MINDSOURCE – Brain Injury Network and Colorado Brain Injury Trust Fund Board Report to the Joint Budget Committee and Health and Human Services Committees July 1, 2022 – June 30, 2023

This report is provided in response to the requirement set forth in Section 26-1-310, C.R.S., for the Colorado Brain Injury Trust Fund Board to "provide a report...on the operations of the trust fund, the money expended, the number of individuals with brain injuries offered services, the research grants awarded and the progress on such grants, and the educational information provided pursuant to this article 1."

Overview

MINDSOURCE – Brain Injury Network (MINDSOURCE) was created in Title 26, Article 1, Part 3 of the Colorado Revised Statutes to be operated by the Colorado Department of Human Services (CDHS) and is housed within the Office of Adult, Aging, and Disability Services. The purpose of MINDSOURCE is to improve the lives of Colorado residents who have survived brain injuries. This statute created the Colorado Brain Injury Trust Fund (Trust Fund) to finance MINDSOURCE activities and the Trust Fund Board (Board) to advise the program on Trust Fund operations. MINDSOURCE staff work closely with the Board to perform the following functions for the program: financial management, policy development, program development and implementation, contract management, program monitoring, administrative support, website maintenance, public assistance and information, reporting, marketing, and public relations.

Revenue and Expenditures

MINDSOURCE receives revenue in the Trust Fund from surcharges assessed for convictions of driving under the influence of drugs or alcohol (DUI), driving while ability is impaired (DWAI), speeding, and riding a motorcycle or motorized bicycle without a helmet (for youth under the age of 18).

In FY 2022-23, the total revenue for MINDSOURCE was \$2,345,402, \$1,895,402 of which was added to the Trust Fund and \$450,000 General Fund appropriated. The program expended \$2,264,097 in FY 2022-23. The following table shows the breakdown of Expenditures by Program Type.

MINDSOURCE Cash Fund & General Fund Expenditures by Program Type Fiscal Year 2022-23				
Brain Injury Services	Research Grants	Education/ Community	Administrative Costs &	Total
		Grants	In-Directs	
\$1,603,002	\$284,273	\$80,701	\$296,121	\$2,264,097

Services

Every five years MINDSOURCE issues a competitive request for proposals for an entity to provide outreach, intake and eligibility, case management services (including resource navigation and self-management), and education consultation (for youth 0-21). MINDSOURCE currently has a contract for the five year period through FY 2025-26 with the Brain Injury Alliance of Colorado (BIAC) for these services. In addition, MINDSOURCE has an interagency agreement with the Colorado Department of Education (CDE) to build the capacity of school and community providers to better support and serve children/youth with brain injury. Please see the addendum for detailed information on the services and educational information provided through BIAC and CDE in FY 2022-23.

Research

MINDSOURCE awards grants to support research in Colorado related to the treatment and understanding of brain injuries. The Research Program released a request for proposals (RFP) for new projects which began on 7/1/22. CDHS ensures an equitable procurement process by soliciting for competitive bids, posting on a public website, and securing diverse evaluators without conflicts of interest. Equity, diversity, and inclusion principles are built into the RFP as well as the resulting contracts with the program. Five applications were received with two applicants awarded funds after a formal evaluation process. Research is funded at two levels: Type I (up to \$50,000/year for two years) and Type II (up to \$150,000/year for two years). Additionally, the research program released supplemental funds for projects by researchers from groups that have been under-represented in research. A project was awarded for calendar year 2023. Please see the addendum for detailed information on the research grants awarded and the progress on such grants in FY 2022-23.

Community Grants

MINDSOURCE awards grants to community agencies for projects that promote the awareness and education of brain injury. Four grants were awarded to the following community agencies for 18-month projects, beginning on January 1, 2022 and ending June 30, 2023:

- Center Toward Self Reliance
- Lit-Up My Mind
- Brain Injury Hope Foundation
- Brain Injury Alliance of Colorado

Addendum

Services

Brain Injury Alliance of Colorado (BIAC)

During FY 2022-23, 903 adults and 72 youth received support from BIAC services as described below:

- Resource Navigation is intended to be quick and responsive support provided via phone, email, or in person. Examples of resource navigation include, but are not limited to: finding medical providers, completing paperwork, securing benefits, understanding brain injury, and connecting to community resources.
- Self-management/Skill-building is a program designed and available for survivors of brain injury who want to invest time in improving their skills in specific areas that can be challenging after a brain injury. Participants meet with their Brain Injury Advisor for an average of 4 hours per month to work on skill-building. Areas of focus for self-management include Home Skills, Personal Skills, and Vocational Skills. Participants have regular homework outside of meetings with their Advisor that is reviewed each time the participants and Advisors meet. BIAC Advisors work one-on-one with each participant to assess individual strengths and weaknesses, identify natural supports in the participant's life, and develop strategies for building specific skills with the goal of greater self-sufficiency.
- Youth Education Consultation. After a brain injury, children and youth may have challenges in the classroom and families may need support navigating the education system. BIAC has a Youth Education Liaison specialist on staff to provide consultation and support services to children and youth, ages 0-21. Consultation and support may include, but are not limited to, the following: providing parent/guardian education about services and programming options available in schools, assisting in the partnership between parents and schools, educating parents and school teams about how a student has been impacted by the individual's brain injury, collaborating with schools on intervention planning, attending transition, individual education planning, multi-tier support systems, other planning meetings, partnering with hospitals to help with transition to school, and any other student specific educational needs/concerns/questions.
- Classes & Workshops. BIAC offered 145 classes and workshops with a combined total attendance of 1,055. Classes and workshops ranged in topics. FY 2022-23 topics included: adaptive yoga, art therapy, comedy writing, SAIL (Self Advocacy for an Independent Life), grief and loss, mindful brain practices, music therapy, poetry, social wellness. Classes and workshops were either held remotely or in a hybrid environment. Remote and hybrid activities reduce barriers for clients with transportation limitations to be able to participate.
- Outreach. MINDSOURCE contracts with BIAC to provide training and outreach. During FY 22-23, BIAC coordinated 157 outreach and training activities with approximately 2,314 attendees. The following is the breakdown of locations for outreach efforts:
 - o 49% Denver Metro
 - o 2% Central Mountain Region
 - o 22% Southern CO
 - o 8% Northern CO
 - o 12% Western Slope
 - o 7% Statewide

Outreach typically consists of meeting with community providers to share information about services and to encourage referrals to brain injury supports and services. Training and capacity building efforts support the development and strengthening of skills, processes, and resources for organizations and communities to serve survivors. BIAC collects post data about the educational training provided to better understand effectiveness. During this reporting period:

• 97% of participants reported that their understanding of what a brain injury is increased

- 91% of participants strongly agreed or agreed that their understanding of how to support people with brain injuries increased.
- 91% of participants strongly agreed or agreed that their knowledge of resources available to survivors of a brain injury increased.

Colorado Department of Education (CDE)

As indicated above, MINDSOURCE has an interagency agreement with CDE. The focus of the CDE interagency agreement is to build the capacity of the school districts, Board of Cooperative Educational Services (BOCES), Charter School Institutes (CSI) personnel and community providers to better support and serve children/youth with a brain injury. This past year activities completed by CDE that support this mission include:

- Training of BrainSTEPS (Strategies Teaching Educators, Parents, & Students) Colorado teams to support children/youth with moderate to severe acquired brain injury, as well as individuals with protracted recovery from concussion (mTBI). During this fiscal year CDE hosted a two-day BrainSTEPS CO New Team/New Team Member in-person training. This prepared two additional BrainSTEPS CO Brain Injury Consulting Teams and 56 new team members to add to existing teams to keep them adequately staffed. There are now 26 Districts and 4 BOCES Level BrainSTEPS CO Teams with 220 team members serving approximately 60 districts in Colorado (covering approximately 70-75% of the Colorado student population).
- Advancing the skills of existing BrainSTEPS CO team members through a one-day Update Training in February with two national speakers.
- Furthering the skills of BrainSTEPS CO team leaders through a specific Team Leader Training (each BrainSTEPS CO team has at least one team leader).
- Training Return to Learn Concussion Management Teams (CMTs) in schools throughout the state via the BrainSTEPS CO online Return to Return to Learn CMT training course. Two-hundred and eighteen schools in Colorado have registered Return to Learn CMTs members, and 485 school personnel have completed the Return to Learn CMT training.
- In March a specific CMT training for all health aides within the school building was created. This training was simplified, and only discussed the main points of concussions. The training was hosted on a CDE free platform that was easily accessible to all schools within Colorado. 76 health aides and school nurses have completed this training.
- Currently work is being done to create a training module specific to school counselors and their role in helping support students with concussions. This should be completed 09/2023.
- Hosting monthly Return to Learn CMT Community of Practice (CoP) online webinars/ meetings featuring guest speakers who are experts in concussion, to keep the knowledge of individuals who have completed the CMT training up-to-date.
- Providing bi-monthly Concussion Action Team webinars/meetings to keep district personnel up-to-date on return to learn concussion information. This allows a place for school personnel to ask questions on policy and procedure.
- Holding monthly virtual meetings with BrainSTEPS CO Team Leaders to disseminate information and answer questions regarding brain injury, consultation, training, etc.
- Supporting BrainSTEPS CO team members through consultation and mentoring.
- Providing consultation to school personnel and parents with questions regarding brain injury.
- During the month of March 2023, Brain Injury Awareness Month, A webinar that all school personnel were invited to attend was held. This 2-hour informational webinar had 95 participants.
- Managing the Traumatic Brain Injury (TBI) and Concussion Action Team listservs to disseminate information on a regular basis.
- Disseminating brain injury information at state conferences and professional meetings.
- Managing the Colorado Kids with Brain Injury (www.cokidswithbraininjury.com) and CDE brain injury (http://www.cde.state.co.us/healthandwellness/braininjury) websites.

Additionally, MINDSOURCE partners with CDHS Offices, Divisions and Programs as well as other state agencies by providing training on identification of brain injury and guidance for supporting individuals with brain injury in their respective systems to help them achieve greater outcomes.

Research

Below are summaries provided to MINDSOURCE by the grantees from FY 2022-23 that include a synopsis of the grantees purpose and progress. Each of these projects were initiated after a competitive RFP process. CDHS ensures equity by soliciting for competitive bids, posting on a public website, and securing diverse evaluators without conflicts of interest. Equity, diversity, and inclusion principles are built into the RFP as well as the resulting contracts with the program.

Title: *University of Colorado – Restoring Efficient Sleep after TBI (CU-REST)*

Principal Investigator: Lisa Brenner **Institution:** University of Colorado

<u>Aim 1</u>: Evaluate the efficacy (i.e., how well the treatment works) of guided Path to Better Sleep among those with moderate to severe traumatic brain injury (TBI) and insomnia.

<u>Progress</u>: 23 new participants were recruited and enrolled 2/28/2023-7/17/2023. Data collection is ongoing for those newly enrolled, as well as the other participants previously enrolled.

<u>Exploratory Aim 1</u>: Examine discrepancies between self-reported and objective actigraphy-derived insomnia symptoms (i.e., total sleep time, sleep onset latency, waking after sleep onset, sleep efficiency) among those randomized to guided Path to Better Sleep, during the first and last intervention weeks. <u>Progress</u>: Data collection via actigraphy devices is ongoing for participants randomized to the guided Path to Better Sleep treatment arm. Data from returned actigraphy devices are being downloaded and visually checked periodically by the study team. Data analysis has not yet begun.

<u>Exploratory Aim 2</u>: Describe the nature (e.g., prompts or reminders to complete modules, help or support using the program and/or completing the modules) and duration (i.e., time) of guidance required by participants in the treatment arm to complete Path to Better Sleep.

<u>Progress</u>: Following each contact the study clinician has with the participant (e.g., both scheduled visits initiated by the study team and unscheduled calls initiated by the participant), a Clinician Tracking Form is completed to document the encounter and track the nature and duration of the guidance provided. Data analysis has not yet begun.

Title: Risk Profiles for Posttraumatic Psychopathology Following Traumatic Brain Injury (TBI)

Principal Investigator: James Graham **Institution:** Colorado State University

Progress: Many individuals living with brain injury experience mental health challenges, including depression, anxiety, substance abuse, and sometimes severe psychiatric disorders, in the months and years following injury. This project aims to 1) assess the current landscape for mental health awareness, protocols, and resources following brain injury and 2) use electronic medical records and claims data to develop a clinically friendly algorithm for estimating risk of significant mental health challenges at hospital discharge. To date, the team has had several conversations with both hospital-based medical professionals and individuals from the community to understand the perceived barriers to accessing appropriate mental health monitoring and/or services following hospitalization for TBI. In year 2, the team will synthesize the views of key stakeholders and develop a practical points-based risk tool built on established statistical risk-modeling protocols.

Title: Vocational Rehabilitation for Coloradans Living with Traumatic Brain Injury

Principal Investigator: Cristina Parsons **Institution:** Colorado State University

Progress: Individuals with brain injuries experience higher rates of unemployment than people with other disabilities. In Colorado, access to vocational rehabilitation services, intended to support people with disabilities in preparing for and obtaining employment, is problematic for those living with brain injury. The purpose of this study is to assess how Coloradans with traumatic brain injury (TBI) encounter vocational rehabilitation services as they work towards employment. In the 2021 program year, only 125 of the 5,320 open vocational rehabilitation cases were individuals with TBI. These individuals were mostly white males in their mid-thirties. Almost half were self-referred to vocational rehabilitation. Only about one third of these individuals were employed when they exited vocational rehabilitation. The next steps are to examine the services received and determine what factors influence employment outcomes. Findings from this study will inform how services are coordinated and how to address system gaps to better meet the needs of Coloradans with brain injury.