Co-Occurring TBI and Mental Health Symptoms Toolkit: Development and Dissemination

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Data to Inform Guideline and Toolkit Development

- **TBI Expert Consensus Conference**
  Consensus paper summarized themes reviewed and expert input regarding recommendations made for assessment and treatment guidelines

- **Focus Groups**
  Qualitative and Quantitative data collected from providers to inform information to be included in toolkit
TBI among OEF/OIF/OND Veterans Seeking Community Mental Health Services: A Consensus Conference Regarding Identification and Treatment

October 24, 2011

Meeting Charge

It is necessary to increase the capacity of the non-VA community mental health system within the State of Colorado to provide a comprehensive and coordinated service delivery system for OEF/OIF/OND Veterans with TBI and co-occurring behavioral health issues.

To meet this objective, these expert panels have been convened to develop assessment and treatment guidelines.

After this meeting, consensus opinions will be synthesized and used to develop educational materials (e.g., TBI Toolkit) for dissemination within the non-VA community mental health system.
Participants

MIRECC project team
Director of the Colorado TBI Program
7 National experts in TBI Assessment
7 National experts in TBI Intervention
2 Colorado Community Mental Health Center experts
1 State leader in TBI
MIRECC support staff
Procedures

• Attendees discussed and revised the initial set of assumptions and questions regarding TBI assessment and intervention.

• Experts broke out into smaller work groups based on expertise/interest (e.g., TBI screening, assessment and evaluation or TBI intervention) to develop consensus responses to the questions.

• A final review of the responses was completed and group consensus was achieved in order to provide recommendations that are considered feasible in the current Colorado community mental health system.
## Assumptions

<table>
<thead>
<tr>
<th>Table 1. Consensus Conference Agreed Upon Assumptions</th>
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<tbody>
<tr>
<td>1. Veterans with TBI (mild, moderate and severe) are seeking treatment within the non-VA mental health system.</td>
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<tr>
<td>2. Although severity of TBI would be expected to impact functioning post-injury, outcomes are a complex interplay between pre- and post-injury factors. As such, potentially complicating factors (e.g., lifetime history of TBI, age at first injury, pre-morbid functioning, etc.) should be assessed.</td>
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<td>3. The typical course of recovery of those with one mild TBI is a return to baseline functioning within weeks to months of the injury. Emerging research suggests that a history of multiple injuries may complicate the recovery process.</td>
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<td>4. Inquiry regarding history of medical conditions that may impact functioning should be included in the mental health intake process. Conditions of interest include TBI (mild, moderate and severe).</td>
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<td>5. Documentation of TBI history, regardless of the injury’s impact on current functioning, is indicated.</td>
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<td>6. If it is determined that an individual’s history of TBI is clinically relevant, assessment and treatment is indicated.</td>
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<td>7. Mental health therapists may or may not have a basic knowledge regarding TBI.</td>
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### Key Questions for Expert Discussion

**Table 2. Sample of Consensus Conference Agreed Upon Questions**

**Assessment**

1. What measures (screening, assessment, evaluation) could appropriately be used by those whose primary training is in mental health? Could basic training be provided in this area and if so how?

2. What questions/tools should CMHCs add to their evaluation procedures to assess for functional impairment/symptoms in those who screen positive?

**Treatment**

1. Under what circumstances and how should an individual’s TBI history be incorporated into treatment planning? Further, how can the consumer be an active part of this process?

2. Under what circumstances is specialized treatment indicated? And, when and to what degree is it appropriate for clinicians to change the content and format of evidence-based interventions?

**Implementation**

1. Once identified, how do we disseminate this to all systems/clinicians/others so that effective strategies can be utilized? (The goal is to optimize the number of available treatments AND accessibility of existing treatments)

2. What barriers/facilitators (e.g., individual [clinician], systems) may impact assessment and treatment planning? Intervention?
Assessment Guidelines
What steps should be included in the screening/assessment process?

Consensus Statement:
Information regarding Veteran status should be collected during the intake process and used to inform assessment. Such information might include:

- Whether or not the individual or one of their immediate family members served in the military
- The Veteran’s combat and/or deployment history
- Military-related duties
- Amount of time in the military
What questions/tools should Centers add to their intake process to identify potential history of TBI and at what point should the screening occur?

*Consensus Statement:*

In terms of TBI history, several brief yes/no questions could be added to the intake process (i.e., medical history form, clinician intake form).

Questions should focus on injury history. One such question that could be added to facilities’ medical history form is:

**Have you ever been knocked out or unconscious following an accident or injury?**

Olson-Madden, 2010
More comprehensively, recommended items for addition to the clinical interview conducted at intake are taken from the Ohio State University Traumatic Brain Injury Identification Method (OSU TBI-ID) Short Form and include:

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about.
2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle or ATV?
3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or horse, rollerblading, falling on ice, being hit by a rock)? Have you ever injured your head or neck playing sports or on the playground?
4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head?
5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat- or training related incidents.

(For further detail please see: https://ckm.osu.edu/sitetool/sites/ohiovalleypublic/documents/OSUTBISF4-9-11Life.pdf)
Should history of probable TBI identified via the intake process be documented in the individual’s medical record and if so, how much information about the history of TBI should be documented?

Consensus Statement:

All information regarding history of TBI (responses to screening and evaluation measures) should be included in the individual’s medical record.

If an individual responds “no” to all screening questions, information documented would be limited to these responses.
What questions/tools should Centers add to their evaluation procedures to assess for functional impairment/symptoms in those who screen positive?

Consensus Statement:
There are many measures of impairment/symptoms for use among those with a history of moderate to severe TBI. A resource for such measures is the Center for Outcome Measurement in Brain Injury (COMBI): www.tbims.org/combi/list.html

Resources for assessing functioning among those with mild TBI are more limited →
Under what circumstances and how should an individual who has been identified (via assessment) as having a positive history of TBI be further evaluated for potential impairment and/or disability and participation activities?

Consensus Statement:
Based on available resources, it is recommended that further evaluation occur if the client does not appear to be benefiting from treatment as offered (e.g., if treatment is not impacting functioning).

This might include: occupational/physical therapy, neuropsychological evaluation
What measures (screening, assessment, evaluation) could appropriately be used by those whose primary training is in mental health?

Consensus Statement:
A brief training is all that is required ➔

Utilize observable behaviors to determine if more services or accommodations are necessary

Obtain collateral information from family/friends
How should screening, assessment, and/or evaluation feedback be provided to consumers and/or their families?

*Consensus Statement:*
Clinicians are encouraged to discuss the individual’s history of TBI; however, in many cases the history will not warrant being the focus of feedback.

It may be helpful to discuss how the individual’s history of TBI and sequelae are impacting co-occurring problems (e.g., psychiatric symptoms). Adopting a holistic approach that incorporates the potential impact of TBI is recommended.

It is also important to educate consumers regarding the benefits of preventing future TBIs. This may entail a discussion about reducing risky behaviors.
Under what circumstances and how should an individual’s TBI history be incorporated into treatment planning?

Consensus Statement:
If identification of TBI is relevant to the proposed treatment or informs direct services or case conceptualization, and its recognition promotes an emphasis on functional recovery, then TBI should be incorporated.

*A diagnosis of TBI might not be as relevant as is the awareness of when and how to intervene (e.g., if impairment or behavior conflicts with current treatment)*
How should clinicians incorporate screening, assessment, and/or evaluation results into their case conceptualization?

*Consensus Statement:*
Screening/assessment/evaluation results should be incorporated to the degree that they can be used productively (e.g., to specifically inform treatment goals and strategies, to build relevant functional outcomes into the treatment plan).

*Results should identify and promote positive functional outcomes rather than to solely identify deficits/impairments*
Under what circumstances can current best practices (e.g., CBT/SSRI for major depression) be utilized with none or only minor revisions?

**Consensus Statement:**
Clinicians should consider utilizing current evidence-based practices (EBP) among those with a history of TBI. However, modifications to treatment may be required, for example, if cognitive deficits interfere with the individual’s ability to engage fully in the treatment.

VA/DoD Evidence Based Practice Clinical Practice Guideline for the Management of Concussion/mild Traumatic Brain Injury provides specific comments and guidance on the role of pharmacotherapies (as well as many other interventions) in the management of cognitive, emotional, and behavioral symptoms among persons with TBI.
Under what circumstances is specialized treatment (e.g., major changes to existing evidence-based practices [EBP] or EBP for those with a history of TBI) indicated?

Consensus Statement:

If indicated via the assessment process, specialized treatment may be considered appropriate.

However, if assessment results do not suggest that ongoing sequelae might interfere with a structured treatment approach, modifications to EBP are not indicated.
What modifications are recommended and not recommended?

Consensus Statement:
Strategies to augment EBPs could be wide-ranging, are likely contingent on the individual’s level of functioning and available resources

Match treatment as best as possible to individual’s needs!
Are there specific treatment strategies/technology or interventions that might improve outcomes?

**Consensus Statement:**

Regardless of TBI history, the aim of treatment is to optimize functioning and quality of life.

As such, strategies which accommodate for deficits/limitations are indicated.

The committee concurs that the same use of technology for “able-bodied” individuals is appropriate.
Implementation Guidelines
What barriers/facilitators (e.g., individual [clinician], systems) may assist in the implementation of screening procedures? Assessment procedures? Evaluation for impairment and/or disability and participation activities?

What barriers/facilitators (e.g., individual [clinician], systems) may impact the case conceptualization process?

What barriers/facilitators (e.g., individual [clinician], systems) may impact treatment planning? Intervention?
Consensus Statement: Barriers

Potential barriers were identified:

- Lack of available resources (e.g., time, funding)
- Clinician may not feel competent (e.g., lack of education) to treat clients with TBI
- Clinician may not feel comfortable treating clients with TBI
- Misinformation/myths about policy/payer sources and its implications for treating individuals with TBI may interfere with implementation
Consensus Statement: Facilitators

Potential facilitators were identified:

- **Expertise exists** within CMHCs regarding providing EBPs to a diverse population with wide-ranging impairments
- There are commonalities between **recovery and rehabilitation models**, highlighting current knowledge and application to a TBI population
- **Others**: Electronic medical records system, movement toward integrated health care, access to VA resources, and acceptance of multiple payer sources
Take Home Points

• Emphasis was placed on identifying facilitators and barriers to implementing these practices within the Colorado community-based mental health care system.

• Screening, Assessment, and Evaluation: Consensus was achieved regarding the types of questions that should be asked to assess for a history of TBI and related sequelae.

• Intervention: Consensus was achieved regarding how to utilize evidence-based practices with this population. Specific recommendations were made re: how to maximize functioning and reduce stigma.
Focus Groups
What was the purpose?

- To collect information from administrators and providers working in community mental health regarding their experiences working with Veterans with a history of TBI and co-occurring mental health concerns
- Identify barriers and facilitators to providing this care
- Use this information to inform the development of the training and toolkit
What did we do?
Participants

• 6 Community Mental Health Centers (CMHCs) across the 5 BHO regions

• Three groups were recruited:
  – Providers
  – OEF/OIF Veterans with TBI history and co-occurring MH concerns
  – Family members/supports

• 44 providers from the 6 CMHCs attended the meetings
• 0 Veterans and 0 family members/supports attended

• Quantitative and qualitative data was collected
Participant Characteristics

• Predominantly female, broad age distribution
• Worked in MH for an average of 12 years
• Over half had never worked with an OEF/OIF Veteran
• 80% had worked with a client with TBI and co-occurring MH concerns
Measures

• Quantitative measures
  – Focus group questionnaire
  – Perceived Barriers to Seeking Mental Health Services: Modified Version

• Qualitative measures
  – Semi-structured interview
What did we find?
Quantitative

• Possible barriers identified
  – Not knowing where to get help
  – Costing too much money
  – Too embarrassing
  – May harm careers
  – Others might have less confidence in them
Topic 1: Experiences working with Veterans with co-occurring TBI and mental health concerns

– Very limited experience working with this population
– Belief that Veterans don’t seek care in the community because of factors related to mental health stigma

“Oh I think it’s about their own perceived stigma, and that macho thing. You know. They’re soldiers…”

“I don’t know if the, if it’s just stigma associated with visiting a mental health center in general...which, in some of our small communities is a real factor.”
Topic 1: Experiences working with Veterans with co-occurring TBI and mental health concerns

- Identified a variety of presenting problems
  - MH symptoms and diagnoses- PTSD, substance use, anger, depression, sleep difficulty, anxiety and arousal
  - Psychosocial difficulties- homelessness, legal trouble, interpersonal problems, post-deployment re-integration and transition
  - Cognitive difficulties- taking more time to accomplish tasks, memory difficulties
Topic 1: Experiences working with Veterans with co-occurring TBI and mental health concerns

- **Assessment**
  - General report that they do not use formal tools to evaluate TBI and/or MH symptoms
  - Many felt that they were not capable of conducting formal TBI assessment

- **Intervention**
  - Similar to work with other clients
  - EBPs and solution-focused treatment
  - Importance of family inclusion and peer support
  - Unsure of how to modify treatment
Topic 2: Resources available to clinicians

– Barriers to accessing training and resources
  • Distance
  • Costs of registration and travel
  • Not having time to participate in training
– Self-initiated strategies for accessing information
  • Readings and online trainings relevant to this population
  • Refer to Veteran and TBI-focused services in the community
Topic 3: Perceived training needs

- Areas of interest- military culture and TBI
- Practical skills
- Web-based and/or in-person training
What were our conclusions?

- Limited experience with providing care to this population
- Belief that stigma prevents the cohort from engaging in care, despite the need for treatment
- Belief that screening and assessment is outside their scope of practice
- Desire for training related to TBI, co-occurring MH concerns and military culture
Welcome to the Toolkit!
The Homepage provides you with information about:

Why an On-line Toolkit?

Traumatic Brain Injury (TBI) is a significant public health concern. This toolkit provides mental health clinicians necessary information to address the needs of Veterans/Military Personnel with a history of TBI and co-occurring mental health conditions. Community mental health clinicians’ input was integral in identifying areas of focus. This toolkit is designed to assist providers in identifying TBI and associated co-occurring problems and determining potential need for further evaluation and/or mental health treatment modification.
The Purpose

The purpose of this toolkit is to offer providers working with Veterans who have a history of TBI and mental health symptoms the following:

- Background information/Education
- Screening and Assessment Tools
- Interventions and Treatment Modification Suggestions
- Additional resources

This toolkit offers a useful starting point to increase the provision of TBI-related mental health services by community providers.

Structure of the Toolkit

Funding

This toolkit was developed as part of a collaborative project between the Veterans Integrated Service Network 19 Mental Illness Research, Education and Clinical Center (VISN 19 MIRECC) and the Colorado TBI Program at the Colorado Department of Human Services Division of Vocational Rehabilitation. The project is funded by the Health Resources and Services Administration (HRSA)
The Homepage also provides you with information about key definitions found throughout the toolkit.

**Definitions**

**Screening:**
Screening refers to a "preliminary procedure, such as a test or examination, to detect the most characteristic sign or signs of a disorder that may require further investigation" (Myers, 2009). Screening helps providers identify who might have a history of TBI. A positive screen would suggest the potential need to conduct further assessment to make a determination regarding TBI history.

**Assessment:**
Assessment refers to "an evaluation or appraisal of a condition...based on the patient's subjective report of the symptoms and course of the illness or condition and the examiner's objective findings, including data obtained through laboratory tests, physical examination, medical history, and information reported by family members and other health care team members" (Myers, 2009). Assessment assists the provider in determining whether or not an individual has a history of TBI. Assessment of co-occurring mental health symptoms and other sequelae is a critical step in providing care to those who have a history of TBI.

**Intervention:**
Intervention is defined as "an act performed to prevent harm to a patient or to improve the mental, emotional, or physical function of a patient" (Myers, 2009). The interventions referenced in this toolkit are aimed at treating symptoms associated with TBI and common co-occurring mental health conditions.

What is the difference between screening and assessment?

What kind of interventions will I find in the toolkit?
• As described under the Structure section of the homepage, the toolkit is divided into 4 sections.

• Within each of the 4 sections you will find the following section headings:
  • Background
  • Screening
  • Assessment
  • Intervention
  • Resources
Information found within this and all sections can be collapsed to view of all available information at-a-glance.
View desired information by expanding and collapsing the sections. Simply click on the + or – sign.
Throughout the toolkit you will find links to helpful information. All links are colored **blue** so that they can be easily seen.

Understanding Military culture is an essential component to working with Veterans and Active Duty Personnel. This section offers introductory information regarding Military structure along with links to help civilian community providers better understand Military culture.

The nation which forgets its defenders will be itself forgotten

~Calvin Coolidge

**Basics of the United States Military can also be found at this link.**

Simply click on the plus (+) symbol to expand the section and read more about each selected toolkit section. Click the minus (-) to close that section.
Our present military organizational structure is a result of the National Security Act of 1947. This is the same act that created the United States Air Force, and restructured the "War Department" into the "Department of Defense."

The Department of Defense is headed by a civilian; the Secretary of Defense, who is appointed by the President of the United States. Under the Secretary of Defense, there are three...
Military & Veteran Culture: Screening

Screening for history of military service and/or Veteran status is not something that may be commonly included in traditional community behavioral health intakes. Veterans may not volunteer this information to a clinician. Learning more about a Veteran's individual experiences may facilitate increased understanding of and treatment disposition for your client. We encourage you to ask all clients a few key questions regarding their military service. These questions could be incorporated into the intake process for new clients, or as part of screening processes already in place at your facility.

Screening for history of military service can be an essential component in understanding risk for traumatic brain injury, psychiatric difficulties, and other post-service issues.

Key Questions
Examples of key questions you may want to ask your client related to his or her military service might include:

- What branch of military service did you serve?
- How many years (or months) of Active Duty Service did you have?
- How many years (or months) of Reserve Service did you have?
- What was your date of separation?
- In which service era did you serve?
- Were you deployed? If yes, how many times were you deployed?
- An exploration of deployment stresses experienced by service members during deployment, common challenges, and tips for working with Veterans who have been deployed.
- Additional information, assessment, and client handouts regarding deployment is available from the organization After Deployment.org
- Do you have a history of combat exposure? If yes, how many combat tours have you served and where?
- Were you exposed to hand-to-hand combat?
- Veterans and their family members may benefit from reading the Military Deployment Guide prepared by the US Department of Defense. The sections on post-deployment emotional let down, combat and operational stress may be especially useful.
- Information regarding combat and operational stress can also be downloaded here.

Above is one example of tools found in this section.
Military & Veteran Culture: Intervention

Several tools available to facilitate culturally competent clinical practice.

Visit the Department of Veterans Affairs Community Provider Toolkit: Working Together to Serve Veterans to participate in online “mini-clinics” for civilian clinicians. These educational, assessment, and treatment tools are geared to help support the rehabilitation and recovery of Veterans living with mental illness.

Mini-clinics for providers include the following topics:

- PTSD
- Suicide Prevention
- Serious Mental Illness
- Women Veterans
- Smoking & Tobacco Use
- Substance Use

Continuing Education and Training

- Earn CEUs from the VA when you learn about military culture through online coursework:
  - National Center for PTSD - Military Culture
  - The National Association of Social Workers offers a free online 5 course training module on working with military service members and families, learn more here
  - Social workers may want to review the National Association of Social Workers Standards for Social Work Practice with Service Members, Veterans and Their Families (2012), download the PDF here

Learn more about The American Psychological Association's efforts related to service members, Veterans and their families.

Return to top
Traumatic Brain Injury
Traumatic Brain Injury: Continued

Consistent with the other sections, you will find background information and links to additional information and resources.
Traumatic Brain Injury: Screening

Screening for TBI is the first step in gathering information regarding probable injury. The TBI-4 and the first five questions of the Ohio State University Traumatic Brain Injury Identification Method (OSU TBI-ID) are two examples of questions that can assist providers with screening.

A “yes” response to any of the questions is indicative of a probable TBI and warrants further assessment to confirm or deny previous injury. A positive response to question 2 is the most likely indicator of probable TBI when using the TBI-4.

If a client answers “no” to all of the questions, no further assessment is needed.

Ohio State University Traumatic Brain Injury Identification Method (OSU TBI-ID)

The first five questions from the Ohio State University Traumatic Brain Injury Identification Method (OSU TBI-ID) (Corrigan and Bogner, 2007; Bogner and Corrigan, 2009) are listed below:

1. In your lifetime, have you ever been hospitalized or treated in an emergency room following an injury to your head or neck? Think about any childhood injuries you remember or were told about. (Yes/No)
2. In your lifetime, have you ever injured your head or neck in a car accident or from crashing some other moving vehicle like a bicycle, motorcycle, or ATV? (Yes/No)
3. In your lifetime, have you ever injured your head or neck in a fall or from being hit by something (for example, falling from a bike or home, rollerblading, falling on ice, being hit by a rock?) Have you ever injured your head or neck playing sports or on the playground? (Yes/No)
4. In your lifetime, have you ever injured your head or neck in a fight, from being hit by someone, or from being shaken violently? Have you ever been shot in the head? (Yes/No)
5. In your lifetime, have you ever been nearby when an explosion or a blast occurred? If you served in the military, think about any combat- or training-related incidents. (Yes/No)

If an individual responds yes to any of these questions, further assessment can be completed using the rest of the OSU TBI-ID.

Download the OSU TBI-ID and view an instructional video from The Ohio Valley Center for Brain Injury Prevention and Rehabilitation.

References


Traumatic Brain Injury: Assessment

Diagnosis of TBI and its associated comorbid symptoms and disorders present unique challenges to reliably making a diagnosis of TBI. As such, no screening instruments available can reliably make the diagnosis. Instead, full assessment should be implemented when screening results indicate probable TBI. It should be noted that assessment via brain imaging is not useful in detecting history of mTBI. As such, structured clinical interview is considered the gold standard assessment approach for diagnosing TBI. Assessment using a structured clinical interview will help to clarify the nature of the injury, confirm injury events, determine if a TBI was sustained, and if so, the severity of injury. The Ohio Valley Center for Brain Injury Prevention and Rehabilitation offers training regarding assessment of TBI history and related symptoms using the gold-standard Ohio State University TBI Identification Method (OSU TBI-ID). Although structured interview relies on verbal history which may be difficult to obtain, this approach provides a means for clinicians to elicit and obtain as much detailed injury history as possible in order to make a diagnosis.

TBI Assessment Tools

After information regarding TBI history has been gathered and a history of probable injury or injuries has been confirmed to establish diagnosis, it can be helpful to assess if and how symptoms associated with TBI may be impacting the client's life. Several tools are available to facilitate this process.
Other tools include:

- World Health Organization Quality of Life (WHOQOL)
- Daily Living Activities (DLA-20)
- Participation Assessment with Recombined Tools-Objective (PART-O)

### Symptoms

**Neuro-behavioral Symptom Inventory (NSI)**

The NSI (Cicerone & Kalmar, 1995) is a 22-item self-report measure of post-concussive (PC) symptoms that commonly occur after mild TBI, including affective, somatic, sensory and cognitive complaints. It can be used as part of a larger assessment battery.

**Reference**


### Functioning

**Craig Handicap Assessment and Reporting Technique (CHART)**

The CHART (Whiteneck et al., 1992) is a 32-item interview based assessment which was developed to measure the degree to which impairments and disabilities result in handicaps years after initial rehabilitation. It can be used for individuals with a history of moderate to severe TBI. The CHART assesses functioning in six domains:

1. Cognitive Independence — the ability to “orient”;
2. Physical Independence — the ability to sustain a customarily effective independent existence;
3. Mobility — the ability to move about effectively in surroundings;
4. Occupation — ability to occupy time in the manner customary to that person’s sex, age, and culture;
5. Social Integration — the ability to participate in and maintain customary social relationships; and
6. Economic Self-Sufficiency — the ability to sustain customary socioeconomic activity and independence.

In addition to the 32-item measure, a short form comprised of 19 questions is also available. The measure can be accessed here.

**Reference**

Traumatic Brain Injury: Intervention

Clinical Practice Guidelines

The following provide links to clinical practice guidelines for mild TBI and persistent symptoms. These guidelines offer information and direction to providers managing clients’ recovery from mTBI:

- VA and DoD worked together to create the Clinical Practice Guidelines for mTBI to facilitate consistent and beneficial treatment. [Download the guidelines](#)
- The Ontario Neurotrauma Foundation also created Guidelines for Concussion/Mild TBI and Persistent Symptoms, which include information about the treatment of persistent symptoms. [Download the guidelines](#)
Strategies to Facilitate EBP

There are currently no widely established evidence-based practices (EBPs) focused on TBI. Those with a history of mTBI may benefit from any number of EBPs and may or may not require modifications to treatment delivery. Those with a history of moderate to severe TBI are most likely to require modifications to treatment delivery. For information regarding recommendations in this regard, please see Olson-Madden, Brenner, Matarazzo, Signoracci, and Expert Consensus Collaborators (2013).

Below are examples of several challenges clinicians often face when providing EBPs to individuals with a history of TBI. Specific strategies are provided with each question. Please also see Signoracci, Matarazzo, Bahraini (2012).

Question: Do you ever notice your client having a difficult time learning or remembering information they hear?

- **Strategy:** Slow pace of conversation
  - **Function:** Facilitate learning and memory for individuals who may become overwhelmed with auditory information
  - **Example:** N/A

References


Visit the toolkit to access other available tools!
Co-occurring TBI and Mental Health Symptoms

Toolkit for Providers of Clients with Co-occurring TBI and Mental Health Symptoms

Site Navigation:

- Home
- Co-Occurring Mental Health Conditions
- Resources

- + Co-Occurring Mental Health Disorders
- + Substance Abuse
- + Depression
- + Posttraumatic Stress Disorder (PTSD)
Co-occurring TBI and Mental Health Symptoms: Substance Abuse

Background Information

Problems with drinking or substance use may occur in response to stress or in combination with PTSD, depression, or other mental health and medical conditions. Pre-injury alcohol and drug abuse increases the risk for sustaining TBI (Vassallo et al., 2007). Additionally, clients with a history of substance abuse often have worse outcomes after sustaining a TBI (Corrigan, Rust, & Lamb-Hart, 1995). Substance use disorders typically decrease after an initial TBI, but there is usually an increase in substance use approximately two to three years after the TBI (Kreutzer, Manwitz & Witold, 1995). Substance use poses an increased risk for future TBIs.

It is essential for providers to routinely assess substance use in the ongoing management of individuals who sustained a TBI. The video “Substance Use and Traumatic Brain Injury Risk Reduction and Prevention” may be helpful for you and your client to view together in practice. The video provides education on how substance use can influence a person with TBI, the risks associated with substance use after a TBI, and how to reduce risk from sustaining future injuries. This video was designed to open dialogue with clients on the topic of substance use.

brainline.org

The Ohio Valley Center for Brain Injury Prevention and Rehabilitation (OVC) also provides useful information about working with individuals with TBI and substance use disorders.

Another relevant article is Substance Use and Mild Traumatic Brain Injury Risk Reduction and Prevention: A Novel Model for Treatment co-authored by Jennifer Olson-Madden.
Co-occurring TBI and Mental Health Symptoms: Substance Abuse Screening

AUDIT-C (brief Alcohol Screening Questionnaire for Unhealthy Alcohol Use)

The AUDIT-C is a 3-item alcohol screen that can help identify persons who are hazardous drinkers or have active alcohol use disorders (including alcohol abuse or dependence). It does not include drug use.

**Q1:** How often did you have a drink containing alcohol in the past year?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>0</td>
</tr>
<tr>
<td>Monthly or less</td>
<td>1</td>
</tr>
<tr>
<td>Two to four times a month</td>
<td>2</td>
</tr>
<tr>
<td>Two to three times a week</td>
<td>3</td>
</tr>
<tr>
<td>Four or more times a week</td>
<td>4</td>
</tr>
</tbody>
</table>

**Q2:** How many drinks did you have on a typical day when you were drinking in the past year?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>None, I do not drink</td>
<td>0</td>
</tr>
<tr>
<td>1 or 2</td>
<td>0</td>
</tr>
<tr>
<td>3 or 4</td>
<td>1</td>
</tr>
<tr>
<td>5 or 6</td>
<td>2</td>
</tr>
<tr>
<td>7 to 9</td>
<td>3</td>
</tr>
<tr>
<td>10 or more</td>
<td>4</td>
</tr>
</tbody>
</table>

**Q3:** How often did you have six or more drinks on one occasion in the past year?

<table>
<thead>
<tr>
<th>Answer</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>0</td>
</tr>
<tr>
<td>Less than monthly</td>
<td>1</td>
</tr>
<tr>
<td>Monthly</td>
<td>2</td>
</tr>
<tr>
<td>Weekly</td>
<td>3</td>
</tr>
<tr>
<td>Daily or almost daily</td>
<td>4</td>
</tr>
</tbody>
</table>

The AUDIT-C is scored on a scale of 0–12 (scores of 0 reflect no alcohol use). In men, a score of 4 or more is considered positive; in women, a score of 3 or more is considered positive. Generally, the higher the AUDIT-C score, the more likely it is that the patient’s drinking is affecting his/her health and safety.

Visit the toolkit to access other available tools!
Co-occurring TBI and Mental Health Symptoms: Substance Abuse Assessment

**Assessment**

**Diagnostic Assessment:**
Comprehensive Addiction and Psychological Evaluation (CAAPE)

CAAPE is a comprehensive tool that can be used for diagnostic purposes as part of a routine clinical intake when both substance use disorders and mental health disorders need to be considered. It takes approximately 25-50 minutes to complete the evaluation.

CAAPE is a copyrighted instrument. For purchase information, visit Evince Clinical Assessments.

**Symptom Severity Assessment:**
The Brief Addiction Monitor (BAM)

The BAM is a 17-item assessment that can be administered by a clinician or completed as a self-administered questionnaire for clients involved in outpatient substance abuse programs. It includes both symptom level outcomes as well as functional outcomes.

Download the BAM here.

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**Intervention**

Interventions for substance misuse/abuse should be symptom-focused and evidence-based in concurrence with current practice guidelines.

The VA/DoD Clinical Practice Guidelines on Substance Use Disorders can be found at their website along with the full guideline and a pocket guide.

Download from SAMHSA the Substance Abuse Treatment Advisory: Treating Clients with Traumatic Brain Injury.
Background, Screening, Assessment, and Intervention information can also be found for:

- Depression
- Posttraumatic Stress Disorder (PTSD)
Resources

Toolkit for Providers of Clients with Co-occurring TBI and Mental Health Symptoms

This page contains a variety of resources for Veterans, Family, Friends, and Caregivers. There are also additional resources for Providers.

Simply click on the plus (+) symbol to expand the section and read more about each selected toolkit section. Click the minus (-) to close that section.

+ For Veterans
+ For Family & Friends
+ For Providers
This page contains a variety of resources for Veterans, Family, Friends and Caregivers. There are also additional resources for Providers.

Simply click on the plus (+) symbol to expand the section and read more about each selected toolkit section. Click the minus (-) to close that section.
Further information about TBI and services that may be available to Veterans with a history of TBI are found in the links below.

**Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE)**

The mission of the Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury (DCoE) is to improve the lives of our nation’s service members, families and veterans by advancing excellence in psychological health and traumatic brain injury prevention and care.

The DCoE provides general information regarding TBI/concussion and psychological health conditions commonly affecting the Nation’s military communities, service members and families.

**afterdeployment.to.health.mil**

afterdeployment.to.health.mil is a wellness resource for the military community. Our mission is to help service members, their families, and veterans overcome common adjustment problems following a deployment.

afterdeployment.to.health.mil provides information regarding Mild TBI commonly seen post-deployment.

**Brain Injury Association of America**

The mission of Brain Injury Association of America is to advance brain injury prevention, research, treatment and education and to improve the quality of life for all individuals impacted by brain injury. Through advocacy, we bring help, hope and healing to millions of individuals living with brain injury, their families and the professionals who serve
Resources: Family & Friends

Family and other social support plays a major role in obtaining a successful outcome for those who have experienced a brain injury (Veterans Health Initiative, 2010). Ongoing sequelae from TBI, however, can have a significant impact on the social support network. For example, up to 47% of caregivers of persons with a history of TBI experience depression (Gillen et al., 1998). Below is a list of resources that can help support family, friends and caregivers of individuals who have experienced a TBI.

VA Caregiver Support Program

The VA Caregiver website declares "VA values your commitment as a partner in our pledge to care for those who have "borne the battle," and we have several support and service options designed with you in mind. The programs are available both in and out of your home to help you care for the Veteran you love and for yourself"

Defense and Veterans Brain Injury Center (DVBiC) Family & Friends

From their website "Family members and friends play an important role in the care and rehabilitation of individuals with traumatic brain injuries (TBIs). Most people who have sustained a TBI recover significantly in the first few months following injury. In fact, more than 85 percent of people with a concussion, also known as a mild TBI, recover completely within weeks to months with minimal intervention."

Family members and caregivers may request support from DVBiC’s TBI Recovery Support Program.

See the DVBiC video "Caring for a Loved One After a Military TBI: One Wife’s Perspective".

And many more!
Resources: Providers

In addition to the other tools, be sure to visit the VISN 19 MIRECC!
VISN 19 MIRECC Resources for Clinicians

Updated: 3 April 2014

FEATURED CLINICIAN RESOURCE

Conceptualizing Suicide Risk in TBI: A Supplemental Handbook

This handbook presents an overview of Traumatic Brain Injury (TBI), a kind of TBI-The Sistema Solution. This handbook explores the relationship between TBI and suicide risk, and the relationship between suicidal ideation and suicide attempts. Presented in an easy to digest format for our very busy clinicians. This is must have for clinicians.

Download your copy now

Suicide Prevention

CONTACT

VISN 19 MIRECC - Denver
1055 Clermont Drive
Denver, CO 80220
VA Eastern Colorado Health Care System
302-896-5020 Ext. 5275

VISN 19 MIRECC - Salt Lake City
500 Foothill Drive
Salt Lake City, Utah 84148
VA Salt Lake City Health Care System
301-562-1585 Ext. 2021
Using QR Codes and Your Smartphone to View the VISN 19 MIRECC Website

Requirements:
1. Smartphone with a camera
2. QR scanning software (available as a free download - just look at your phone’s marketplace)

① Scan QR Code    ② Open Website