA 22209, or fax to 703 907 7849, or send by email to educme@psych.org.

Target Audience

Clinicians who treat patients with posttraumatic stress disorder and psychiatrists interested in the latest research findings and clinical applications in the treatment of trauma-exposed individuals.

Learning Objective

After completion of this activity psychiatrists will have the foundation for subsequent performance improvement initiatives aimed at enhancing outcomes for patients with posttraumatic stress disorder.

Accreditation Statement

The APA is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians.

Designation Statement

APA designates this educational activity for a maximum of 5 *AMA PRA Category 1 Credits™*. Physicians should only claim credit commensurate with the extent of their participation in the activity.

CME Disclosure

Farifteh F. Duffy, Ph.D. No relevant financial relationships to disclose
Thomas Craig, M.D. No relevant financial relationships to disclose.
Eve K. Moscicki, Sc.D., M.P.P. No relevant financial relationships to disclose.
Joyce C. West, Ph.D., M.P.P. No relevant financial relationships to disclose.
Laura J. Fochtmann, M.D. No relevant financial relationships to disclose.

Begin date

April 2009

End date

December 2011

Estimated time of completion

5 hours

Media

Journal Article

Farifteh F. Duffy, Ph.D.
Thomas Craig, M.D.
Eve K. Moscicki, Sc.D., M.P.H.
Joyce C. West, Ph.D., M.P.P.
Laura J. Fochtman, M.D.

Performance in Practice: Clinical Tools to Improve the Care of Patients with Posttraumatic Stress Disorder

Abstract: To facilitate continued clinical competence, the American Board of Medical Specialties and the American Board of Psychiatry and Neurology are implementing multifaceted Maintenance of Certification programs, which include requirements for self-assessments of practice. Because psychiatrists may want to gain experience with self-assessment, two sample performance-in-practice tools are presented that are based on recommendations of the American Psychiatric Association (APA) Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder and the US Departments of Veterans Affairs and Defense (VA/DoD) Clinical Practice Guideline for the Management of Post-Traumatic Stress. One of these sample tools provides a traditional chart review approach to assessing care (Appendix A); the other sample tool presents an approach that permits a real-time evaluation of practice (Appendix B). Both tools focus on treatment of posttraumatic stress disorder (PTSD) among adults age 18 or older, and both can be used as a foundation for subsequent performance improvement initiatives with the aim of enhancing outcomes for patients with PTSD.

In current practice, psychiatrists, like other medical professionals, are expected to maintain their specialty expertise in the face of an ever-expanding evidence base. Because a number of studies have demonstrated a gap between recommended evidence-based best practices and actual clinical practice, a variety of strategies have been developed with the aim of improving the quality of clinical care (1–10). Proactive approaches to improving quality of care such as the use of clinical reminders (11–19) and audit and feedback of practice patterns to prac-

tioners (12–14, 19–22) have resulted in some degree of care enhancement in contrast to the limited success in changing clinician behavior via traditional didactic approaches to education (e.g., CME conferences) (11–15, 23–26). It is also likely that a combination of quality improvement strategies will be essential in promoting substantial improvements in patient care and outcomes (13, 20, 21, 26–30).

As part of this effort to bridge the quality gap between evidence-based practices and actual clinical practice, the American Board of Medical Specialties and the American Board of Psychiatry and Neurology are implementing multifaceted Maintenance of Certification (MOC) programs that include requirements for self-assessments of practice through reviewing the care of at least five patients (31). As with the original impetus to create specialty board certification, the MOC programs are intended to enhance quality of patient care in addition to assessing and verifying the competence of medical practitioners over time (32, 33). Although

CME Disclosure

Farifteh F. Duffy, Ph.D., Eve K. Moscicki, Sc.D., M.P.P., and Joyce C. West, American Psychiatric Institute for Research and Education, Arlington, Virginia; Thomas Craig, M.D., Springfield, Virginia; and Laura J. Fochtman, M.D., Department of Psychiatry and Behavioral Science, Stony Brook University, Stony Brook, New York.

All authors report no competing interests.

Address correspondence to Farifteh Duffy, Ph.D., American Psychiatric Institute for Research and Education, 1000 Wilson Blvd., Suite 1825, Arlington, VA 22209; e-mail: fduffy@psych.org.

the MOC phase-in schedule will not require completion of a Performance in Practice (PIP) unit until 2014 (31), individual psychiatrists may wish to begin assessing their own practice patterns before that time. To facilitate such self-assessment related to the treatment of posttraumatic stress disorder (PTSD), this article will provide sample PIP tools that are based on recommendations of two major guidelines published in the United States: APA's Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder (PTSD) (34) and the U.S. Department of Veterans Affairs and Defense (VA/DoD) Clinical Practice Guideline for the Management of Post-Traumatic Stress (35), supplemented by the latest evidence in the most recent APA Guideline Watch (36). Other noteworthy practice guidelines for the treatment of PTSD include the Australian guidelines for the treatment of adults with acute stress disorder and PTSD (37) and the National Institute for Clinical Excellence management of PTSD in primary and secondary care (38).

The PIP tools described here have been developed to specifically address care of PTSD among adults age 18 years and older; screening, diagnosis, and treatment of PTSD among patients younger than 18 years of age is beyond the scope of this article. A similar set of self-assessment tools for the treatment of depression among adults was published earlier (39), guided by recommendations from the APA Practice Guideline for the Treatment of Patients with Major Depressive Disorder (40).

Evidence-based practice guidelines and quality indicators (41, 42) provide an important foundation for assessing quality of treatment. For a number of reasons, however, the realities of routine clinical practice may temper the development and assessment of a clinically appropriate treatment plan for a specific patient. First, as described previously (39), evidence-based practice guidelines and quality indicators are often derived from data based on randomized controlled trials (RCTs). Because patients in efficacy trials and even those in effectiveness trials must meet stringent enrollment criteria, they often differ in important ways from patients seen in routine clinical practice (43). For example, patients in RCTs are less likely to be suicidal, have co-occurring psychiatric and medical conditions that may interfere with treatment, or be as severely ill as patients in routine clinical practice. Such differences may need to be taken into account when a physician is formulating the best treatment plan for an individual patient.

In addition, when quality indicators are used to compare individual physicians' practice patterns, differences in patient characteristics and illness se-

verity between practices may lead to false conclusions about differences in quality of care. In such circumstances, case mix adjustment is important to address confounding and permit accurate comparison of quality indicator results (44, 45). Also, inadequate attention to factors such as case mix adjustments may lead to unintended consequences such as excluding more severely ill or less adherent patients from practices in an attempt to improve performance on specific quality indicators. Finally, for patients who have complex conditions or are receiving simultaneous treatments for multiple disorders, composite measures of overall treatment quality may yield more accurate appraisals than measurement of single quality indicators (46–48).

Although the above caveats need to be taken into consideration, use of retrospective quality indicators can be beneficial for individual physicians who wish to assess their own patterns of practice. If a physician's self-assessment identifies aspects of care that frequently differ from key quality indicators, further examination of practice patterns would be helpful. Through such self-assessment, the physician may determine that deviations from the quality indicators are justified, or he or she may acquire new knowledge and modify his or her practice to improve quality. It is this sort of self-assessment and performance improvement efforts that the MOC PIP program is designed to foster.

INDICATORS FOR THE EVIDENCE-BASED RECOGNITION AND TREATMENT OF PTSD

The evidence underlying the development of indicators for quality assessment/improvement is generally derived from three sources: 1) experimental studies (e.g., RCTs); 2) epidemiologic or observational studies; and 3) expert consensus. For ASD and PTSD, recent clinical practice guidelines have examined these sources of evidence and have been published in the United States by APA (APA Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Posttraumatic Stress Disorder) (34) and the VA/DoD (Clinical Practice Guideline for the Management of Post-Traumatic Stress) (35). The clinical indicators in Appendixes A and B are largely derived from these guidelines supplemented with information from a recent Guideline Watch that updates APA practice guidelines (36) and focuses on recent evidence for pharmacological and psychotherapeutic treatment for PTSD. Appendix C highlights key assessment and treatment recommendations derived from the aforementioned guidelines (34–36)

INDICATORS FOR SCREENING, ASSESSMENT, AND EVALUATION OF PTSD

The need for screening and diagnosis of PTSD in psychiatric practice is underscored by the substantial prevalence of PTSD in both the general population and in high-risk populations, especially after exposure to specific traumatic events. For example, recent epidemiologic studies using DSM-III-R and DSM-IV criteria have found the lifetime prevalence of PTSD to range from 6.4% to 9.2% (49–51). In addition, women generally have a higher risk of PTSD than men, controlling for type of trauma (51). These findings support the importance of quality indicators focused on screening for PTSD in the general population using structured instruments such as the PTSD Checklist-Civilian Version (PCL-C) (52). In recent studies of military service members deployed to Iraq and Afghanistan, PTSD prevalence rates of 5.0%–19.9% have been found, varying based on strict or broad definition of PTSD using the PCL, deployment location, and pre-post deployment status (53). In addition, several reports have suggested that routine screening for PTSD can identify subsyndromal PTSD with significant disability at least as frequently as PTSD that meets the full diagnostic criteria (48, 54, 55).

In addition to routine screening for PTSD in general civilian and military populations, evidence has suggested the need for intensive screening and diagnostic efforts intended for populations with a history of exposure to trauma. For example, elevated rates of lifetime and current prevalence of PTSD have been reported for populations exposed to terrorist attacks [e.g., 12.6% PTSD prevalence among residents of lower Manhattan after the 9/11 attacks (56) and 31% PTSD prevalence among survivors of the Oklahoma City bombing 1 year later (57)], natural disasters such as hurricanes [22.5% PTSD prevalence after Hurricane Katrina (58)] and earthquakes [24.2% PTSD prevalence 9 months after an earthquake in China (59)], and medically traumatic events such as burns [28.6% PTSD prevalence at 1 year (60)], cancer surgery [11.2%–16.3% 6-month PTSD prevalence after surgery (61)], acute coronary syndrome [12.2% PTSD prevalence at 1 year (62)], and hospitalization for traumatic injury [20.7% PTSD prevalence at 1 year (63)]. An additional consideration is the need for longitudinal screening of trauma survivors because the onset of PTSD symptoms may be delayed for 6 months or more in a substantial number of individuals. More specifically, a systematic review found that “studies consistently showed that delayed-onset PTSD in the absence of any prior

symptoms was rare, whereas delayed onsets that represented exacerbations or reactivations of prior symptoms on average accounted for 38.2% and 15.3%, respectively, of military and civilian cases of PTSD” (64).

Finally, ongoing screening is essential in identifying PTSD in patients being evaluated or seeking treatment for other psychiatric conditions such as psychosis (65–67). Also, a substantial proportion of patients with mood and other anxiety disorders also have PTSD. For example, it has been estimated that 7%–40% of patients with bipolar disorder also meet the criteria for PTSD (68). In addition, the National Comorbidity Survey found the rate of affective disorders to be 4 times higher among respondents with PTSD than among those without PTSD (e.g., 47.9%–48.5% for major depressive episode in subjects with PTSD versus 11.7%–18.8% for those without PTSD) (49). Similarly, rates of anxiety disorders other than PTSD were twice as high or more among those with PTSD (e.g., 7.3%–31.4% for a variety of specific anxiety disorders) than among those without PTSD (e.g., 1.9%–14.5% for the same range of disorders) (68). Finally the same study reported alcohol abuse/dependence to be up to twice as high among those with PTSD (e.g., 51.9% for men and 27.9% for women) compared to individuals without PTSD (e.g., 34.4% for men and 13.5% for women) (49).

TREATMENT INDICATORS

Indicators for assessing the quality of treatment should ideally be derived from experimental treatment trials, preferably RCTs. However, in the absence of such trials, clinicians must rely on clinical experience augmented by data from observational and retrospective studies and expert consensus. Evidence-based practice guidelines provide clinicians with a valuable clinical resource by compiling and processing the most recent scientific knowledge and expert consensus for the treatment and management of selected disorders. Well-established practice guidelines such as those developed by APA and the VA/DoD, that have been referenced here, use a rigorous standardized process for searching the literature, data extraction, and synthesis (35, 69). For ease of use, recommendations are then graded based on the level of supporting evidence. For example, Appendix C includes the level of clinical confidence/grade for each of the recommendations based on the VA/DoD and APA practice guidelines, and the definition associated with each level/grade.

PHARMACOTHERAPY

The APA and VA/DoD guidelines uniformly recommend the initiation of serotonin-specific reuptake inhibitor antidepressants (SSRIs) as first-line treatment for PTSD (34, 35). However, the recent Guideline Watch (36) and Institute of Medicine report (70), although still supporting use of SSRIs for PTSD among civilians, have found less RCT evidence to support these medications for the treatment of combat-related trauma. There is also less RCT evidence supporting the use of other antidepressants (tricyclic antidepressants, monoamine oxidase inhibitors, and non-SSRI second-generation antidepressants) (36). Expert consensus plus observational studies suggest consideration of an antidepressant trial of at least 12 weeks at adequate doses before the therapeutic regimen is changed and consideration of long-term antidepressant maintenance treatment as clinically indicated. In terms of other potential treatment strategies, there is growing evidence to support the use of prazosin specifically for treatment of PTSD-associated nightmares (71). In addition, recent data suggest that adjunctive treatment with a second-generation antipsychotic agent may be helpful in patients with a partial response to an SSRI or other second-generation antidepressant. However, first-generation antipsychotics should not be used in the management of PTSD. Current evidence also recommends against long-term use of benzodiazepines to manage core PTSD symptoms or as monotherapy, especially given the potential for misuse/abuse and the lack of strong evidence of efficacy. There is, as yet, insufficient evidence to recommend the use of anticonvulsants or primary pharmacotherapeutic prophylaxis of PTSD.

PSYCHOTHERAPY

There is strong RCT evidence supporting the use of exposure-based therapies including exposure-based cognitive behavioral therapy, cognitive processing therapy, prolonged exposure therapy, and brief exposure therapy for civilians with PTSD exposed to trauma (both civilian and wartime) and for women with PTSD associated with sexual assault (34–36). Current recommendations suggest use of trauma-focused cognitive behavior therapy as a first-line treatment for PTSD (36), which is typically delivered on an individual basis for 8–12 sessions of 90 minutes each (38). Exposure-based therapies, however, are not indicated and should be used with caution for “patients living in dangerous situations (e.g., domestic violence) or for patients with current suicidal ideation, substance abuse not

in stable remission, comorbid psychosis, or health problems that preclude exposure to intense physiological arousal” (35).

RCT evidence has suggested that eye movement desensitization and reprocessing treatment may be efficacious for PTSD (36). There is also some RCT evidence supporting the use of stress inoculation therapy for PTSD related to sexual assault (36). Imagery Rehearsal Therapy may be considered for treating nightmares and sleep disruption associated with PTSD. There is strong evidence against the use of psychological debriefing as it may have long-term adverse consequences and has not shown any apparent benefit.

ACKNOWLEDGMENT

This work was funded in part by the Department of Defense Concept Award Grant #W81XWH-08-1-0399 and the American Psychiatric Foundation Barriers to Care Grant.

DISCLOSURE OF OFF-LABEL USE OF MEDICATION

Medications discussed in this manuscript derived from the APA and the VA/DoD practice guidelines may not have an indication from the U.S. Food and Drug Administration (FDA) for the treatment of PTSD. To date sertraline and paroxetine are the only medications approved by the FDA to treat PTSD. Decisions about off-label use should be guided by the evidence provided in the APA or the VA/DoD practice guidelines, other scientific literature, and clinical experience. Medications which have not received FDA approval for any indication are not included in this manuscript.

REFERENCES

1. Institute of Medicine: Crossing the Quality Chasm: A New Health System for the 21st Century. Washington, DC, National Academy Press, 2001
2. Institute of Medicine: Improving the Quality of Health Care for Mental and Substance-Use Conditions. Washington, DC, National Academies Press, 2006
3. Colenda CC, Wagenaar DB, Mickus M, Marcus SC, Tanielian T, Pincus HA: Comparing clinical practice with guideline recommendations for the treatment of depression in geriatric patients: findings from the APA practice research network. *Am J Geriatr Psychiatry* 2003; 11:448–457
4. West JC, Duffy FF, Wilk JE, Rae DS, Narrow WE, Pincus HA, Regier DA: Patterns and quality of treatment for patients with major depressive disorder in routine psychiatric practice. *Focus* 2005; 3:43–50
5. Wilk JE, West JC, Narrow WE, Marcus S, Rubio-Stipec M, Rae DS, Pincus HA, Regier DA: Comorbidity patterns in routine psychiatric practice: is there evidence of under-detection and under-diagnosis? *Compr Psychiatry* 2006; 47:258–264
6. Pincus HA, Page AE, Druss B, Appelbaum PS, Gottlieb G, England MJ: Can psychiatry cross the quality chasm? Improving the quality of health care for mental and substance use conditions. *Am J Psychiatry* 2007; 164: 712–719
7. Rost K, Dickinson LM, Fortney J, Westfall J, Hermann RC: Clinical improvement associated with conformance to HEDIS-based depression care. *Ment Health Serv Res* 2005; 7:103–112
8. Cochrane LJ, Olson CA, Murray S, Dupuis M, Tooman T, Hayes S: Gaps between knowing and doing: understanding and assessing the barriers to optimal health care. *J Contin Educ Health Prof* 2007; 27:94–102
9. Chen RS, Rosenheck R: Using a computerized patient database to evaluate guideline adherence and measure patterns of care for major depression. *J Behav Health Serv Res* 2001; 28:466–474
10. Cabana MD, Rushton JL, Rush AJ: Implementing practice guidelines for depression: applying a new framework to an old problem. *Gen Hosp Psychiatry* 2002; 24:35–42
11. Davis D: Does CME work? An analysis of the effect of educational activities on physician performance or health care outcomes. *Int J Psychiatry Med* 1998; 28:21–39

12. Bloom BS: Effects of continuing medical education on improving physician clinical care and patient health: a review of systematic reviews. *Int J Technol Assess Health Care* 2005; 21:380–385
13. Chaillet N, Dubé E, Dugas M, Audibert F, Tourigny C, Fraser WD, Dumont A: Evidence-based strategies for implementing guidelines in obstetrics: a systematic review. *Obstet Gynecol* 2006; 108:1234–1245
14. Grimshaw J, Eccles M, Thomas R, MacLennan G, Ramsay C, Fraser C, Vale L: Toward evidence-based quality improvement: evidence (and its limitations) of the effectiveness of guideline dissemination and implementation strategies 1966–1998. *J Gen Intern Med* 2006; 21(suppl 2): S14–S20
15. Grimshaw JM, Shirran L, Thomas R, Mowatt G, Fraser C, Bero L, Grilli R, Harvey E, Oxman A, O'Brien MA: Changing provider behavior: an overview of systematic reviews of interventions. *Med Care* 2001; 39(8 suppl 2):II2–II45
16. Balas EA, Weingarten S, Garb CT, Blumenthal D, Boren SA, Brown GD: Improving preventive care by prompting physicians. *Arch Intern Med* 2000; 160:301–308
17. Feldstein AC, Smith DH, Perrin N, Yang X, Rix M, Raebel MA, Magid DJ, Simon SR, Soumerai SB: Improved therapeutic monitoring with several interventions: a randomized trial. *Arch Intern Med* 2006; 166:1848–1854
18. Kucher N, Koo S, Quiroz R, Cooper JM, Paterno MD, Soukonnikov B, Goldhaber SZ: Electronic alerts to prevent venous thromboembolism among hospitalized patients. *N Engl J Med* 2005; 352:969–77
19. Weingarten SR, Henning JM, Badamgarav E, Knight K, Hasselblad V, Gano A, Jr, Ofman JJ: Interventions used in disease management programmes for patients with chronic illness-which ones work? Meta-analysis of published reports. *BMJ* 2002; 325:925
20. Arnold SR, Straus SE: Interventions to improve antibiotic prescribing practices in ambulatory care. *Cochrane Database Syst Rev* 2005; 4:CD003539
21. Bradley EH, Holmboe ES, Matterna JA, Roumanis SA, Radford MJ, Krumholz HM: Data feedback efforts in quality improvement: lessons learned from US hospitals. *Qual Saf Health Care* 2004; 13:26–31
22. Paukert JL, Chumley-Jones HS, Littlefield JH: Do peer chart audits improve residents' performance in providing preventive care? *Acad Med* 2003; 78(10 suppl):S39–S41
23. Sohn W, Ismail AI, Tellez M: Efficacy of educational interventions targeting primary care providers' behaviors: an overview of published systematic reviews. *J Public Health Dent* 2004; 64:164–172
24. Grol R: Changing physicians' competence and performance: finding the balance between the individual and the organization. *J Contin Educ Health Prof* 2002; 22:244–251
25. Oxman TE: Effective educational techniques for primary care providers: application to the management of psychiatric disorders. *Int J Psychiatry Med* 1998; 28:3–9
26. Green LA, Wyszevianski L, Lowery JC, Kowalski CP, Krein SL: An observational study of the effectiveness of practice guideline implementation strategies examined according to physicians' cognitive styles. *Implement Sci* 2007; 2:41
27. Roumie CL, Elasy TA, Greevy R, Griffin MR, Liu X, Stone WJ, Wallston KA, Dittus RS, Alvarez V, Cobb J, Speroff T: Improving blood pressure control through provider education, provider alerts, and patient education: a cluster randomized trial. *Ann Intern Med* 2006; 145:165–175
28. Hysong SJ, Best RG, Pugh JA: Clinical practice guideline implementation strategy patterns in Veterans Affairs primary care clinics. *Health Serv Res* 2007; 42:84–103
29. Dykes PC, Acevedo K, Boldrighini J, Boucher C, Frumento K, Gray P, Hall D, Smith L, Swallow A, Yarkoni A, Bakken S: Clinical practice guideline adherence before and after implementation of the HEARTFELT (HEART Failure Effectiveness & Leadership Team) intervention. *J Cardiovasc Nurs* 2005; 20:306–314
30. Greene RA, Beckman H, Chamberlain J, Partridge G, Miller M, Burden D, Kerr J: Increasing adherence to a community-based guideline for acute sinusitis through education, physician profiling, and financial incentives. *Am J Manag Care* 2004; 10:670–678
31. American Board of Psychiatry and Neurology: Maintenance of certification for psychiatry. 2007. http://www.abpn.com/moc_psychiatry.htm
32. Institute of Medicine: Health Professions Education: a Bridge to Quality. Washington, DC, National Academies Press, 2003
33. Miller SH: American Board of Medical Specialties and repositioning for excellence in lifelong learning: maintenance of certification. *J Contin Educ Health Prof* 2005; 25:151–156
34. American Psychiatric Association: Practice guideline for the treatment of patients with acute stress disorder and posttraumatic stress disorder. *Am J Psychiatry* 2004; 161(11 suppl):1–31
35. Departments of Veterans Affairs and Defense: VA/DoD clinical practice guideline for the management of post-traumatic stress. 2004. http://www.pdhealth.mil/clinicians/va-dod_cpg.asp
36. Benedek DM, Friedman MJ, Zatzick D, Ursano RJ: Guideline watch (March 2009): Practice guideline for the treatment of patients with acute stress disorder and posttraumatic stress disorder. <http://www.psychiatryonline.com/content.aspx?aID=156514>
37. Forbes D, Creamer M, Phelps A, Bryant R, McFarlane A, Devilly GJ, Matthews L, Raphael B, Doran C, Merlin T, Newton S: Australian guidelines for the treatment of adults with acute stress disorder and post-traumatic stress disorder. *Aust N Z J Psychiatry*. 2007; 41:637–648
38. National Collaborating Centre for Mental Health: Post-traumatic stress disorder (PTSD): the management of PTSD in adults and children in primary and secondary care. Clinical Guideline 26. London, National Institute for Clinical Excellence, 2005. <http://www.nice.org.uk/CG026NICEguideline>
39. Fochtmann LJ, Duffy FF, West JC, Kunkle R, Plovnick RM: Performance in practice: sample tools for the care of patients with major depressive disorder. *Focus* 2008; 6:22–35
40. American Psychiatric Association: Practice guideline for the treatment of patients with major depressive disorder (revision). *Am J Psychiatry* 2000; 157(4 suppl):1–45
41. Eddy D: Reflections on science, judgment, and value in evidence-based decision making: a conversation with David Eddy by Sean R. Tunis. *Health Aff (Millwood)* 2007; 26:w500–w515
42. Kobak KA, Taylor L, Katzelnick DJ, Olson N, Clagnaz P, Henk HJ: Antidepressant medication management and Health Plan Employer Data Information Set (HEDIS) criteria: reasons for non-adherence. *J Clin Psychiatry* 2002; 63:727–732
43. Zarin DA, Young JL, West JC: Challenges to evidence-based medicine: a comparison of patients and treatments in randomized controlled trials with patients and treatments in a practice research network. *Soc Psychiatry Psychiatr Epidemiol* 2005; 40:27–35
44. Hofer TP, Hayward RA, Greenfield S, Wagner EH, Kaplan SH, Manning WG: The unreliability of individual physician "report cards" for assessing the costs and quality of care of a chronic disease. *JAMA* 1999; 281:2098–2105
45. Greenfield S, Kaplan SH, Kahn R, Ninomiya J, Griffith JL: Profiling care provided by different groups of physicians: effects of patient case-mix (bias) and physician-level clustering on quality assessment results. *Ann Intern Med* 2002; 136:111–121
46. Parkerton PH, Smith DG, Belin TR, Feldbau GA: Physician performance assessment: nonequivalence of primary care measures. *Med Care* 2003; 41:1034–1047
47. Lipner RS, Weng W, Arnold GK, Duffy FD, Lynn LA, Holmboe ES: A three-part model for measuring diabetes care in physician practice. *Acad Med* 2007; 82(10 suppl):S48–S52
48. Nietert PJ, Wessell AM, Jenkins RG, Feifer C, Nemeth LS, Ornstein SM: Using a summary measure for multiple quality indicators in primary care: the Summary QQuality InDex (SQUID). *Implement Sci* 2007; 2:11
49. Kessler RC, Sonnega A, Bromet E, Hughes M, Nelson CB: Posttraumatic stress disorder in the National Comorbidity Survey. *Arch Gen Psychiatry* 1995; 52:1048–1060
50. Elhai JD, Grubaugh AL, Kashdan TB, Frueh BC: Empirical examination of a proposed refinement to DSM-IV posttraumatic stress disorder symptom criteria using the National Comorbidity Survey Replication data. *J Clin Psychiatry* 2008; 69:597–602
51. Breslau N, Kessler RC, Chilcoat HD, Schultz LR, Davis G, Andreski P: Trauma and posttraumatic stress disorder in the community: the 1996 Detroit area survey of trauma. *Arch Gen Psychiatry* 1998; 55:626–632
52. Norris FH, Hamblen JL: Standardized self-assessment measures of civilian trauma and PTSD, Assessing Psychological Trauma and PTSD: A Practitioner's Handbook, 2nd ed. Edited by Wilson J, Keane T. New York, Guilford, 2003. http://www.ncptsd.va.gov/ncmain/ncdocs/assmnts/ptsd_checklist_pcl.html
53. Hoge CW, Castro CA, Messer SC, McGurk D, Cotting DI, Koffman RL: Combat duty in Iraq and Afghanistan, mental health problems and barriers to care. *N Engl J Med* 2004; 351:13–22
54. Schnyder U, Moergeli H, Klaghofer R, Buddeberg C: Incidence and prediction of posttraumatic stress disorder symptoms in severely injured accident victims. *Am J Psychiatry* 2001; 158:594–599
55. Silva RR, Alpert M, Munoz DM, Singh S, Matzner F, Dummit S: Stress and vulnerability to posttraumatic stress disorder in children and adolescents. *Am J Psychiatry* 2000; 157:1229–1235
56. DiGrande L, Perrin MA, Thorpe LE, Thalji L, Murphy J, Wu D, Farfel M, Brackbill RM: Posttraumatic stress symptoms, PTSD, and risk factors among lower Manhattan residents after the Sept 11, 2001 terrorist attacks. *J Trauma Stress* 2008; 21:264–273
57. North CS, Pfefferbaum B, Tivis L, Kawasaki A, Reddy C, Spitznagel EL: The course of posttraumatic stress disorder in a follow-up study of survivors of the Oklahoma City bombing. *Ann Clin Psychiatry* 2004; 16:209–215

APPENDICES A AND B: PERFORMANCE IN PRACTICE SAMPLE TOOLS

Appendices A and B provide sample PIP tools, each of which is designed to be relevant across clinical settings (e.g., inpatient, outpatient), straightforward to complete, and usable in a pen-and-paper format to aid adoption. Although the MOC program requires review of at least 5 patients as part of each PIP unit, it is important to note that larger samples will provide more accurate estimates of quality within a practice.

Appendix A provides a retrospective chart review PIP tool that assesses the care given to patients with PTSD. Although Appendix A is designed as a self-assessment tool, these forms could also be used for retrospective peer-review initiatives. As with other retrospective chart review tools, some questions on the form relate to the initial assessment and treatment of the patients whereas others relate to subsequent care. In general, treatment options for newly diagnosed patients who are being treated for the first time should judiciously follow the first-line evidence-based treatment recommendations. On occasion, however, there may be appropriate clinical reasons for deviation from recommended care including: patient's prior response or reaction to a similar class of pharmacologic agents, differential diagnoses, psychiatric or medical co-occurring conditions, and patient preferences.

Appendix B provides a prospective review form. It is intended to provide a cross-sectional assessment that could be completed immediately following a patient's visit. As currently formatted, Appendix B is designed to be folded in half to allow real-time feedback based upon answers to the initial practice-based questions. This approach is more typical of clinical decision support systems that provide real-time feedback on the concordance between guideline recommendations and the individual patient's care. Such feedback provides the opportunity to adjust the treatment plan of an individual patient to improve patient-specific outcomes. In the future, the same data recording and feedback steps could be implemented via a web-based or electronic record system enhancing integration into clinical workflow. Data from this form could also be used in aggregate to plan and implement broader quality improvement initiatives. For example, if self-assessment using the sample tools

suggests that signs and symptoms of PTSD are inconsistently assessed, consistent use of more formal rating scales such as the PTSD Checklist (PCL) (35, 52) could be considered.

Each of the sample tools attempts to highlight aspects of care that have significant public health implications (e.g., suicide, substance use disorders) or for which gaps in guideline adherence are common. Appendix C includes evidence-based recommendations derived from the APA (34, 36) and the VA/DoD (35) practice guidelines and summarizes specific aspects of care that are measured by these sample PIP tools. Quality improvement suggestions that arise from completion of these sample tools are intended to be within the control of individual psychiatrists rather than dependent upon other health care system resources.

After using one of the sample PIP tools to assess the pattern of care given to a group of 5 or more patients with PTSD, the psychiatrist should determine whether specific aspects of care need to be improved. For example, if the presence or absence of co-occurring psychiatric disorders has not been assessed or if these disorders are present but not addressed in the treatment plan, then a possible area for improvement would involve greater consideration of co-occurring psychiatric disorders, which are common in patients with PTSD.

These sample PIP tools can also serve as a foundation for more elaborate approaches to improving psychiatric practice as part of the MOC program. If systems are developed so that practice-related data can be entered electronically (either as part of an electronic health record or as an independent web-based application), algorithms can suggest areas for possible improvement using specific, measurable, achievable, relevant and time-limited objectives. Such electronic systems could also provide links to journal or textbook materials, clinical practice guidelines, patient educational materials, drug-drug interaction checking, evidence-based tool kits or other clinical materials. In addition, future work will focus on developing more standardized approaches to integrating patient and peer feedback with personal performance review, developing and implementing programs of performance improvements and reassessment of performance and patient outcomes.

Appendix A: Retrospective Chart Review Performance in Practice Tool for the Care of Patients with Posttraumatic Stress Disorder (PTSD)

The purpose of this clinical tool is to complement the physician's clinical judgment with a visual aid highlighting key evidence-based recommendations for the assessment and treatment of PTSD and to provide an opportunity to evaluate potential reasons for deviation from recommended care.

Instructions: Choose the last 5 patients you treated with a diagnosis of PTSD. If the answer for a given item is "Yes," or "Not Applicable," place a check mark in the appropriate box; if the answer to the question is "No" or "Unknown," leave the box unchecked. After reviewing the charts of all 5 patients, complete the final column.

Scoring: Any rows for which the total is less than 5 reflect clinical areas for the physician to examine whether clinical or other circumstances explain why clinical practices are not consistent with recommended care, or whether changes in practice can strengthen the provision of evidence-based care.

I. ASSESSMENT for PTSD	Patient					
	#1	#2	#3	#4	#5	
Check box if new patient initiating treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i># of new patients</i>
Did the initial evaluation assess:						Number of patients with check mark in row?
a. Exposure to trauma (see Appendix C: recommendation II.1)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
b. Signs/symptoms of PTSD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
c. PTSD type: Acute, Chronic, PTSD w/ delayed onset	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
d. Risk factors for PTSD (see Appendix C: recommendation II.3 to 5)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
e. Traumatic brain injury	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
f. Suicidal ideation/plans/intentions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
g. Suicidal behavior/attempts	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
h. Non-suicidal self-injurious behaviors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
i. Nicotine use/abuse/dependence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
j. Alcohol use/abuse/dependence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
k. Other substance use/abuse/dependence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
l. Presence of other co-occurring psychiatric disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
m. Presence of general medical conditions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
n. Functional impairment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
o. Prior history of hospitalization	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
p. Patient's prior response to treatment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
q. Availability or lack of social support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
II. TREATMENT / MANAGEMENT of PTSD						
Does the treatment plan currently include, refer, or consider the following treatment management approaches for PTSD?						
Check if any one of the "a" or "b" psychotherapeutic interventions are provided						
a. Exposure-based psychotherapeutic first-line interventions for PTSD (e.g. Exposure-based Cognitive Behavioral Therapy, Cognitive Processing Therapy, Prolonged Exposure Therapy, Brief Exposure Therapy (4 to 5 sessions))	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
<i>OR</i>						
b. Other psychotherapeutic interventions considered for PTSD (e.g., Stress Inoculation Therapy, Eye Movement Desensitization and Reprocessing, Imagery Rehearsal Therapy)						
c. Appropriate psychopharmacologic intervention for PTSD (e.g., SSRIs, SNRIs, TCAs, MAOIs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
e. Ongoing follow-up and monitoring (e.g. at least one follow-up every 3 months)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
f. Patient/family education about illness/treatments	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
g. Treatment for co-occurring substance use disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5
h. Treatment for other co-occurring psychiatric disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<u> </u> /5

Appendix B: Sample “Real-Time” Performance-in-Practice (PIP) Tool for Patients with Posttraumatic Stress Disorder (PTSD)

This “real-time” PIP tool is intended to be a prospective cross-sectional assessment that could be completed immediately following a patient visit. As currently formatted, the tool is designed to be folded in half to allow real-time feedback based upon answers to initial practice based questions.

To establish a diagnosis of PTSD (refer to DSM-IV-TR for the diagnostic criteria), a thorough assessment of the patient’s current and prior exposure to traumatic event(s) is required. The patient’s response to the traumatic event at the time of trauma must involve intense fear, helplessness, or horror (Criterion A) and involve persistent re-experiencing (one or more symptoms in Criterion B); persistent avoidance of stimuli associated with the trauma and numbing of general responsiveness (three or more symptoms in Criterion C), and persistent symptoms of increased arousal (two or more symptoms in Criterion D). There need to be associated change in functioning and the duration of disturbance of one month or more.

Patient’s Sociodemographic Characteristics				The treatment plan should consider factors such as age, sex, ethnicity, culture and religious/spiritual beliefs, which may require a modified treatment approach.
Age: _____				
Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female				
Racial/ethnic background	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unknown <input type="checkbox"/>	
Highest level of education	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Marital status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Employment status	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Assess the following:				Assessment of risk factors should include: <i>Pre-trauma Risk Factors for ASD/PTSD</i> : prior exposure to trauma, adverse childhood experiences, younger age, minority race, female gender, low socioeconomic or educational status, psychiatric disorders or personality dimensions, cognitive factors.
Assess for PTSD Specific pre-, peri-, and post-trauma events	Yes	No	Unknown	
Most recent trauma types (motor vehicle crashes, violence, combat-related, sexual-related, other)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Severity of trauma (mild, moderate, severe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Recency of exposure to trauma (time elapsed since exposure)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Peri-trauma Risk Factors for ASD/PTSD</i> including: severity of trauma, peri-traumatic dissociation, young age at the time of exposure, and acute stress reaction.
Level of distress at the time of trauma/peri-traumatic dissociation (mild/moderate/severe)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
History of trauma exposure (i.e., type, severity, frequency, adverse childhood experiences)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Post-trauma Risk Factors for ASD/PTSD</i> including: resource loss, lack of social support, ongoing life stressors, bereavement, psychosocial difficulties.
Since exposure to most recent trauma, is patient experiencing any of the following?	Yes	No	Unknown	
Nightmares about the experience/ thinking about it when patient did not want to	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	If associated symptoms of PTSD are not routinely assessed (as indicated by multiple unknown symptoms of PTSD), consider using a standardized tool for assessing and recording PTSD symptoms such as the 17-item PTSD Check List (PCL) (52) or the Clinician Administered PTSD Scale (CAPS) (72).
Patient tries hard not to think about the trauma or goes out of his/her way to avoid situations that remind them of it	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Patient is constantly on guard, watchful, easily startled	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Patient feels numb or detached from others, activities, or their surroundings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B: Sample “Real-Time” Performance-in-Practice (PIP) Tool for Patients with Posttraumatic Stress Disorder (PTSD) (p. 2 of 6)

Current PTSD Diagnosis	Acute <input type="checkbox"/>	Chronic <input type="checkbox"/>	Delayed Onset <input type="checkbox"/>	If the patient has clinically significant symptoms of PTSD consider initiating treatment. If the patient is currently receiving treatment, depending on the duration of treatment and persistence of symptoms a change in the treatment plan may be indicated. Consideration may be given to changing a medication dose, modifying or adding a medication, or revising the primary diagnosis.
Is the patient experiencing clinically significant distress or impairment in social, occupational, or other important areas of functioning that is a change from their pre-trauma level of functioning?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	Unknown <input type="checkbox"/>	
Length of time in treatment with psychiatrist or other clinicians for current PTSD:	_____ months			The patient’s level of functioning is important in making a diagnosis of PTSD, but is equally important in examining response to treatment. It is also a primary focus of patients and their families as well a major determinant of illness related disability.
Co-Occurring Psychiatric Conditions	Current	Past	Unknown	
Other Anxiety Disorder(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Co-occurring psychiatric disorders are common in patients with PTSD and need to be considered when planning care.
Depressive Disorder(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Bipolar Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Psychotic Disorder(s)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Tobacco use abuse/dependence contributes to significant morbidity and mortality among smokers, yet can be treated effectively.
Nicotine Dependence	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Alcohol Use Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other Substance Use Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Adjustment Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Use of alcohol or other substances can be problematic among patients with PTSD and can influence treatment response and suicide risk even in the absence of substance use disorder.
Somatoform Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sleep Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Personality Disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other psychiatric concerns:	Current	Past	Unknown	
Impaired cognition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Smoking/Nicotine	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Alcohol use problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other substance use problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sleep problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Yes	No	N/A	
If the patient has current or past co-occurring psychiatric disorders, are these being addressed in the treatment plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the patient uses tobacco, has he/she been encouraged to quit?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B: Sample “Real-Time” Performance-in-Practice (PIP) Tool for Patients with Posttraumatic Stress Disorder (PTSD) (p. 3 of 6)

Presence of traumatic brain injury (TBI):	Current <input type="checkbox"/>	Past <input type="checkbox"/>	Unknown <input type="checkbox"/>	Assessment of TBI should include, but not be limited to, the following: history, symptoms, neurological exam, neuro-cognitive function, and psychological function.
If TBI present, rate the severity	Mild <input type="checkbox"/>	Moderate <input type="checkbox"/>	Severe <input type="checkbox"/>	
Suicidal/Self Injurious Behaviors	Yes	No	Unknown	<p>Mild TBI = loss of consciousness 0 to 30 min, alteration of consciousness/mental state up to 24 hours, amnesia 0-1 day.</p> <p>Moderate TBI = loss of consciousness >30 min and <24 hours, alteration of consciousness/mental state >24 hours, amnesia >1 day and <7 days</p> <p>Severe TBI = loss of consciousness >24 hours, alteration of consciousness/mental state >24 hours, amnesia >7 days</p>
Has patient had suicidal ideation or behavior in the past 90 days?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>If Yes:</i>				
Mild/intermittent ideation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	A history of hospitalization, prior suicide attempts or other self-harming behaviors is relevant in estimating suicide risk.
Severe/persistent ideation:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Made a suicide plan:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Self-injurious behavior <i>without intention</i> to die (e.g. cutting behavior)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Self-injurious behavior <i>with intention</i> to die (e.g. suicide attempt)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Number of previous suicide attempts (enter 0 if no previous history)	_____ # attempts			
Does patient have history of violent or aggressive behaviors toward others?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	The presence or absence of aggressive behaviors can also be important to risk assessment.
Was patient ever hospitalized for the treatment of a psychiatric disorder?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Does this patient have a family history of mental illness?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B: Sample “Real-Time” Performance-in-Practice (PIP) Tool for Patients with Posttraumatic Stress Disorder (PTSD) (p. 4 of 6)

Axis III—General Medical Conditions (including side effects of meds):	Yes	No	Unknown	
Trauma-related injury	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p>For many patients with PTSD, the trigger traumatic event may also result in physical injury (eg., motor vehicle crashes, violence), consequently the patient’s health status should be a particular focus of care. When present, general medical conditions and their treatments can exacerbate existing symptoms or require adjustments in medication doses.</p> <p>Medications prescribed for psychiatric disorders can interact with those for general medical conditions and can produce side effects in various organ systems.</p>
Problems with pain	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hypertension	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Cardiovascular disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Asthma/COPD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Renal disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Hepatic disorders	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Infectious diseases (e.g., HIV, Hepatitis C)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Thyroid disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Seizure disorder	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Sleep apnea	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Obesity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
If the patient has current general medical conditions, has contact been made with the patient’s primary care physician?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>If obesity is present:</i>				<p>Weight gain is common with psychiatric medications and obesity contributes to morbidity and mortality.</p> <p>Sleep apnea can be an unrecognized complication of obesity that can be exacerbated by sedating medications.</p>
Is the patient’s weight being monitored?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Have nutrition/exercise been discussed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Axis IV—and other psychosocial and environmental problems	Yes	No	Unknown	<p>Psychosocial rehabilitation services are effective in improving quality of life. Consider psychosocial rehabilitation services including: health education, skills training, supported housing, family skills training, social skills training, supportive employment intervention, vocational counseling, occupational/recreational therapy, peer support group</p>
Lack of social support	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Housing problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Economic problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Occupational/school problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Marital problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other relationship problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Problem with access to healthcare services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Problems related to interaction with the legal system	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Ongoing life stressors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other psychosocial problems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Appendix B: Sample “Real-Time” Performance-in-Practice (PIP) Tool for Patients with Posttraumatic Stress Disorder (PTSD) (p. 5 of 6)

Pharmacologic treatments provided (by psychiatrist or other clinicians):	Dose	Route	
Current psychiatric medication(s):			<p>SSRIs are considered the first-line psychopharmacologic intervention. However, SSRIs are no longer recommended with the same level of confidence for combat-related PTSD as for non-combat-related PTSD. (36)</p> <p>There are recommendations against: long term use of benzodiazepines to manage core PTSD symptoms; use of benzodiazepines as monotherapy; and use of first generation antipsychotics for the management of PTSD. (34, 35)</p> <p>Knowledge of medications that patients are receiving for treatment of non-psychiatric disorders is important in assessing potential drug-drug interactions and interpreting reported side effects of treatment. Such information can also alert the clinician to the presence of general medical conditions that may not have been reported by the patient (e.g., hypertension, hyperlipidemias) or to side effects of treatment that may require changes in medications or medication doses.</p> <p>With the fragmentation of health care, medications that were intended to be tapered may have been continued inadvertently. Continued use of non-essential medications increases costs as well as side effects and drug-drug interactions. Also consider if any of the medications require blood level monitoring or other follow-up laboratory testing. If the patient has residual symptoms, assess the adequacy of the medication dose and determine if changes in medication or dose are indicated.</p>
SSRIs: _____			

SNRIs: _____			

TCAs: _____			

MAOIs: _____			

Other (Specify: _____)			
Current non-psychiatric medication(s):			

<i>In reviewing the patient's list of psychiatric medications:</i>			
Has the potential for drug-drug interactions been assessed?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Is each medication essential?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

Appendix B: Sample “Real-Time” Performance-in-Practice (PIP) Tool for Patients with Posttraumatic Stress Disorder (PTSD) (p. 6 of 6)

Psychosocial treatments provided (by psychiatrist or other clinicians):	Current	Past	Unknown	
Exposure-based Cognitive Behavioral Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Exposure-based therapies (e.g. exposure-based cognitive behavioral therapy, cognitive processing therapy, prolonged exposure therapy, brief exposure therapy) are considered first-line evidence-based psychotherapeutic interventions. However, exposure therapies are not indicated and should be used with caution for “patients living in dangerous situations (e.g. domestic violence) or for patients with current suicidal ideation, substance abuse not in stable remission, comorbid psychosis, or health problems that preclude exposure to intense physiological arousal.” (35)
Cognitive Processing Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Prolonged Exposure Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Brief Exposure Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Stress Inoculation Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Imagery Rehearsal Therapy	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Eye Movement Desensitization and Reprocessing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	There is strong evidence against the use of psychological debriefing as it may have long term adverse consequences without any apparent benefits. (34, 35)
Treatment for nicotine problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Treatment for alcohol problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Treatment for other substance use problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Treatment for sleep problem	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Case Management or Care Management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Self-management approaches	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Patient/family psychoeducation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Other	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<i>In reviewing the psychosocial treatment approaches that are being used:</i>				
Does the treatment approach adequately target core symptoms: Yes <input type="checkbox"/> No <input type="checkbox"/>				
Are modifications needed to address residual symptoms? Yes <input type="checkbox"/> No <input type="checkbox"/>				
Estimated degree of adherence to treatment: <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor <input type="checkbox"/> Unknown				
Estimated magnitude of treatment-related side effects: <input type="checkbox"/> Mild <input type="checkbox"/> Moderate <input type="checkbox"/> Severe <input type="checkbox"/> Unknown				
Side effects experienced: _____				
Is additional education or discussion of the treatment plan needed to enhance the patient’s understanding and adherence?	Yes <input type="checkbox"/>	No <input type="checkbox"/>		Common side effects of antidepressant medications include sleep-related effects (i.e., sedation, insomnia), gastrointestinal effects (e.g., diarrhea, constipation, nausea), restlessness/anxiety, sexual dysfunction, headache, and anticholinergic effects. Effects on cardiac conduction can be a particular problem with tricyclic antidepressants. For all antidepressants, the FDA has issued warnings that the potential for increased suicidal thoughts or behaviors with antidepressant therapy in individuals under the age of 25 must be balanced against the benefits of treatment.
Based on the severity of the patient’s PTSD, is patient receiving evidence-based psychopharmacological and/or psychosocial treatments that are recommended by the practice guidelines?	<input type="checkbox"/>	<input type="checkbox"/>		
Were patient/family preferences taken into consideration in the development of treatment plan?	<input type="checkbox"/>	<input type="checkbox"/>		
Are any changes in the treatment plan likely as a result of using these PIP tools?	<input type="checkbox"/>	<input type="checkbox"/>		

Appendix C: Evidence-Based Assessment and Treatment Recommendations for Posttraumatic Stress Disorder

I. Definition

Trauma: An extreme traumatic stressor involving direct personal experience . . . the person's response to the event must involve intense fear, helplessness, horror

Acute Stress Reaction (ASR): . . . onset of some signs and symptoms may be simultaneous with the trauma or may follow after an interval of hours or days . . . symptoms not resolved within 4 days after the event, after ruling out other disorders

Acute Stress Disorder (ASD): clinically significant symptoms >2 days, but <1 month after exposure

Post Traumatic Stress Disorder (PTSD): clinically significant symptoms lasting more than 1 month after exposure to a trauma

Acute PTSD: clinically significant symptoms lasting >1 month, but <3 months

Chronic PTSD: clinically significant symptoms lasting >3 months after exposure to trauma

PTSD with delayed onset: clinically significant symptoms at least 6 months after exposure to trauma|| (35)

II. Assessment

Key Evidence-Based Guideline Recommendations	DoD/VA Guideline 2004† (35)	APA Guideline 2004‡ (34)
	Final Grade	Level of Clinical Confidence
1. Assess for trauma exposure including: time of onset, recency (time elapsed since exposure), type, nature, severity, history, frequency, course, and level of distress.	B	I
2. Screen patients for PTSD (screen for recent or remote trauma exposure. In military populations the VA/DoD guidelines recommend initial screening followed by screening annually or more if clinically indicated).	B	I
3. Assess for pre-trauma risk factors for ASD/PTSD including: prior exposure to trauma, adverse childhood, younger age, minority race, female gender, low socioeconomic or educational status, psychiatric disorders or personality dimensions, cognitive factors.	B	I
4. Assess for peri-trauma risk factors for ASD/PTSD including: severity of trauma, peri-traumatic dissociation, youth at time of exposure	B	I
5. Assess for post-trauma risk factors for ASD/PTSD including: resource loss, lack of social support, ongoing life stressors, bereavement, psychosocial difficulties	B	I
6. Assess for co-occurring physical or psychiatric disorders (depression, alcohol, other substance, other anxiety disorders, TBI, commonly co-occur with PTSD)	B	I
7. Assess risk for suicide or harm to others	B	I
8. Assess for functional impairment		I

Appendix C: Evidence-Based Assessment and Treatment Recommendations for Posttraumatic Stress Disorder (p. 2 of 3)

III. Treatment/Management:

Based on the 2009 APA Guideline Watch, best evidence from recent studies bolsters support for exposure-based psychotherapies but also pharmacological interventions in many circumstances. (36)

Key Evidence-Based Guideline Recommendations	DoD/VA Guideline 2004†	APA Guideline 2004‡
	Final Grade	Level of Clinical Confidence
A. Pharmacotherapy		
1. Pharmacotherapy may be the first-line intervention for acutely traumatized patients		II
2. SSRIs as first-line for the treatment of PTSD Based on most recent evidence outlined in the 2009 APA Guideline Watch for PTSD: a. "Evidence for superiority of SSRIs and SNRIs over placebo for <i>non-combat-related</i> PTSD . . . Evidence of efficacy most convincing for the SSRIs, across all symptom clusters and for co-occurring depression and disability." b. "SSRIs may be no longer recommended with the same level of confidence for veterans with <i>combat-related PTSD</i> as for patients with non-combat-related PTSD." (36)	A	I
3. Second-line treatment for PTSD include TCAs and MAOIs	B	II
4. Consider antidepressant trial of 12 weeks before changing the therapeutic regimen	B	
5. Propranolol may be considered for treatment of immediate post-event stress	B	
6. Consider augmentation with prazosin for the management of nightmares and other symptoms of PTSD (36)	C	
7. Pharmacotherapy for treatment for ASD—Imipramine for hyperarousal/excessive arousal/panic attacks	B	
8. Other pharmacotherapy for treatment of ASD a. Benzodiazepines for sleep disturbance/insomnia/hyperarousal/excessive arousal/panic attacks b. Chloral hydrate for sleep disturbance/insomnia c. Propranolol for hyperarousal/excessive arousal/panic attacks	C	III
9. Consider maintenance treatment, reassess periodically	C	
10. Insufficient but increasing evidence in use of atypical antipsychotics for the treatment of PTSD <i>Based on the most recent evidence outline in the 2009 APA Guideline Watch for PTSD, "data are encouraging for adjunctive treatment with a 2nd generation antipsychotic in patients with partial response to an SSRI or SNRI, including for co-occurring psychotic symptoms."</i> (36)	Insufficient evidence	III
11. Recommend against: a. Long term use of benzodiazepines to manage core symptoms of PTSD b. Use of benzodiazepine as monotherapy c. First generation antipsychotics in the management of PTSD	Insufficient evidence	III

Appendix C: Evidence-Based Assessment and Treatment Recommendations for Posttraumatic Stress Disorder (p. 3 of 3)

Key Evidence-Based Guideline Recommendations	DoD/VA Guideline 2004†	APA Guideline 2004‡
	Final Grade	Level of Clinical Confidence
B. Psychotherapy:		
Based on most recent evidence outline in the 2009 APA Guideline Watch for PTSD, support for “exposure-based CBTs such as CPT and prolonged exposure therapy when delivered in individual formats” (36)		
1. Cognitive Behavioral Therapy (CBT) is an effective treatment for core symptoms of acute and chronic PTSD		I
2. Brief intervention of CBT (4 to 5 sessions) for ASD	A	II
3. Cognitive Therapy (CT) is effective with civilian men and women exposed to combat and non-combat trauma	A	II
4. CT is effective with military and veteran with combat- and non-combat-related PTSD	Insufficient evidence	
5. CT is effective for women with PTSD associated with sexual assault	A	
6. Exposure Therapy (ET) has shown to be effective in the treatment of PTSD	A	II
7. Exposure therapy may not be indicated and should be used with caution for individuals with following conditions: “living in dangerous situations (e.g. domestic violence), current suicidal ideation, substance abuse not in stable remission, comorbid-psychosis, or health problems that preclude exposure to intense physiological arousal.” (35)	Ineffective, or may be harmful	
8. Eye Movement Desensitization and Reprocessing (EMDR) has shown to be effective in the treatment of PTSD	A	II
9. Stress Inoculation Training (SIT) is effective as a treatment for PTSD related to sexual assault	A	II
10. Imagery Rehearsal Therapy (IRT) considered for treatment of PTSD (nightmares and sleep disruption in particular)	B	II
11. Psychodynamic psychotherapy for the treatment of patient with PTSD/complex PTSD	B	II
12. Hypnosis may be used to alleviate PTSD symptoms	B	Insufficient evidence
13. Psychological debriefing is ineffective and has adverse long term effects	Ineffective, or may be harmful	Not recommended
C. Psychosocial Rehabilitation Services		
1. Psychosocial rehabilitation services to include health education, skills training, supported housing, family skills training, social skills training, supportive employment, vocational counseling, occupational/recreational therapy, peer support group should be considered		

† DoD/VA Quality Rating:

Reference: Post-traumatic Stress Disorder VA/DoD Clinical Practice Guidelines: <http://www.ncptsd.va.gov/ncmain/doclist.jsp>

Final Grade of Recommendation

A A strong recommendation that the intervention is always indicated and acceptable

B A recommendation that the intervention may be useful/effective

C A recommendation that the intervention may be considered

May be considered not useful/effective, or may be harmful

Insufficient evidence to recommend for or against—the clinician will use clinical judgment

‡ APA Clinical Confidence Rating:

Reference: The American Psychiatric Association Practice Guideline for the Treatment of Patients with Acute Stress Disorder and Post-traumatic Stress Disorder:

http://www.psych.org/psych_pract/treatg/pg/ASD_PTSD_05-15-06.pdf

I Recommended with substantial clinical confidence.

II Recommended with moderate clinical confidence.

III May be recommended on the basis of individual circumstances.

§ APA Guideline Watch (January 2009)—Reference #36

**Sample "Real-Time" Performance in Practice Tool
for Patients with Posttraumatic Stress Disorder (PTSD)
Survey Form and CME Certification** Begin date April 2009,
End date December 31, 2011.

To earn CME credit for this *Survey Program*, psychiatrists should use the **Sample Real Time Performance in Practice Tool** (Appendix B) as indicated. After using the performance in practice tool for at least 5 patients, participants should fully complete this survey and send it by mail to APACME 1000 Wilson Boulevard, Suite 1825 Rosslyn VA 22209, or fax to 703 907 7849, or send by email to educme@psych.org.

Objective: After completion of this activity psychiatrists will have the foundation for subsequent performance improvement initiatives aimed at enhancing outcomes for patients with PTSD.

The APA is accredited by the Accreditation Council for Continuing Medical Education (ACCME) to provide continuing medical education for physicians. APA designates this educational activity for a maximum of 5 AMA PRA Category 1 credits. Physicians should only claim credit commensurate with the extent of their participation in the activity.

		1	2	3	4	5	
1. Overall, I am satisfied with the usefulness of this PIP tool (Appendix B) in assessing my practice patterns.	Strongly disagree	0	0	0	0	0	Strongly agree
2. This PIP tool was difficult for me to use.	Strongly disagree	0	0	0	0	0	Strongly agree
3. The questions and information on this PIP tool were worded clearly.	Strongly disagree	0	0	0	0	0	Strongly agree
4. The organization of information on this PIP tool was clear.	Strongly disagree	0	0	0	0	0	Strongly agree
5. I was able to complete this PIP tool rapidly.	Strongly disagree	0	0	0	0	0	Strongly agree
6. Completing this PIP tool had no effect on my knowledge about treating patients with PTSD.	Strongly disagree	0	0	0	0	0	Strongly agree
7. By completing this PIP tool, I have identified at least one way in which I can improve my care of patients.	Strongly disagree	0	0	0	0	0	Strongly agree
8. Completing this PIP tool has helped me to verify that I am providing appropriate care to my patients.	Strongly disagree	0	0	0	0	0	Strongly agree
9. Completing this PIP tool was a good use of my time.	Strongly disagree	0	0	0	0	0	Strongly agree
10. Reviewing my patterns of practice is a good use of my time.	Strongly disagree	0	0	0	0	0	Strongly agree

List the most helpful aspects of this PIP tool (Appendix B):

- 1.
- 2.
- 3.

List the least helpful aspects of this PIP tool (Appendix B):

- 1.
- 2.
- 3.

How do you plan to use the information gained from this self-assessment in your practice?

How might we improve upon this PIP tool in the future?

Additional comments:

Please evaluate the effectiveness of this CME activity.

1. Achievement of educational objectives: YES _____ NO _____
 2. Material was presented without bias: YES _____ NO _____
- American Psychiatric Association CME**
1000 Wilson Blvd., Suite 1825 Arlington, VA 22209-3901
Telephone: (703) 907-8637, Fax: (703) 907-7849
To earn credit, complete and send this page.
Retain a copy of this form for your records.

Number of hours you spent on this activity _____
(understanding & using the tool; completing the survey up to 5 hrs)

Date _____

APA Member: Yes _____ No _____

Member number _____

Last name First name Middle initial Degree

Mailing address

City State Zip code Country

Fax number

E-mail address: _____

I would like to receive my certificate by:

Fax _____ E-mail _____