

Bridging the Gap, Untangling the Web

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Bridging the Gap: A Closer Look at Addictions,
Mental Health, Brain Injury and the Justice System
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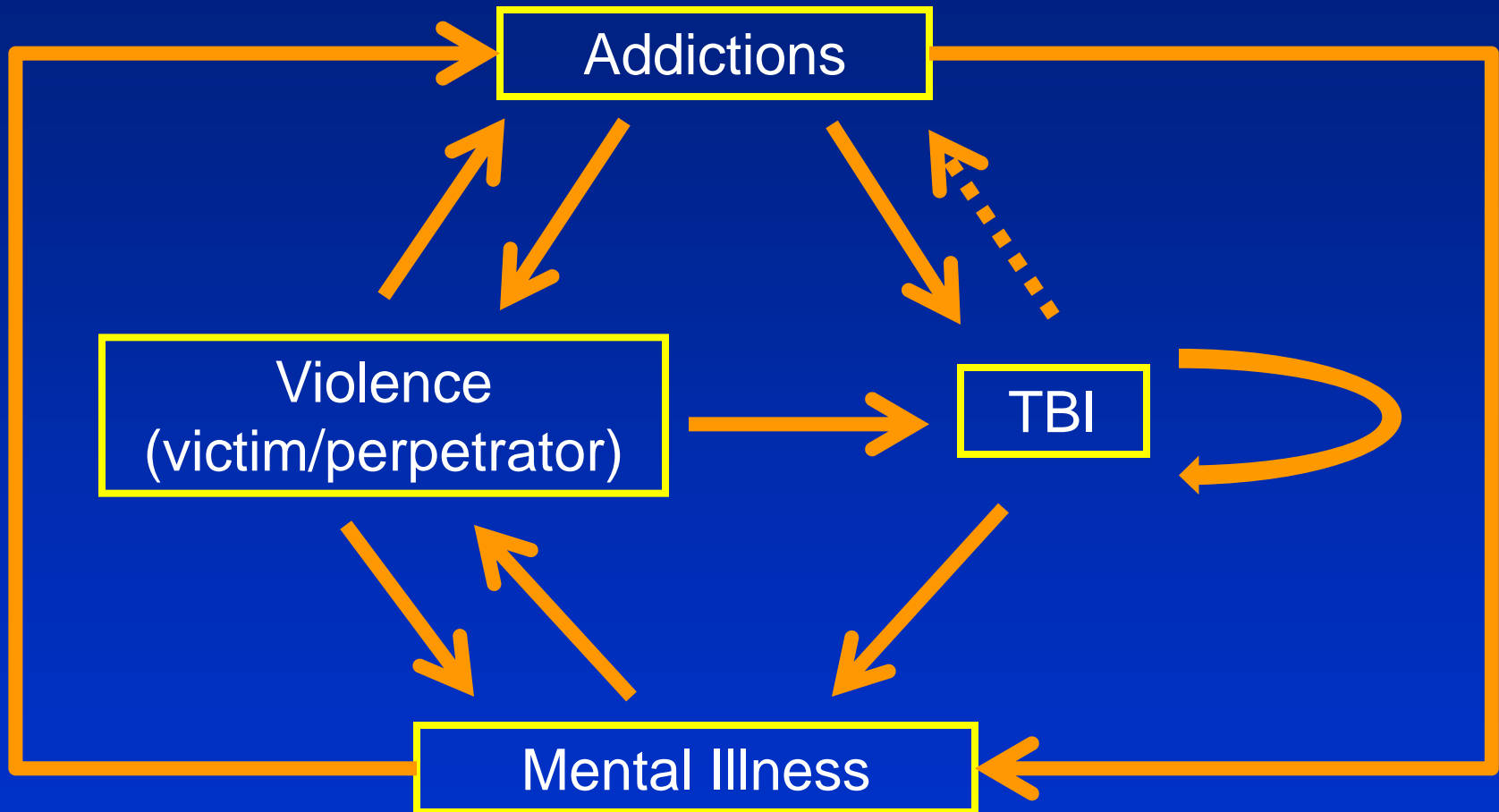
Traumatic Brain Injury (TBI)

- Blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain
- Falls, motor vehicles, unintentional impacts, assaults, sports
- 18,000 admissions yearly

Neuropsychiatric Impact of TBI

- Cognitive impairment
- Emotional lability
- Depression
- Behavioral problems

- Significant improvement in most
- Persistent symptoms in some





Homelessness

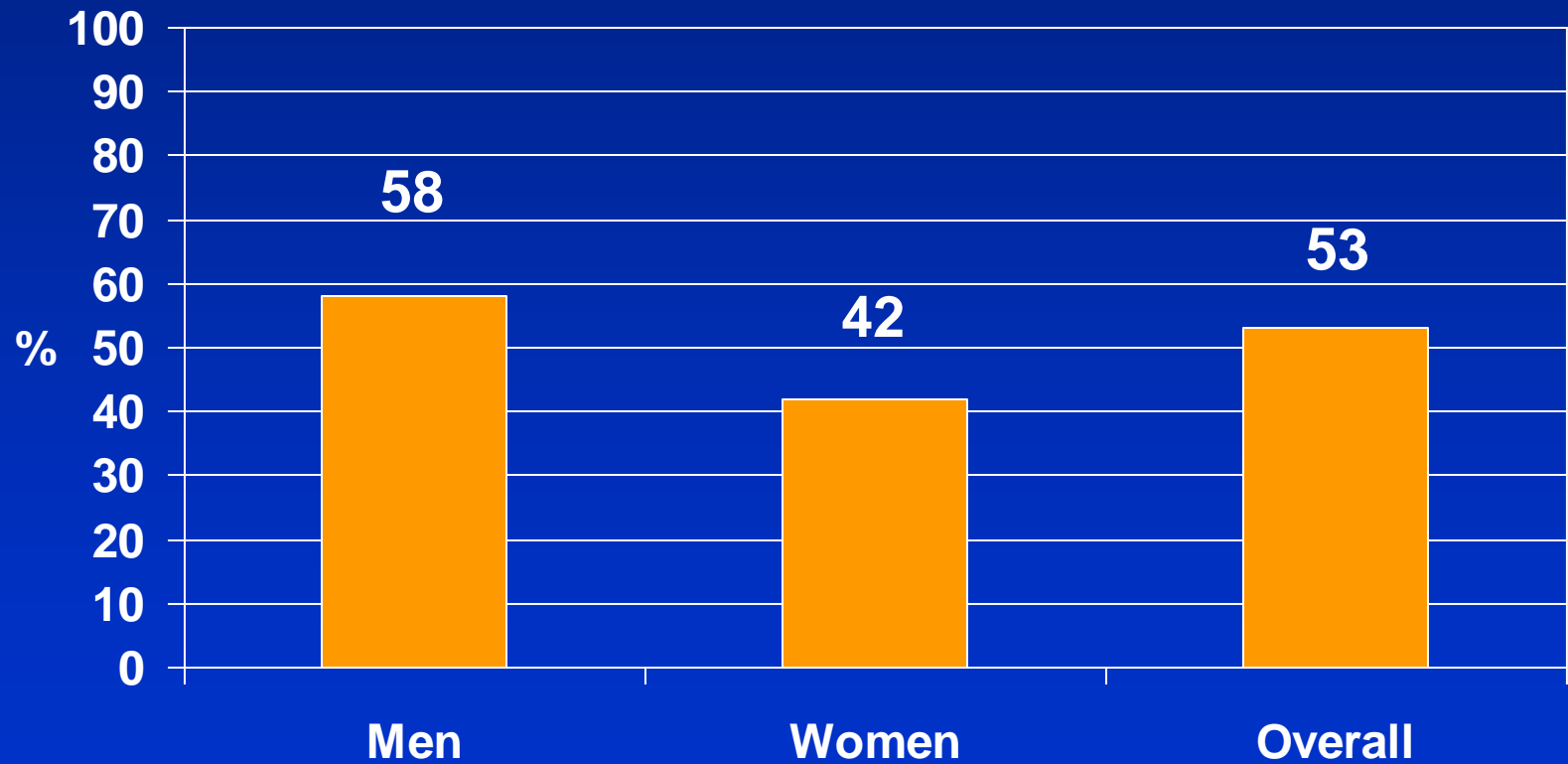


- 150,000 Canadians use shelters each year
- 5,000 people in Toronto are homeless
 - 4,000 in shelters
 - 1,000 on the street, in hospitals, in jails
- Uncounted thousands of “hidden homeless”

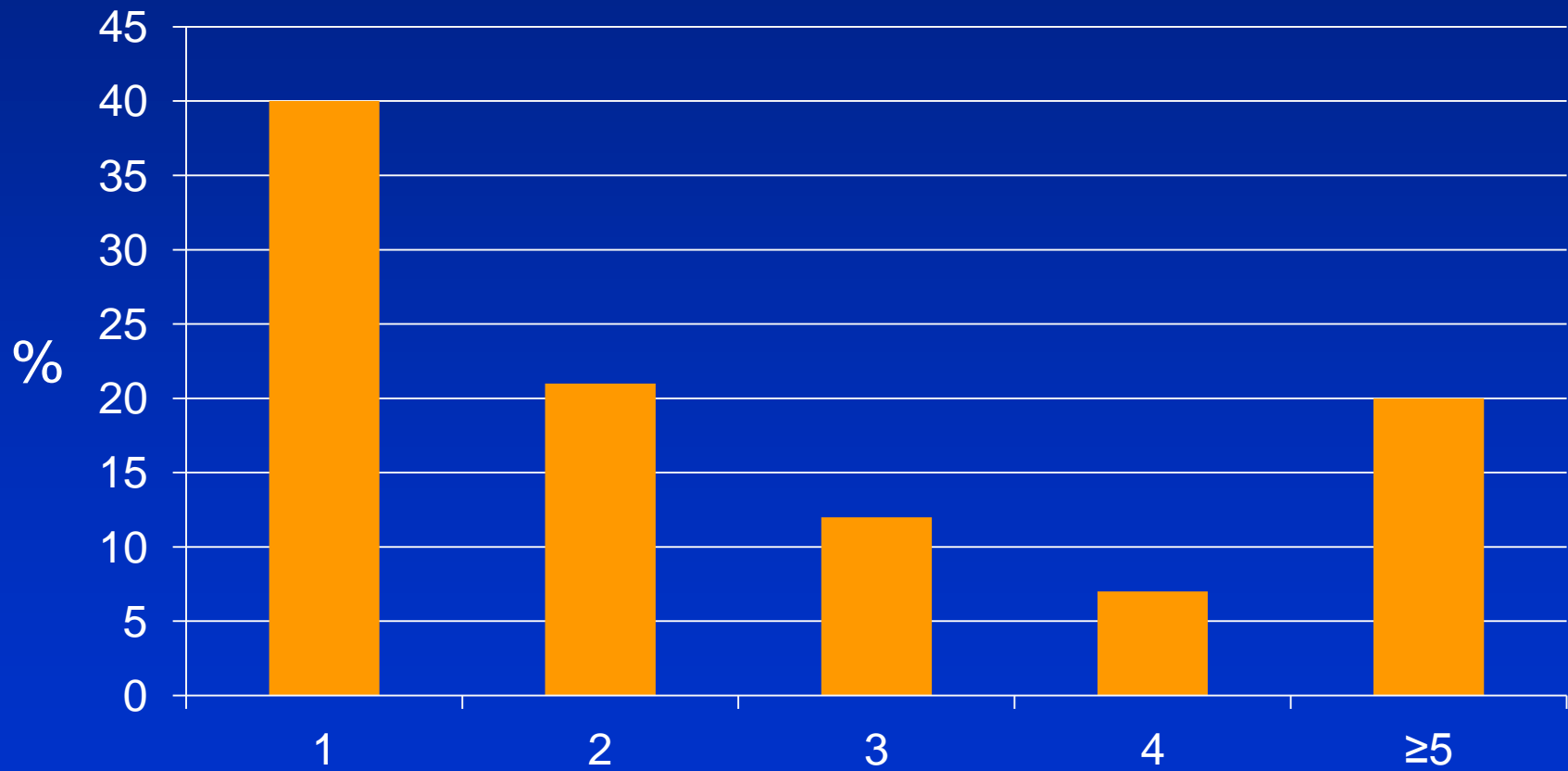
TBI among homeless people

- Cross-sectional survey of 904 homeless men and women
- Toronto
- Self-reported history of TBI
- “Have you ever had an injury to the head which knocked you out or at least left you dazed, confused, or disoriented?”
- Hwang SW, CMAJ. 2008;179(8):779-84

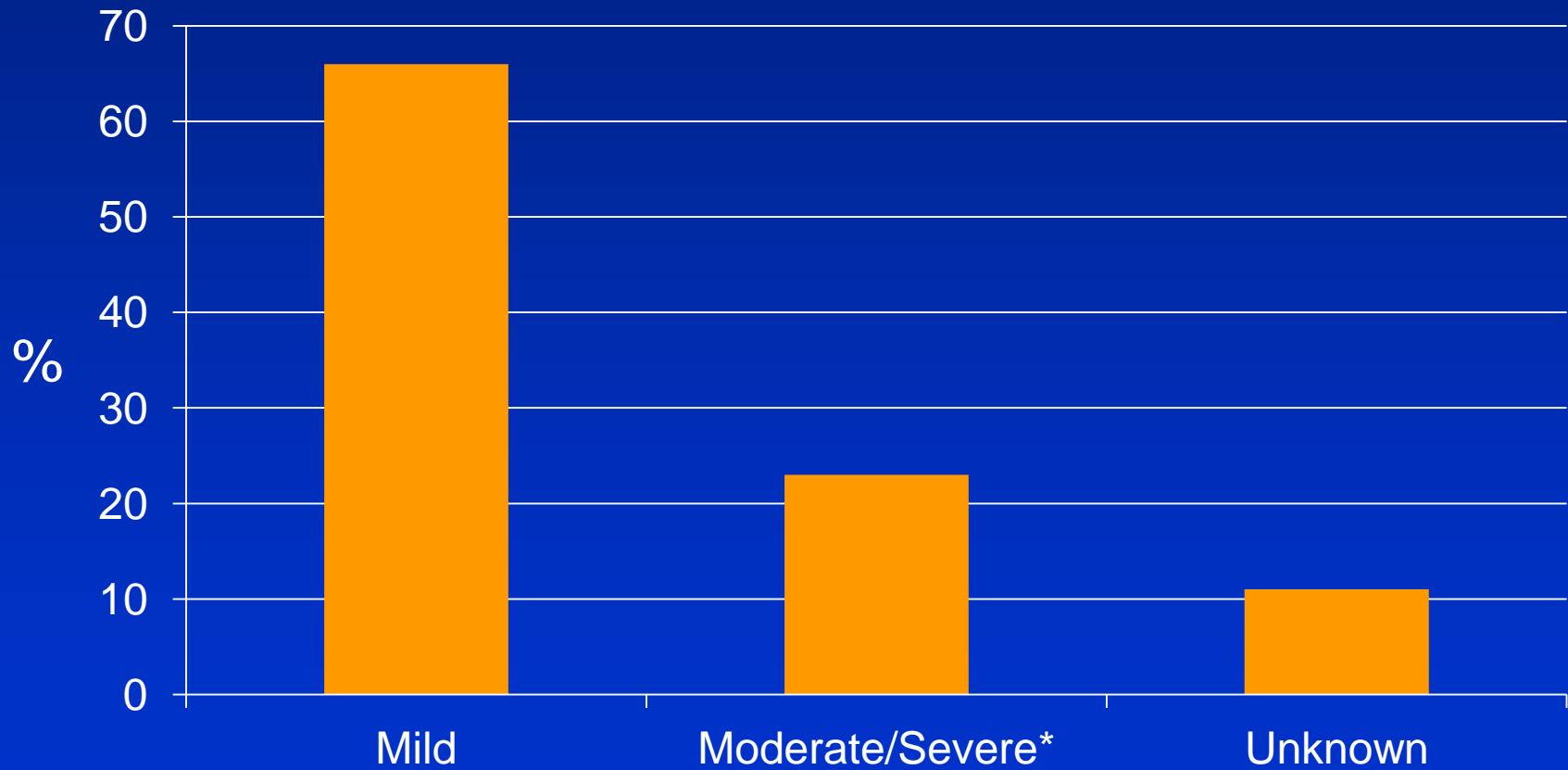
Lifetime History of TBI



Number of TBIs in Lifetime



Severity of Worst TBI



* unconsciousness >30 minutes

Timing of TBI and homelessness



TBI - Associations

- History of TBI is strongly associated with:
 - Seizures
 - Mental health problems
 - Drug and alcohol problems
 - Worse mental health
 - Worse physical health

History of TBI is a Predictor of Future Risk

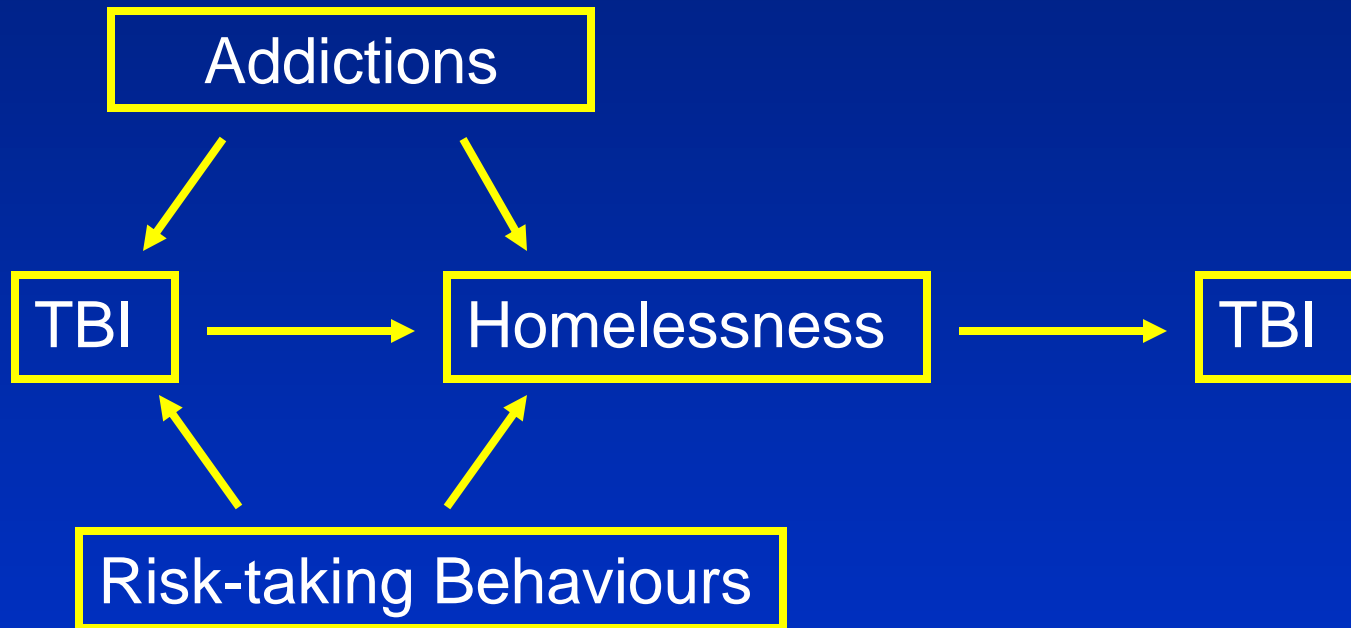
- Health and Housing in Transition (HHiT) study
- Longitudinal study of homeless and vulnerably housed adults
- Vancouver, Toronto, Ottawa
- Baseline: Self-reported history of TBI
- 964 participants with 1-year follow-up

History of TBI is a Predictor of Future Risk

- Emergency Department Visit: Odds Ratio 1.5
- Arrest and/or Incarceration: Odds Ratio 1.8
- Physical Assault: Odds Ratio 2.8

- Adjusted for age, sex, city, immigration, ethnicity, education, lifetime years of homelessness, housing status (homeless vs. vulnerably housed), physical health, mental health, alcohol use, drug use, and having a primary care provider

TBI and Homelessness



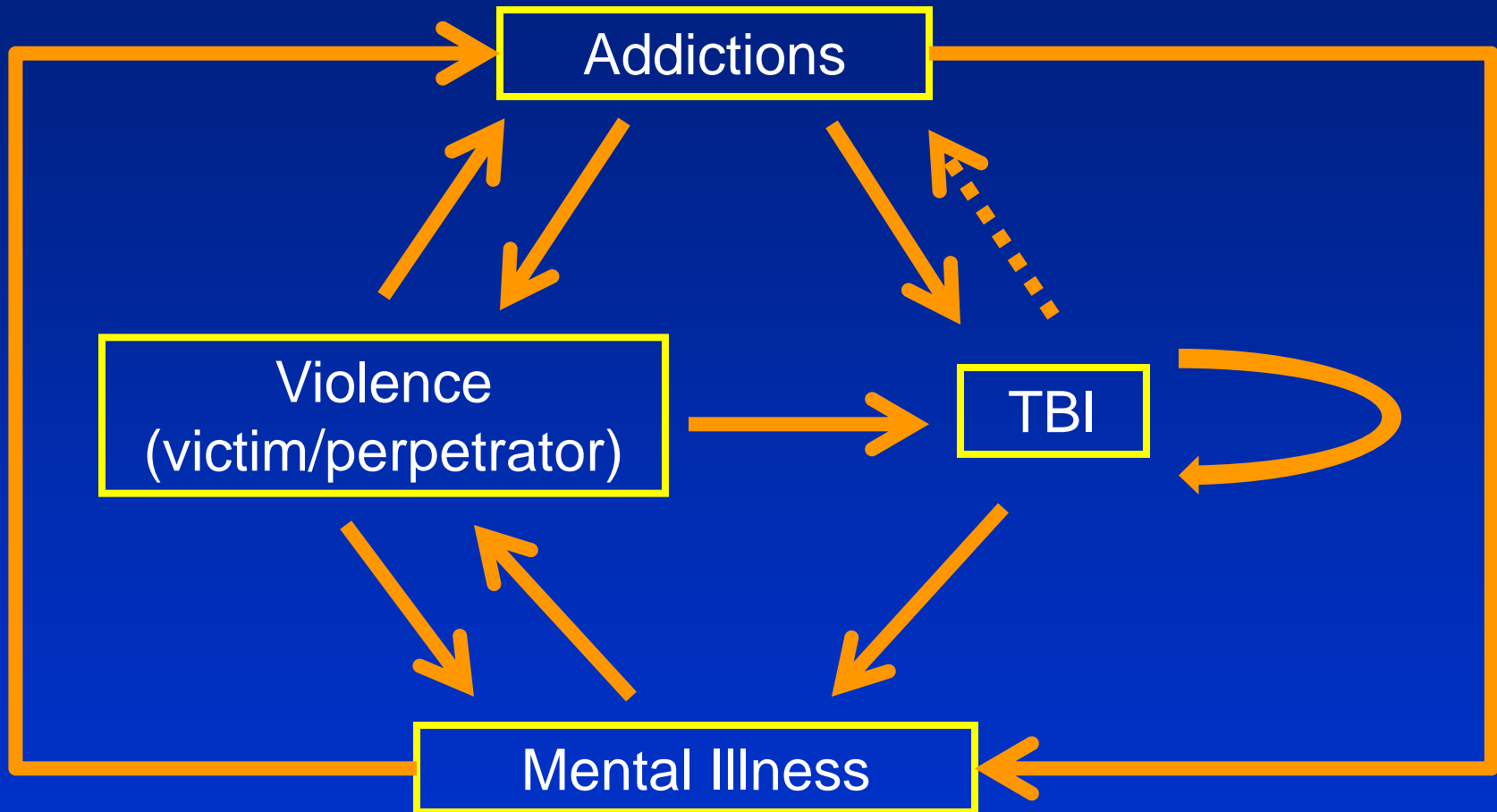
Cognitive Rehabilitation after TBI

- Interventions for attention, communication skills, and executive functioning after TBI
- Comprehensive-holistic rehabilitation after TBI

- Cicerone KD, Arch Phys Med Rehabil. 2009 Nov;90(11):S52-9.

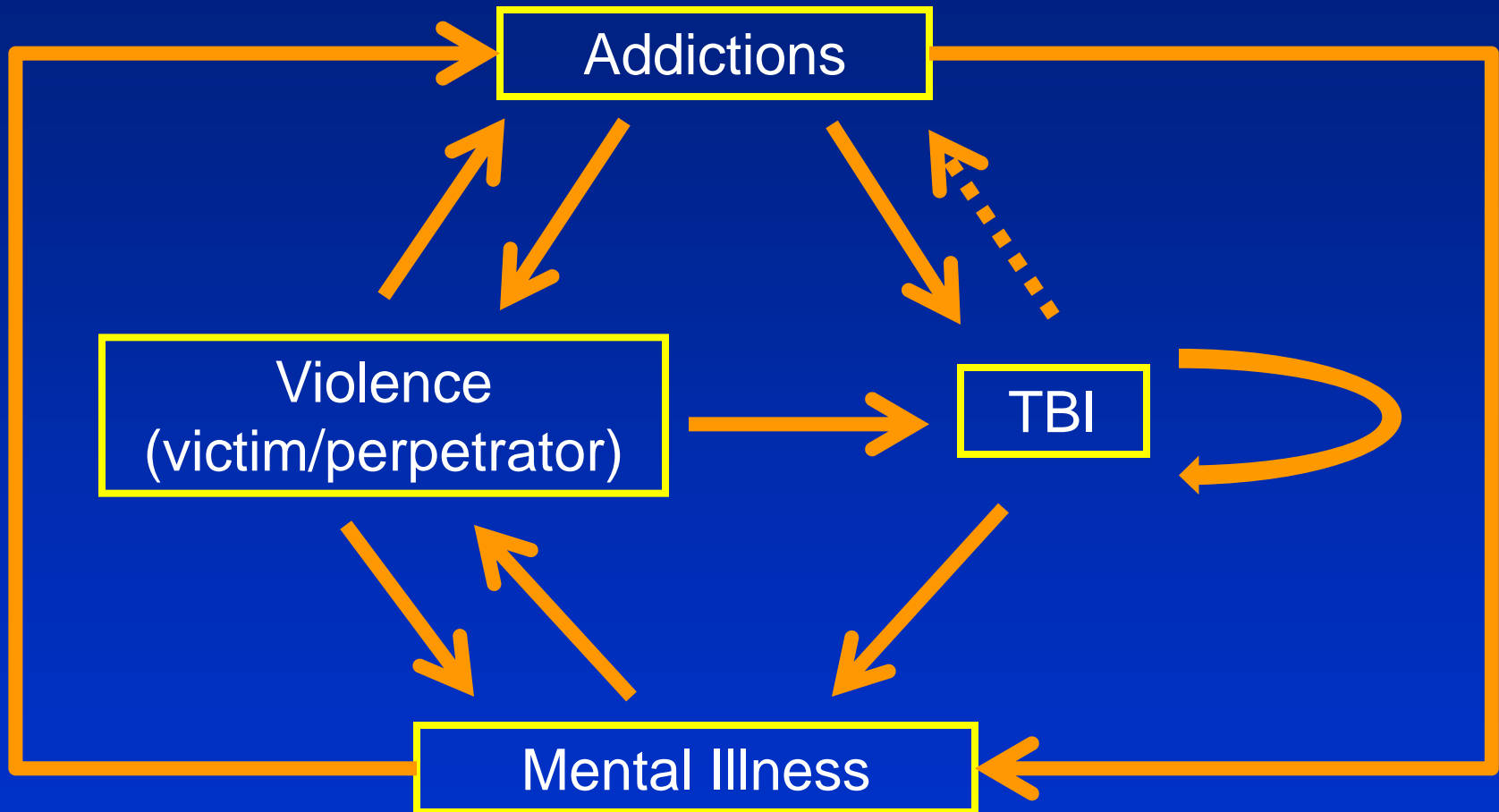
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- Which individuals can be most effectively targeted for intervention?
 - How to identify?
 - When to identify?



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