NASHIA Mission

“To assist State governments in promoting partnerships and building systems to meet the needs of individuals with brain injury and their families.”
The Role of NASHIA & State Government

- Only organization to represent State employees working to support individuals with brain injury and their families.
- Formed in 1989

Membership:
- State employees in various agencies
  - Public Health, Vocational Rehabilitation, Medicaid, Mental Health, Education, Developmental Disabilities, Aging
- Advocacy organizations
- Providers
- Consumers
What We Do

- **Advocacy**
  - Funding: TBI Act programs (ACL/CDC); NIDILRR Research; DOD Research; and VA rehabilitation programs
  - Legislation: TBI Act; Juvenile Justice and Delinquency Prevention Act; Older Americans Act; Violence Against Women Act; and more
  - Congressional TBI Taskforce and March TBI Awareness Day

- **Training**
  - Webinars: Professional Ethics; Person Centered Planning; Partnerships with Protection & Advocacy; and Elder Falls/Brain Injury Series
  - Annual SOS Conference

- **Technical Assistance**
  - State TA: State Plans; State System Development; Dedicated Funding Sources/Trust Funds; Registries; Medicaid Waivers; Brain Injury Council Development; Advocacy; and more
  - Federal TA: HRSA TBI Program TAC; ACL National Center for Advancing Person Centered Planning Systems (NCAPPS)
What is a TBI?

- A Traumatic Brain Injury (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.
- Traumatic brain injury (TBI) is a major cause of death and disability in the United States. TBIs contribute to about 30% of all injury deaths.
- Every day, 153 people in the United States die from injuries that include TBI.
- In 2013, about 2.8 million TBI-related emergency department (ED) visits, hospitalizations, and deaths occurred in the United States.
  - TBI contributed to the deaths of nearly 50,000 people.
  - TBI was a diagnosis in more than 282,000 hospitalizations and 2.5 million ED visits. These consisted of TBI alone or TBI in combination with other injuries.
- Those who survive a TBI can face effects that last a few days, or the rest of their lives.
  - Effects of TBI can include impaired thinking or memory, movement, sensation (e.g., vision or hearing), or emotional functioning (e.g., personality changes, depression). These issues not only affect individuals but can have lasting effects on families and communities.
Rates of TBI

Over the span of six years (2007-2013), while rates of TBI-related ED visits increased by 47%, hospitalization rates decreased by 2.5% and death rates decreased by 5%. = More individuals aging with brain injury!
Falls are the Leading Cause of TBI

In 2013, falls were the leading cause of TBI. Falls accounted for 47% of all TBI-related ED visits, hospitalizations, and deaths in the United States. Falls disproportionately affect the youngest and oldest age groups:

- More than half (54%) of TBI-related ED visits hospitalizations, and deaths among children 0 to 14 years were caused by falls.
- Nearly 4 in 5 (79%) TBI-related ED visits, hospitalizations, and deaths in adults aged 65 and older were caused by falls.

Among TBI-related deaths in 2013:

- Rates were highest for persons 75 years of age and older.
- Falls were the leading cause of death for persons 65 years of age or older.

Among non-fatal TBI-related injuries in 2013:

- Hospitalization rates were highest among persons 75 years of age and older.
- Rates of ED visits were highest for persons 75 years of age and older and children 0-4 years of age.
- Falls were the leading cause of TBI-related ED visits for all but one age group.
ED visits increased by 70% for Older Adults between 2001 and 2010. Falls accounted for over 50% of the increase in TBI-related ED visits.

*Graph: Rates of TBI-related Hospitalizations by Age Group — United States, 2001–2010*
Older Adult Falls and Brain Injury

- Older adults with fall-related TBI have more co-morbidities than those with motor vehicle crash TBI
  - Higher incident among those with dementia, depression, and Parkinson’s disease

- Appropriate screening, identification and treatment is imperative to ensure against incorrect diagnosis and subsequent prescribing that exacerbates the injury

- States like Iowa, Massachusetts and Nebraska have prioritized this population

- NASHIA has been collaborating with NCOA to provide training opportunities broadly
Aging with Brain Injury (As Opposed to Injuries that Occur Later in Life)

- Where individuals with TBI would not have survived decades ago, due to state of the art protective equipment and medical innovations these individuals not only survive their injury but age in society.

- Many of these individuals are in need of similar services and supports as those in the broader disability community (housing, transportation, enhanced medical supports, etc).

- Differing from the broader disabilities community, this population often has significantly increased rates of co-occurring behavioral health and substance abuse issues.

- More data on numbers living with TBI, ages and resources sought should be collected with CDC Concussion Surveillance System post TBI Act reauthorization.
Behavioral Health and TBI

- Depression is frequent following TBI; depressed clients with TBI more likely suicidal.
- Higher rates of anxiety disorders (generalized, OCD and PTSD)
- Higher rates of psychosis among persons with TBI
- Some studies have found higher rates of personality disorders among persons with TBI.
- Childhood TBI doubles likelihood of psychiatric disorder by early adulthood.

Why TBI facilitates behavioral problems:
- Pathophysiology--structural damage from TBI disinhibits behavior
- Neurobehavioral--TBI changes how we view rewards and consequences
- Developmental--early life TBI predisposes a person to behavioral problems
Seventy-two percent of participants in treatment for dually diagnosed substance use disorders and severe mental illness reported a history of at least one TBI. Participants with TBI had greater morbidity as reflected in more complex psychiatric diagnoses and greater likelihood of being diagnosed with an Axis II personality disorder.

Dr. John Corrigan (Pub. 2009)
Substance Abuse, Mental Health and TBI
Over 12 months in KY (N=7932)
Substance Abuse and Brain Injury

Risky Behavior Can Result in TBI

- Substance use, misuse or abuse is common pre-injury. And, this increases risk-taking behaviors linked to sustaining a TBI.

Opioids Commonly Prescribed for TBI

- Chronic pain is a common co-morbidity to a TBI & opioids commonly used to treat this pain.
- Pain is one of the most common comorbid health issues for patients sustaining at TBI.
- Chronic pain includes back, neck, and joint pain as well as headaches.
- For military members chronic pain often presents as part of a clinical triad - TBI, pain, and psychological issues like depression or anxiety.
- Chronic pain is more prevalent in patients following a mild TBI versus a moderate or severe TBI.
- Between 70-80% of patients who have sustained a TBI are discharged with a prescription for an opioid.
- Substance use, misuse or abuse may affect course and consequences of TBI rehabilitation and long term outcomes.
- Substance use, misuse, and abuse may increase over time as a result of TBI given consequences of injury - social isolation, increased impulsivity and irritability, and cognitive limitations.
Substance Abuse and Brain Injury

ABI is a Potential Result of Opioid Overdose

- Lack of oxygen resulting from overdose can result in an acquired brain injury
- Drugs such as naloxone make it possible for individuals who overdose to survive; however, they may have received a cognitive impairment due to lack of oxygen during the overdose

Prognosis of TBI and Substance Use

- Substance use, misuse or abuse may affect course and consequences of TBI rehabilitation and long term outcomes.
- Substance use, misuse, and abuse may increase over time as a result of TBI given consequences of injury - social isolation, increased impulsivity and irritability, and cognitive limitations.
- Individuals with TBI are more likely to prematurely end treatment, often characterized as non-compliant.
Training and Education Essential

NASHIA (States) Provides Opportunities for Training to Recognize Symptoms and Information and Referral Services and Supports

- ED Departments/First Responders
- Mental Health providers
- Primary Care Providers
- Caregivers
- Area Agencies on Aging
Partnerships with NCMHA

- Collaboration with Member Organizations (Ex. NASMHPD, NASUAD, NCOA)
  - Joint Conference Participation, Joint Webinars, Federally Funded Papers, and Teaming Opportunities for Federal Grants/Contracts

- Fact Sheets
  - Opioid Use and TBI Fact Sheet

- Joint Congressional Advocacy
  - Congressional Briefings or joint awareness through materials sharing
    - Senate Select Committee on Aging/Congressional TBI Taskforce briefing with NCOA on Aging with Brain Injury
  - Legislation (Older Americans Act expires FY19, Funding, Reports or Attn to aging with MH/BI)
Questions? Discussion

Rebeccah Wolfkiel
execdirector@nashia.org
202-681-7840