Today’s Agenda

Substance Abuse, Co-occurring Conditions, & Coordinating Care

• Screening for TBI in substance abuse and other co-occurring condition treatment settings
• Coordinating Care & Services for Children & Youth
• Q & A
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Presenters

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Director of Clinical Services,
Pima Prevention Partnership
Traumatic Brain Injury (TBI): The Substance Abuse Connection

Presented by Charlie Alcaraz, MPA
Pima Prevention Partnership
Presentation Overview

- Defining Traumatic Brain Injury (TBI)
- Prevalence of TBI
- Common Symptoms of TBI
- TBI and Substance Use Disorders (SUD)
- SBIRT as TBI Prevention Intervention
- The HELPS Brain Injury Screening Tool
- Best Practice Approaches for Serving People with Co-occurring SUD and TBI
Defining TBI

- **Center for Disease Control (CDC)**
  - “Craniocerebral trauma associated with neurological or neuropsychological abnormalities, skull fracture, intracranial lesions or death.”

- **Brain Injury Association of America (BIAA)**
  - “TBI is defined as an alteration in brain function, or other evidence of brain pathology, caused by an external force.”
COMMON SYMPTOMS OF TBI

- Motor and Sensory Effects
  - Dizziness and lightheadedness
  - Fatigue or lethargy
  - Headaches and other pain
  - Sleep disturbances

- Cognitive Problems
  - Poor planning, follow through, problem solving, and judgment
  - Impaired attention and concentration
  - Language and communication impairments
  - Worsened memory

- Emotional Effects
  - Aggression and irritability
  - Anxiety
  - Apathy or lack of spontaneity
  - Difficulty regulating emotions
  - Impulsive, disruptive, or socially inappropriate behavior
  - Lack of self-awareness (including lack of awareness of cognitive deficits)
  - Personality changes

Do These Symptoms Look Familiar?
TBI AND PSYCHIATRIC DISORDER SYMPTOMS OVERLAP

- Substance abuse and mental health treatment providers may not recognize clients who have been affected by TBI because its symptoms overlap with those of substance use disorders and other co-occurring conditions such as ADHD, depression, generalized anxiety disorder, and posttraumatic stress disorder (PTSD). 
TBI AND SUBSTANCE USE DISORDERS FACTS

- **History of substance abuse is a risk factor for TBI**
  - Between 33% and 80% have histories of substance misuse
  - Alcohol is most commonly reported misused substance

- **Alcohol use at time of TBI incident is common**
  - Approximately 75% of TBI patients have alcohol in their blood upon hospital admission
  - One-third to one-half are intoxicated at time of injury
  - 54% of persons who sustain a **second** TBI are under the influence
TBI AND SUBSTANCE USE DISORDERS FACTS

- **Prior TBI is common among individuals in SUD treatment**
  - Between 38% and 63% of people in SUD treatment had prior TBI
  - SUD and TBI compound the negative effects each has on brain structure and function

- **TBI strongly associated with subsequent abstinence or reduced consumption**
  - Intense clinical monitoring during hospitalization
  - Advice from outpatient healthcare providers to abstain
  - Decreased access to alcohol or drugs (e.g., because of physical disability or close monitoring by caregivers)
  - Decisions to make life changes after the brain injury
TBI and Substance Use Disorders Facts

- **For some, the reduction in use is only temporary**
  - Minority begins drinking or *increases* alcohol consumption in first year after injury
  - Substance abuse before sustaining a TBI is risk factor for heavy drinking afterward
  - About 50% of TBI survivors return to pre-injury use patterns within first year
At-risk alcohol/substance use plays a significant role as a contributing factor for TBI

- Nearly half of all trauma beds are occupied by patients injured while under the influence of alcohol
- Patients seeking treatment in the ER are more likely to self-disclose their alcohol use than those receiving treatment in a primary care setting
- Efforts to reduce the risk of TBI are unlikely to be successful if the underlying risk factors remain untreated
- Yet, even for patients presenting with obvious unhealthy drinking habits, as few as 15% have their at-risk behavior addressed during their visit
What does this tell us

- Immediacy between the event bringing them to care and connection between risky drinking and injury (for ER patients with at-risk alcohol use)
  - Can produce a crisis that helps motivate a person to change their drinking behavior
  - Creates the optimal time for emergency personnel to intervene
  - Patient’s openness to discuss alcohol problems decreases significantly after a couple of days
SBIRT as TBI Prevention Strategy

**Screening**
- Quickly assess the severity of substance use and identifies the appropriate intervention

**Brief Intervention**
- Increases insight and awareness of substance use; motivation toward behavioral change

**Referral to Treatment**
- Provides those identified as needing more extensive treatment with access to specialty care
AUDIENCE POLL

1) How many of you have heard of the SBIRT Model?

2) How many of you currently utilize an SBIRT Model to address TBI?
SBIRT is effective because it…

1. Catches alcohol and drug problems *before* they dramatically affect a person’s life.

2. Uses simple screening and brief motivational intervention to affect change - in as little as 15 minutes.

3. Takes away the stigma associated with alcohol and drug treatment by normalizing it in health care settings.
Documented success of SBIRT

- SBIRT works in ER and trauma centers
  - Brief Intervention studies indicate that they are more effective than no counseling and as effective as traditional therapy in achieving:

  - Reductions in alcohol consumption
  - Successful referral to and participation in alcohol/substance abuse treatment programs
  - Reduction in drinking and driving and moving traffic violations
  - Reduction in repeat injuries, and injury hospitalizations
SBIRT IS COST-EFFECTIVE

- Decrease in unhealthy drinking is followed by reductions in hospitalization and health care costs
  - Substantial portion of the reduction in costs is related to a reduction in the use of emergency department resources
  - Recent cost analysis of brief intervention in a primary care setting found a net cost savings of $330 per intervention

- Examples
  - **Wisconsin SBIRT**: Reduction in hospital costs, emergency department (ED) visits, and associated problems resulting in $1,000 savings per person screened
  - **Texas SBIRT**: A net savings of $3.81 in ED costs for every $1.00 invested in screening and brief intervention. ED saw a 50% reduction in recurrent alcohol-related injuries
**The HELPS Brain Injury Screening Tool**

- Original HELPS tool was developed by M. Picard, D. Scarisbrick, R. Paluck, at the International Center for the Disabled in 1991.

- Tool can be found at: https://www.hnfs.com/va/statistic/rmh/4_helps_tbi.pdf
**SCREENING DOMAINS**

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<th>H</th>
<th>Have you ever Hit your Head or been Hit on the Head?</th>
<th>□ Yes □ No</th>
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<td>Note: Prompt client to think about all incidents that may have occurred at any age, even those that did not seem serious: vehicle accidents, falls, assault, abuse, sports, etc. Screen for domestic violence and child abuse, and also for service related injuries. A TBI can also occur from violent shaking of the head, such as being shaken as a baby or child.</td>
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<td>E</td>
<td>Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head?</td>
<td>□ Yes □ No</td>
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<td>Note: Many people are seen for treatment. However, there are those who cannot afford treatment, or who do not think they require medical attention.</td>
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<td>Did you ever Lose consciousness or experience a period of being dazed and confused because of an injury to your head?</td>
<td>□ Yes □ No</td>
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<td>Note: People with TBI may not lose consciousness but experience an “alteration of consciousness.” This may include feeling dazed, confused, or disoriented at the time of the injury, or being unable to remember the events surrounding the injury.</td>
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<td>P</td>
<td>Do you experience any of these Problems in your daily life since you hit your head?</td>
<td>□ Yes □ No</td>
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<td>Note: Ask your client if s/he experiences any of the following problems, and ask when the problem presented. You are looking for a combination of two or more problems that were not present prior to the injury.</td>
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<td>□ headaches □ difficulty reading, writing, calculating</td>
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<td>□ dizziness □ poor problem solving</td>
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<td>□ anxiety □ difficulty performing your job/school work</td>
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<td>□ depression □ change in relationships with others</td>
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<td>□ difficulty concentrating □ poor judgment (being fired from job, arrests, fights)</td>
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<td>□ difficulty remembering</td>
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<td>S</td>
<td>Any significant Sicknesses?</td>
<td>□ Yes □ No</td>
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<td>Note: Traumatic brain injury implies a physical blow to the head, but acquired brain injury may also be caused by medical conditions, such as: brain tumor, meningitis, West Nile virus, stroke, seizures. Also screen for instances of oxygen deprivation such as following a heart attack, carbon monoxide poisoning, near drowning, or near suffocation.</td>
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H- Hit Head

Have you ever Hit your Head or been Hit on the Head? □ Yes □ No

Note: Prompt client to think about all incidents that may have occurred at any age, even those that did not seem serious: vehicle accidents, falls, assault, abuse, sports, etc. Screen for domestic violence and child abuse, and also for service related injuries. A TBI can also occur from violent shaking of the head, such as being shaken as a baby or child.

- Consider context of client’s life to inform prompts
  - Hobbies and interests? [i.e., skateboarding, football, Mixed Martial Arts (MMA), etc.]
- Address information obtained from other assessments
  - GAIN-Q and GAIN-I ask about emergency room/hospital visits. They may be unrelated to head injury, but it’s important to always ask.
E- EMERGENCY ROOM/ MEDICAL CARE

Were you ever seen in the Emergency room, hospital, or by a doctor because of an injury to your head?

☐ Yes  ☐ No

Note: Many people are seen for treatment. However, there are those who cannot afford treatment, or who do not think they require medical attention.

- Consider if paramedics were called to the scene
  - If so, was further medical attention recommended?
  - Address barriers to accessing medical services that may have impacted decision to seek further treatment (i.e., health insurance, financial crisis, etc.).
Lose Consciousness

Did you ever lose consciousness or experience a period of being dazed and confused because of an injury to your head? □ Yes □ No

Note: People with TBI may not lose consciousness but experience an “alteration of consciousness.” This may include feeling dazed, confused, or disoriented at the time of the injury, or being unable to remember the events surrounding the injury.

• Remember, losing consciousness is an indicator, but not all who suffer TBI lose consciousness.

• People may not recognize being “dazed” and may use alternate terminology to reflect these sensations.
  • Popular MMA language, for example, substitutes words such as “rocked” for the meaning of dazed (similar to people’s use of the word “buzzed” instead of drunk or intoxicated).
P - PROBLEMS

Do you experience any of these Problems in your daily life since you hit your head?  □ Yes  □ No

Note: Ask your client if s/he experiences any of the following problems, and ask when the problem presented. You are looking for a combination of two or more problems that were not present prior to the injury.

- headaches
- dizziness
- anxiety
- depression
- difficulty concentrating
- difficulty remembering
- difficulty reading, writing, calculating
- poor problem solving
- difficulty performing your job/school work
- change in relationships with others
- poor judgment (being fired from job, arrests, fights)

- Consider Motivational Interviewing strategies
  - Using words such as “Changes” instead of “Problems”
  - Open ended question first
  - Probe using listed options
S- SICKNESS

Any significant Sicknesses? □ Yes □ No

Note: Traumatic brain injury implies a physical blow to the head, but acquired brain injury may also be caused by medical conditions, such as: brain tumor, meningitis, West Nile virus, stroke, seizures. Also screen for instances of oxygen deprivation such as following a heart attack, carbon monoxide poisoning, near drowning, or near suffocation.

• This question reminds us that we are looking for damage to the brain that may have impacted our clients’ cognitive or emotional functioning, regardless of cause.
Scoring and Results

Scoring the HELPS Screening Tool

- A HELPS screening is considered positive for a possible TBI when the following 3 items are identified:

1. An event that could have caused a brain injury (yes to H, E, or S), and

2. A period of loss of consciousness or altered consciousness after the injury or another indication that the injury was severe (yes to L or E), and

3. The presence of two or more chronic problems listed under P that were not present before the injury.
**ADDITIONAL CONSIDERATIONS**

- Positive screening is *not sufficient to diagnose TBI* as the reason for current symptoms and difficulties.

- *Some individuals could present exceptions* to the screening results, such as people who do have TBI-related problems but answered “no” to some questions.

- Consider positive responses within the context of the person’s self-report and documentation of altered behavioral and/or cognitive functioning.
TREATMENT APPROACHES

Substance abuse treatment for persons with TBI includes:

- Motivational Interviewing
- Barrier reduction*
- Financial incentives*
- Assessment of functional utility of drug/alcohol use
- Assessment of high risk situations
- Coping and other skills training
  - Stress and anger management
  - Problem Solving
- Role Playing
- Homework
- Client/family education
**Effective Strategies**

- Integrated approaches are best with teams including:
  - Substance abuse clinician
  - Case manager
  - Medical/rehabilitation staff

- Identify and utilize unique learning styles
  - Reading, writing, and drawing abilities
  - Ask about and observe attention span
  - Written materials should be concise and to the point
  - Use concrete examples and visual aids
  - Encourage clients to take notes for later review
  - Repeat, review, rehearse...Repeat, review, rehearse
Effective Strategies

- Provide direct feedback about behaviors
  - Don’t assume clients with TBI know a behavior is inappropriate
  - Redirect tangential or excessive speech; predetermine signals for use in group
  - Heavily reinforce appropriate responses
    - Contingency Management/financial incentives provide concrete reinforcement

- Behavior is not always tied to emotional state
  - Non-compliance is not always lack of motivation or resistance
  - Lack of self-awareness may not be denial
CONCLUSIONS

- TBI is common among people in SUD treatment
- Symptoms of TBI, SUD, and other psychiatric disorders are similar
- SBIRT can be effective TBI prevention strategy
- Screening for TBI is essential in SUD treatment settings
- Integrated approach to treatment is essential
CONTACT INFORMATION

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REFERENCES & RESOURCES


References & Resources

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Thank you for your participation

Please take a moment to complete our short evaluation:

https://www.surveymonkey.com/s/B5BCDVZ

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