Everyday in Utah at least one person dies each day, six people are hospitalized and 59 people visit the emergency department due to a Traumatic Brain Injury (TBI).

TBIs can have a dramatic impact on a person’s ability to lead an active, fulfilling life. Estimates indicate about 2% of Utah’s population live with the effects of TBI. TBIs can affect an individual’s ability to work, their short- and long-term memory, vision, sleep, mood, movement, ability to perform activities of daily living, etc. Once we understand the causes of TBIs better, we can work to prevent TBIs before they occur and minimize the long term effects for those who live with TBI.

Allen was homeless when he came to us. As a result of playing sports in his youth and several fights, he had received many TBIs and felt hopeless. He really needed services to help him. Because of the Fund, Allen received housing and was set up on Social Security. He goes to the gym to regain his physical and mental health and is working to strengthen his relationship with his wife and children.
Most TBIs occur due to falls (53%), followed by transportation (22%), and sports or recreation (16%) (Figure 3).

The cost of TBI hospital charges in Utah were nearly $118 million dollars in 2014 (Figure 4).

Robert sustained a TBI due to a motor vehicle accident. He suffered memory loss and organization problems because of his TBI and misplaced court information for unpaid traffic tickets. Advocates worked with the judge who decided to throw out the warrants and waive the fines. His driver license was revoked and his daughter took his vehicle away, but we were able to obtain subsidized housing and Social Security. His son moved in to help him and that seems to be helpful. He was referred for therapy but has some medical issues with seizures which interfered with his recovery. We will continue followup and work with him and his family to get the assistance he needs.
Overview of the TBI Fund
The TBI Fund was established in 2008 by the Utah state legislature as a restricted special revenue to educate the general public and professionals on treatment and prevention of TBI; provide access to evaluations and coordinate short-term care to assist an individual in identification of services or support needs, resources, and benefits for which the individual may be eligible; and develop and support an information referral system for persons with a TBI and their families.

The Fund is administered under the direction of the Utah Department of Health through the Violence and Injury Prevention Program (VIPP).

In SFY 2020 the TBI Fund received $200,000 in appropriations. The COVID-19 pandemic greatly impacted the utilization of the TBI Fund, but we were able to maintain the required 50% of direct services. The TBI Fund is payor of last resort.

COVID-19 Impact
The COVID-19 pandemic had a negative impact on the TBI Fund. Due to COVID-19, providers were unable to provide community training as expected which resulted in a decrease in training and outreach. COVID-19 greatly impacted the TBI population, due to the fear and isolation associated with the pandemic. A majority of those who receive support from the TBI Fund didn't reach out for help at first. Their focus was on their health and isolation requirements.

Because of the pandemic, the Brain Injury Alliance of Utah (BIAU) downsized leadership and staff. Many changes propelled by the pandemic dramatically improved operations at the BIAU. Their annual conference was a great success and held completely online. That success lead them to improve online tools and a transition to a fully remote team. They now provide care to more individuals and feel confident in their ability to continue to grow and provide patient-centered care.

All contractors have developed more virtual ways to reach out and provide services. As the vaccine became more widely available, more people started to reach out and contractors have seen a steady increase in client cases. They also developed ways to provide training and outreach virtually.

For most of the year, providers who give neuro-psychological assessments and MRIs didn't provide in-person services which made it difficult for patients to access those services.
TBI Fund Accomplishments
- Ninety-nine people received a free intake assessment which includes a self-assessment looks for a lifetime history of TBI.
- Contractors provided resource facilitation services to 48 individuals with TBI and their families and connected them to more than 300 community resources.
- Resource facilitators provided more than 818 hours of resource facilitation services.
- Intake interviews were provided for an additional six people who did not qualify for services because their brain injury fell into the category of acquired as a result of West Nile virus, encephalitis, or anoxia, etc., or none at all.
- Fifteen people were given neuro-psychological exams to identify barriers and connect them to resources.

Public Education and Outreach
- Facebooks ads were posted on a regular bases to promote the TBI Fund
- The TBI Fund was promoted during the BIAU annual conference in October. About 500 people attended.
- Contractors promoted the TBI Fund on their website.
- Attended virtual conferences to promote the TBI Fund and TBI education.

Professional Training
- A total of 18 training events were held by the TBI Fund contractors. Approximately 150 individuals were reached.
- Two Certified Brain Injury Specialist (CBIS) trainings resulted in the certifications of eight professionals.
- Fourteen individuals were certified as a result of two Brain Injury Fundamenta’s training by the Brain Injury Association of America.

Prevention
The TBI Fund allocates money for fall prevention because older adult falls are the leading cause of TBI hospitalizations in Utah. The Fund contracts with four local agencies to implement the Stepping On or Tai-Chi programs, evidence-based falls prevention programs.

The Stepping On program is endorsed by the Centers for Disease Control and Prevention (CDC) to help prevent older adult falls. The program has shown a 31% reduction in falls. Subjects covered in the workshops include exercise, home and community safety, vision, medication review, and safe footwear. Outcomes from the Stepping On program indicate older adults reduced the fear of falls, increased activity, and are more comfortable in talking with their healthcare provider about falls.

The Tai-Chi for Arthritis program uses Tai Chi’s sun style to improve relaxation, and balance. It’s also easy for older adults to use. Movements are focused on left and right sides along with forward and backward turns to improve mobility and offer a variety of combinations. It is a 16-week program of weekly hour long sessions. Classes are conducted by current Tai Chi board-certified instructors. Tai Chi has been shown to be effective in a decrease falls and the risk for falls.

Because both Stepping On and Tai-Chi are taught in-person, they needed to adapt to virtual programs. The Tai-Chi program was quick to develop virtual classes, but because of the nature of the Stepping On program it took much longer.

The programs were implemented in various local health department jurisdictions including Tooele, Central, and Utah, and the Five County.

Healey's Story
Healey sustained a TBI in a motor vehicle accident. He reached out to the Fun in need of services. He was able to obtain Medicaid and participates in Open Doors rapid rehousing program as a result of the work of the TBI Fund. As of the date of this report, he was no longer homeless.
Kevin's Story

Kevin had a cancerous tumor surgically removed in 2007. After the surgery he had experienced impulsivity problems and a decrease in executive functions. He had an incident in the summer resulting in an extended hospitalization. After his release he and his family reached out to the TBI Fund for help. He was connected to a physician who provided him with a neuro-psychological exam which highlighted barriers. The TBI Fund provider also gave his family many hours of training to help them learn how to work with him and his injury. At the time of this report Kevin has been able to maintain his job and his family has a greater understanding of his injury.

Needs and Concerns Documented by Contractors

- It is difficult to staff resource facilitator positions due to the specific knowledge needed for these positions.
- Contractors find it hard to obtain the required brain injury documentation needed. Often TBI goes undiagnosed for many years.
- TBI survivors are overwhelmed with needs and underserved with resources.
- Risk of suicide increases among TBI survivors due to isolation and lack of support, combined with impulsivity.
- There is little awareness about TBI and the Fund among the increased number of domestic violence individuals who seek help.
- COVID-19 required providers to move to virtual programs which required system changes.
- There is a need to reach more hospital/rehabilitation discharge workers to provide them with information on the TBI Fund for the person and family to access once they are released home.