This pocket card aims to support mental health providers in understanding and using the Departments of Veterans Affairs and Defense Clinical Practice Guideline for assessing and treating posttraumatic stress disorder (PTSD) in those with comorbid mild traumatic brain injury (mTBI) (https://www.healthquality.va.gov/guidelines/mh/ptsd/index.asp). The pocket card (fig 1) is intended to be used as a supplement and guide to the Clinical Practice Guideline but not a replacement to it. Also included is a quick-reference table of public-domain, evidence-based measures to aid diagnosis and treatment (Table 1).

A traumatic brain injury (TBI) is an injury that disrupts the normal function of the brain. It can be caused by a jolt, blow, penetrating object, or blast. The vast majority of TBIs are mild and are also called concussions. TBI is a public health concern because it accounts for over 2.5 million emergency department visits each year. Many individuals with mTBI do not seek medical care, so the incidence is likely greater than emergency department records suggest.

Between 10%-15% of civilians with a history of mTBI also have PTSD. This number more than doubles in military-veteran cohorts. Patients with both PTSD and mTBI have higher rates of psychiatric comorbidity, poorer function, and lower quality of life than those with PTSD alone. It is important for providers to evaluate lifetime history of TBI at the outset of mental health treatment. If a patient has a history of mTBI, providers should assess for ongoing postconcussive symptoms, which can persist months after the head injury and can include headache, dizziness, fatigue, and sleep disturbances. Postconcussive symptoms can be related to both physical and psychological factors and may warrant adjunctive therapies to optimize the response to PTSD treatments. For example, referrals for treatment of headaches and vestibular symptoms may be necessary.

Cognitive complaints are common among individuals with PTSD with and without mTBI. Regardless of the etiology of the perceived cognitive difficulties (PTSD vs mTBI), it can be beneficial to address these concerns in the therapeutic relationship. First, discuss how the patients view their symptoms of PTSD and mTBI. Use the patients’ own words. Next, provide education about how treatment will be directed at the whole person. Do not attempt to parse out symptom etiology. For example, “What are your concerns about addressing [patients’ words for their symptoms] when you have had a TBI?” Finally, it is essential that providers know and communicate that most evidence-based treatments for PTSD are safe and effective for people with mTBI. For example, “I will offer you treatments that are effective among those who have sustained mTBI.” With that in mind, minor modifications can be used to help patients with mTBI successfully complete PTSD treatment.

If patients have specific cognitive concerns, below are adaptations to cognitive behavioral therapy:

1. **Cognitive Behavioral Therapy (CBT)**
   - **Diagnosis:** Assess for ongoing postconcussive symptoms.
   - **Adaptations:**
     - **Symptom Management:** Focus on managing physical symptoms.
     - **Treatment Plan:** Include physical therapy and exercise.

2. **Eye Movement Desensitization and Reprocessing (EMDR)**
   - **Diagnosis:** Symptoms related to TBI.
   - **Adaptations:**
     - **Modified Protocol:** Use modified protocol to address cognitive and physical symptoms.
     - **Intraocular Stimulation:** Use intraocular stimulation to reduce symptoms.

3. **Virtual Reality Therapy (VRT)**
   - **Diagnosis:** PTSD with mTBI.
   - **Adaptations:**
     - **Personalized Environment:** Create a personalized environment to manage physical symptoms.
     - **Virtual Reality Exposure:** Use virtual reality exposure to manage PTSD symptoms.

4. **Diarying:**
   - **Diagnosis:** Symptoms related to both PTSD and mTBI.
   - **Adaptations:**
     - **Symptom Tracking:** Track physical and psychological symptoms.
     - **Response Planning:** Plan responses to both physical and psychological symptoms.

5. **Physical Therapy:**
   - **Diagnosis:** Postconcussive symptoms.
   - **Adaptations:**
     - **Strengthening:** Focus on strengthening exercises to reduce physical symptoms.
     - **Mobility Exercises:** Include exercises to improve mobility and reduce physical symptoms.

6. **Exercise Therapy:**
   - **Diagnosis:** Physical symptoms.
   - **Adaptations:**
     - **Cardiovascular:** Focus on cardiovascular exercise to reduce physical symptoms.
     - **Strength Training:** Include strength training to reduce physical symptoms.

7. **Nutritional Therapy:**
   - **Diagnosis:** Physical symptoms.
   - **Adaptations:**
     - **Nutritional Assessment:** Assess nutritional status.
     - **Supplementation:** Use supplements to manage physical symptoms.

8. **Mindfulness Meditation:**
   - **Diagnosis:** Both PTSD and mTBI.
   - **Adaptations:**
     - **Guided Meditations:** Use guided meditations to manage both PTSD and mTBI symptoms.
     - **Mindfulness Exercises:** Include mindfulness exercises to manage both PTSD and mTBI symptoms.

9. **Counseling:**
   - **Diagnosis:** Management of postconcussive symptoms.
   - **Adaptations:**
     - **Cognitive-Behavioral Counseling:** Focus on cognitive-behavioral techniques to manage physical symptoms.
     - **Supportive Counseling:** Address emotional support for physical symptoms.

10. **Psychological Anesthesia:**
    - **Diagnosis:** Physical symptoms.
    - **Adaptations:**
      - **Anesthetic Techniques:** Use anesthetic techniques to manage physical symptoms.
      - **Psychological Support:** Include psychological support to manage physical symptoms.

11. **Pharmacological Therapy:**
    - **Diagnosis:** Physical symptoms.
    - **Adaptations:**
      - **Medication Management:** Use medication to manage physical symptoms.
      - **Physician Consultation:** Consult with a physician to manage physical symptoms.
- **TBI-specific Information:**
  - Education about how TBI affects cognition
  - Give hope because most people with mTBI will return to baseline functioning within a couple months.
- **Attention & Concentration Problems:**
  - Use shorter, more frequent sessions
  - Plan breaks during sessions
- **Communication Strategies:**
  - Use clear, structured questions
  - Incorporate visual resources when possible
  - Emphasize behavioral techniques
- **Memory Aids:**
  - Encourage patient to use a therapy notebook or device to record information
  - Repeat salient points frequently
  - Involve a family member or caregiver
- **Executive Functioning Assistance:**
  - Present information slowly to allow for longer processing speed
  - Focus on concrete examples to generate possible solutions
  - Use “say it, show it, do it” approach to model tasks for between sessions

<table>
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**Table 1** Suggested measures available in public domain to use when working with patients with mTBI and mental health comorbidities

Abbreviations: DSM-5, *Diagnostic and Statistical Manual of Mental Disorders* (Fifth Edition); GAD-7, Generalized Anxiety Disorder Questionnaire 7; MH, mental health; PCL-5, PTSD Checklist; PHQ-9, Patient Health Questionnaire 9; RCI, Reliable Change Index.
Fig 1  Mental health pocket card for management of patients with PTSD and a history of mTBI.
Authorship
This page was developed by Catharine H. Johnston-Brooks, PhD, ABPP-CN (e-mail address: catharine.johnston-brooks@cuanschutz.edu); Shannon R. Miles, PhD; and Diana P. Brostow, PhD, MPH, RDN.

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References


