



Brain Injury & Justice Involved Individuals

Presented by:
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 - Specialties focusing on Veteran mental health and brain injury as well as substance use and abuse
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- Assistant Professor in the Center on Brain Injury Research and Training
 - Focus primarily on brain injury education and training
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Presentation Outline

- What is a brain injury
- Brain injury signs and symptoms
- Where brain injury and justice involvement collide
- Why is screening important
- Working with clients with brain injury
- Brain injury resource navigation

What is a Brain Injury?

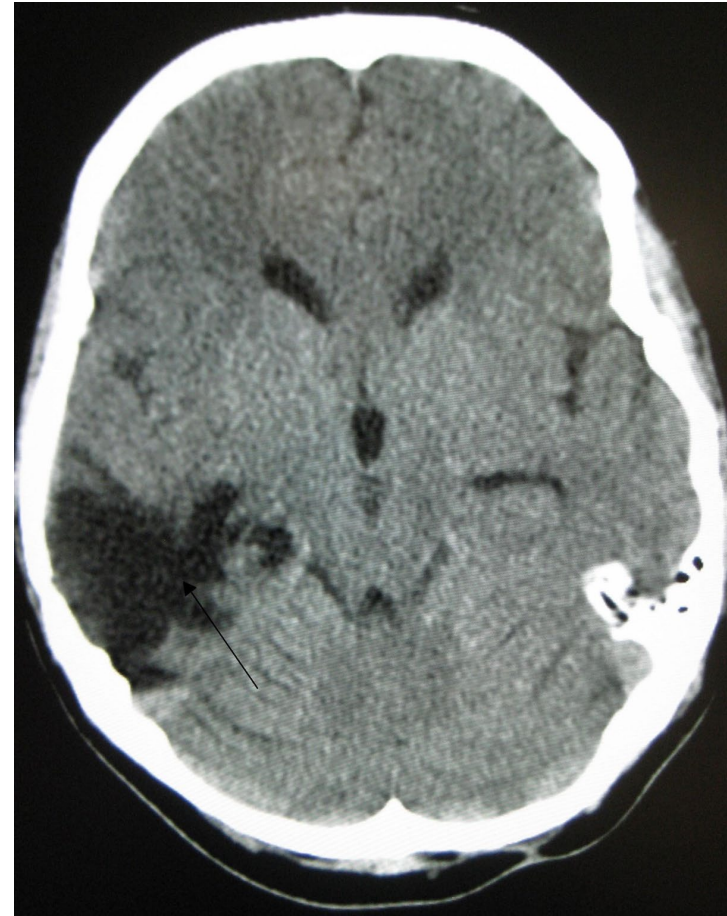
Brain Injury Can be Traumatic or Acquired



What is *acquired* brain injury (ABI)?

An insult that occurs after birth and causes damage to brain tissue. Causes may include...

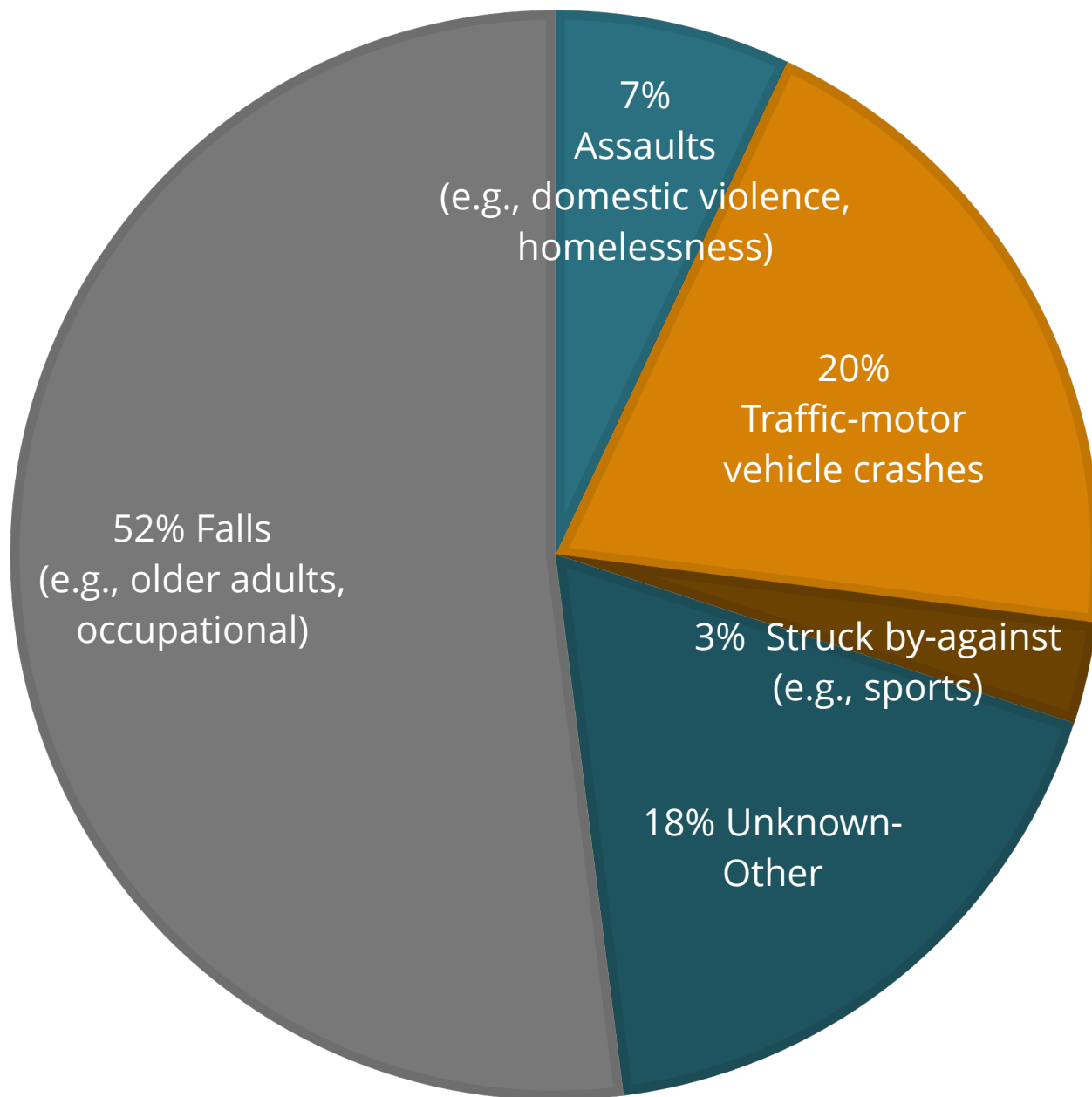
- Trauma
- Stroke
- Infection
- Tumor
- Hypoxia
- Exposure to Toxins



What is *traumatic* brain injury (TBI)?

“A TBI is caused by a bump, blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain.”¹

- Effects may be temporary or permanent
- Severity can range from mild to severe
- A concussion is a brain injury.
- Multiple TBIs have cumulative effects



Leading Causes of TBI

Leading Causes of Brain Injury for Active-Duty Service Members

- Bullet penetration
- Violent impact
- Shock-waves from explosive weapons

Kong, LZ., Zhang, RL., Hu, SH. *et al.* Military traumatic brain injury: a challenge straddling neurology and psychiatry. *Military Med Res* 9, 2 (2022). <https://doi.org/10.1186/s40779-021-00363-y>

Veterans and Brain Injury

- **TBI is the signature wound of the Iraq and Afghanistan wars.**
- **It is a significant wound for Vietnam Veterans.**
- **Brain injury occurs as a result of general military duty.**
 - Falls, motor vehicle collisions, assaults, and merely hitting your head against something all can lead to brain injuries.

Brain Injury Signs and Symptoms



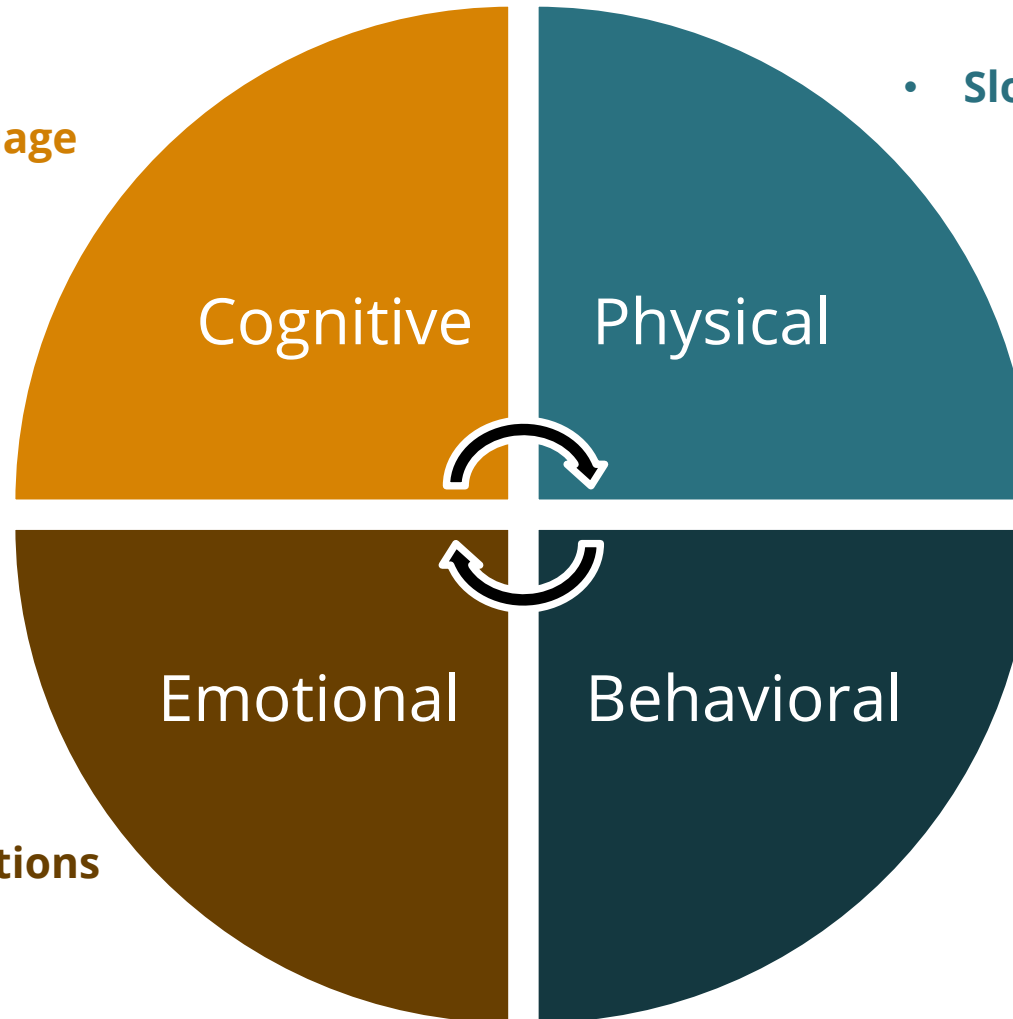
Brain Injury Signs & Symptoms

Not everyone will experience all; Overlap with other conditions

Difficulty with:

- Speech-language
- Organization
- Attention
- Learning
- Memory
- Hearing

- Depression
- Anxiety
- Irritability
- Mood swings
- Blunted emotions



Brain Injury and Cognitive Impairment ²

Common cognitive impairments include:

- Decreased attention/concentration
- Memory difficulties
- Impaired judgment
- Reduced ability to follow instructions

These cognitive deficits are associated with poor functional outcomes in:

- Social interaction
- Problem solving
- Skill acquisition
- Work/Occupational performance
- Independent living

Brain Injury can look like:

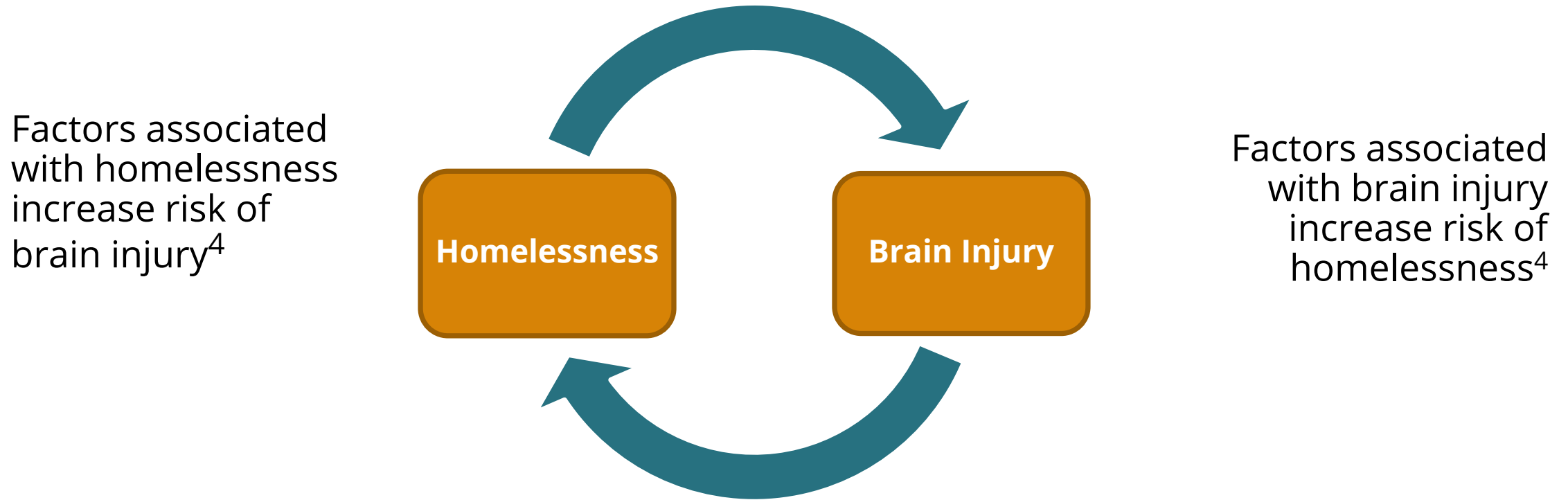
- Grandiose planning
- Failure to make a plan
- Failure to follow a plan
- Failure to initiate activity
- Difficulty in completing tasks
- Disorganization
- Impulsivity
- Jumping to conclusions
- Repeating the same mistakes
- Stubbornness

Other Conditions Associated with Brain Injury²

- Post-traumatic stress disorder (PTSD)
- Major Depressive Disorder
- Generalized Anxiety Disorder
- Substance Use Disorders
- Poor Affect
- Suicidal Ideation

Brain injury can lead to symptoms mimicking these issues, and can exacerbate symptoms of previous diagnoses

Homelessness and brain injury likely share a bidirectional relationship



Brain injuries are more prevalent within populations at risk of being unhoused, including veterans,⁵ those with mental and behavioral health conditions,⁶ victims of intimate partner violence,⁷ and those involved in the justice system.⁸



71%

of sampled individuals experiencing homelessness reported a history of brain injury⁹

74%

reported a brain injury that occurred prior to experiencing homelessness.⁹

Where Brain Injury and Justice Involvement Intersect



**Approximately every other
person involved in the justice
system has a history of brain
injury**

55.9%

Prevalence for women¹⁰

55.2%

Prevalence for men.¹⁰

60.25%

Prevalence in the overall
offender population.¹¹

Youth, Brain Injury and Justice Involvement¹²

- Adolescents with brain injury had significantly more often committed crimes (53.8%) compared to adolescents without brain injury (14.7%)
 - Subjects with brain injury had significantly more violent crimes
- Brain injury during childhood and adolescence increased the risk of:
 - any criminality by 6.8 times
 - conduct disorder by 5.7 times
 - concomitant criminality & conduct disorder by 18.7 times

Brain Injury
Consequence

The diagram consists of a vertical teal bar on the left. To its right are four horizontal chevrons pointing right. The top chevron is orange and contains the text 'Brain Injury Consequence'. The following three chevrons are teal and contain specific consequences: 'Attention deficit', 'Memory deficit', and 'Irritability or Anger'. To the right of these chevrons are three corresponding light orange and light gray chevrons pointing right, which contain the functional impacts of each consequence.

Functional Impact on Competency and Prison Adjustment

Attention deficit

Difficulty focusing on or responding to required tasks or directions, distractibility, cognitive fatigue

Memory deficit

Difficulty understanding or remembering new information or directions, miss appointments, contradicts self

Irritability or
Anger

Behaviors that lead to incarceration and Incidents with justice-involved personnel, "over-reacts" emotionally



Brain Injury
Consequence

Functional Impact on Competency and Prison Adjustment

Uninhibited or
Impulsive
Behavior

Hyperactive, poor inhibition of emotions or desires
(e.g., making inappropriate jokes, drug use, rage)

Executive
Function deficit

Difficulty organizing behavior to execute stated intentions or goals (e.g., don't actually do what they wanted or said they would do), doesn't set realistic goals, unaware of impairment, verbal output disorganized

Brain injury is a serious health concern that makes it difficult to adjust to prison.¹³

- The unadjusted risk of incurring a serious charge for those with a history of brain injury was 39% higher than those with no history of brain injury
- **This has implications for planning:**
 - **before sentencing** (e.g., court diversion programs),
 - **during incarceration** (e.g., interventions to enhance prison adjustment) and
 - **at discharge** (e.g., supports during and after transitioning to the community to enhance financial security, ensure adequate housing, connections with service agencies and specialists)

What can you do if you think someone has experienced a brain injury?

- Learn simple screening questions providers can ask the person or they can ask of themselves to determine possible history of brain injury.
- Learn simple accommodations to modify your services to better need the needs of your client
- Assist the person in getting connected to health care providers and/or community health care workers who may be able to help with more in-depth brain injury screening and/or access to needed resources (e.g., housing, food stamps, health insurance).

Why is screening
important?



Managing Brain Injury in Justice Systems

Screen for Lifetime Exposure

- Scientifically validated structured interview
- Takes ~ 15 minutes for trained examiner
- Classifies:
 - Improbable/No TBI
 - Mild TBI
 - Moderate TBI
 - Severe TBI
- Ohio State University TBI Identification Method

Make Accommodations

- Recognize common symptoms of brain injury
- Incorporate compensatory strategies into practice
- Increase the odds of treatment success
- Ohio State University TBI Accommodating the Symptoms of TBI

Brain Injury Screening: Why?

- A history of brain injury that may not be known to providers
- Brain injury that has occurred in the past may not be visible, including on MRIs or CT scans
- Untreated brain injury would have no medical documentation
- Old medical records may not be available
- The effects of brain injury can impact the treatment/services a client is receiving

Possible Steps to Supporting a Person with Possible History of Brain Injury

Screen for Brain Injury History



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graph TD; A[Screen for Brain Injury History] --> B[Recognize Cognitive and Functional Impairment]; B --> C[Accommodate Cognitive and Behavioral Symptoms]; C --> D[Integrate with Community Resources]; D --> E[Monitor and Manage Co-Occurring Health and Mental Health Issues];
```

Recognize Cognitive and Functional Impairment

Accommodate Cognitive and Behavioral Symptoms

Integrate with Community Resources

Monitor and Manage Co-Occurring Health and Mental Health Issues

Connection to Services and Supports

Therapeutic treatment options:

- speech therapy
- vocational therapy
- physical therapy
- vision therapy
- audiology
- psychological and psychiatric therapies

Resources:

- Housing options
- Employment opportunities
- Other benefits

Community supports:

- Peer-to-peer support groups
- Brain Injury specific support groups

Social support:

- Recreational sports leagues
- Trail building teams
- Equine programs
- Meditation and mindfulness

Working with Clients with Brain Injury

Accommodations



Examples of Accommodations

★ Simplify

- Choose quiet, distraction-free environments
- Use simple but complete messages
- Provide extra time for the person to process what you've said
- Provide organizing statements, such as identifying the topic being discussed
- Use language familiar to the person
- Keep recommendations simple

★ Extra time

★ Reduce distractions

- Check comprehension by asking for a summary of or demonstration of information provided
- If a person seems to be struggling to recall information, simply repeat the correct information for them. Discourage guessing, which may result in perpetuating incorrect information.
- Provide simple, written instructions, in one place if possible, for all important information.
- Use simple calendars and reminders that can be carried with the individual.

★ Check In

★ Repeat

★ Visual cues

More Accommodations

★ Review

- Together, regularly review all written information.
- When possible, prioritize treatments (appointments) rather than scheduling several simultaneously.
- When making referrals and appointments together, create and talk through a plan for attendance.
- Ask for help. Enlist environmental supports. For example: “Is there someone who might be able to attend the appointment with the person?”

★ Prioritize

★ Routines

- Confirm the person owns a cell phone and is able to use the texting feature to receive reminders and other important information.
- Help build routines, such as scheduling appointments on the same day of the week.
- Consider the use of simplified medication routines, including pill boxes, and possibly packaged medication.
- Use case management/ resource navigation services where they are available.

★ Plan

★ Support

★ Ask for help

When person's behavior differs from their stated goals and intentions, assume that they are doing the best they can and determine what supports will allow them to be more successful.



Resources

- Kim Gorgens TED Talk- [The surprising connection between brain injuries and crime](#)
- National Association of State Head Injury Administrators (NASHIA)
 - [Criminal and Juvenile Justice Resource Library](#)
- [Brain Injury and the Law: A presentation made to the Indiana Courts](#)
- [TBI Youth Justice website](#)
- [OSU TBI ID Screening Tool and Training](#)

Brain Injury Resource Navigation

Senate Bill 420



The average person
with a brain injury in
Oregon needs

12

services and supports.



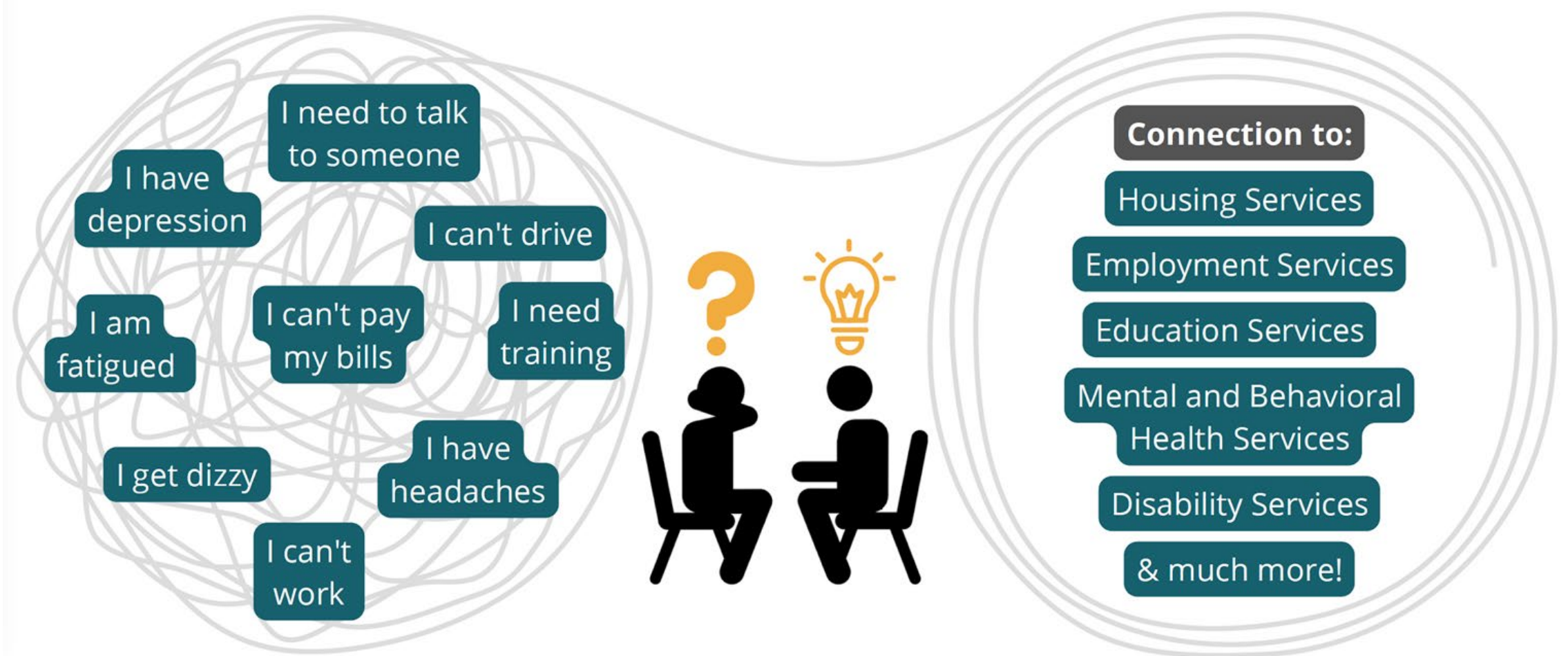
48%

Do not get the support
they need because
they are not aware of
services.

Data from the 2020-2021 Oregon Brain Injury Services and Supports Survey. This survey was conducted by the Center on Brain Injury Research and Training with funding from the Administration for Community Living's Traumatic Brain Injury State Partnership Program.

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Navigators can help connect brain injury survivors to needed resources!



Brain Injury Resource Navigators

- Real people making real connections with our brain injury survivors
- Not merely Information and Referral
- Personal contact to provide a “warm hand-off” to available resources
- Person-centered
- Geographically relevant
- Housed in the Oregon Department of Human Services
- Based on Best Practices nationwide



It is here!

cbirt.org

Contact Information

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Presenter: Caitlin Synovec, OTD, OTR/L, BCMH

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(Recorded 4/28/21)

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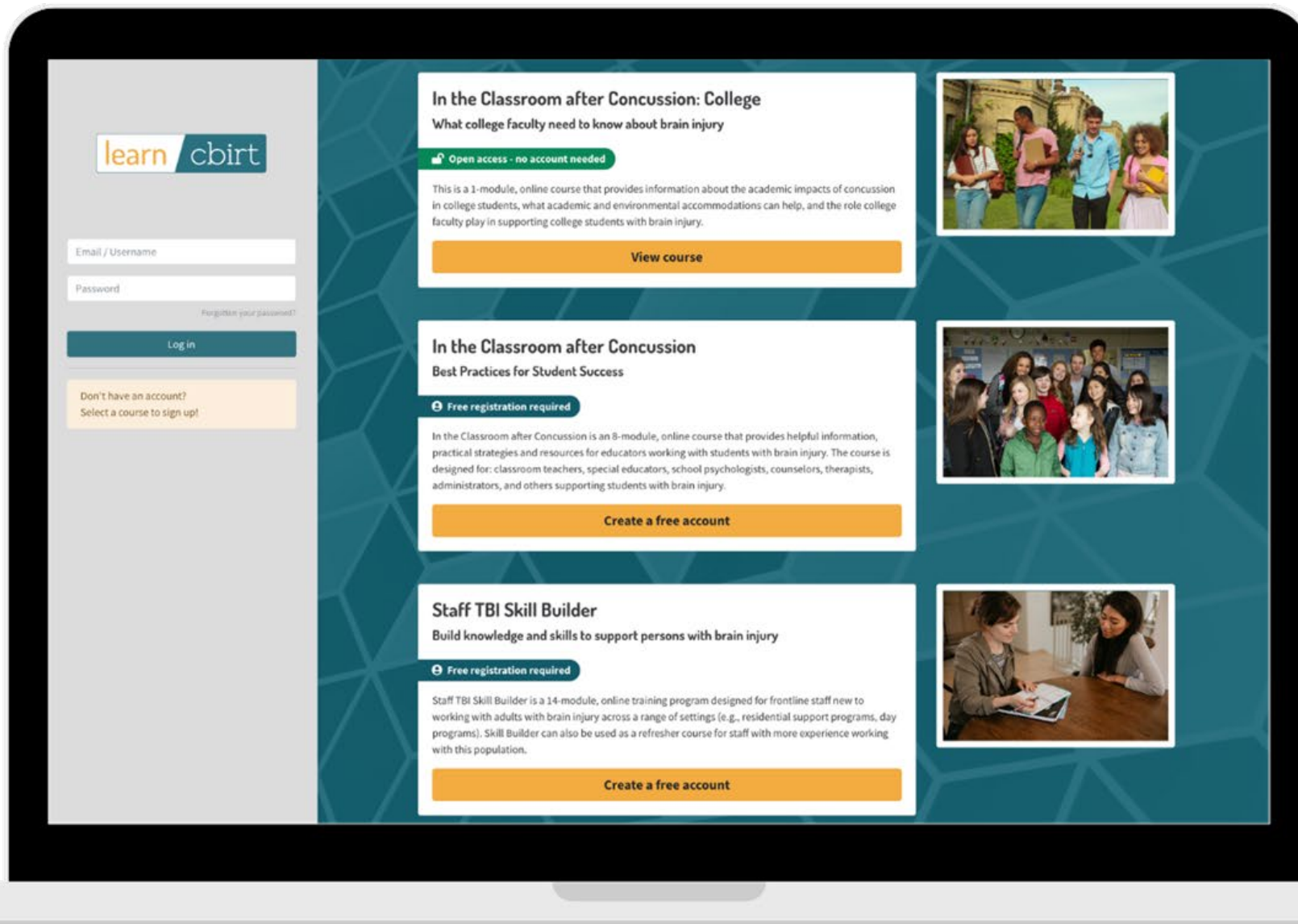
Free Trainings Available on learn.cbirt.org

In the Classroom

- In the Classroom after Concussion is an 8-module, online course that provides helpful information, practical strategies and resources for educators working with students with brain injury.
- The course is designed for: classroom teachers, special educators, school psychologists, counselors, therapists, administrators, and others supporting students with brain injury.
- Additional module available for college faculty

Staff TBI Skill Builder

- A 14-module, online training program designed for frontline staff new to working with adults with brain injury across a range of settings (e.g., residential support programs, day programs).
- Skill Builder can also be used as a refresher course for staff with more experience working with this population.



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