Colorado Traumatic Brain Injury Trust Fund Program
Report to the Legislature

Reporting Period
July 1, 2016 – June 30, 2017

Brain Injury Program
Colorado Department of Human Services
Division of Vocational Rehabilitation
Judy L. Dettmer, Director
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Program Overview
The Colorado Brain Injury Program (CBIP) was created by Title 26, Article 1, Part 3 of the Colorado Revised Statutes, to improve the lives of Colorado residents who have survived traumatic brain injuries (TBI). This statute created the Colorado TBI Trust Fund (Trust Fund) to finance program activities and the Trust Fund Board to advise the program on Trust Fund operations. The board is administered within the Colorado Department of Human Services (CDHS). Three board members are designated in statute and 10 members are appointed by the Governor with the consent of the Senate. Please see below for a list of board members. The Board has established three ongoing committees to assist staff in policy-setting of program goals and strategic planning for the Trust Fund: Program Evaluation and Research, Revenue, and Vision and Outreach.

Trust Fund Board of Directors

<table>
<thead>
<tr>
<th>Name</th>
<th>Employment/Affiliation</th>
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<tbody>
<tr>
<td>Brittany Bell</td>
<td>The Sturdy Life</td>
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<tr>
<td>Theresa Chase, PhD</td>
<td>Colorado Mesa University</td>
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<tr>
<td>Indira Gujral, PhD</td>
<td>Boulder County Public Health</td>
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<tr>
<td>Sena Harjo</td>
<td>Clayton Early Learning Center</td>
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<tr>
<td>Catharine Johnston-Brooks, PhD</td>
<td>Denver Veterans Affairs Medical Center</td>
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<tr>
<td>Danny Mistry, MD</td>
<td>Western Orthopedics &amp; Sports Medicine, P.C.</td>
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<tr>
<td>Helen Morgan</td>
<td>Denver District Court</td>
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<td>Jennie Munthali</td>
<td>Colorado Department of Public Health and Environment</td>
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<tr>
<td>Gretchen Russo</td>
<td>Colorado Department of Human Services</td>
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<tr>
<td>Patrick Schniederjan, PhD</td>
<td>Mesa County Valley School District</td>
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<td>Wendy Turman</td>
<td>Frontside Analytics</td>
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<td>Melissa Winthers</td>
<td>Brain Injury Alliance of Colorado</td>
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<td>William Wosilius</td>
<td>Optiv Security</td>
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Program Administration
CDHS administers CBIP which was housed within the Division of Vocational Rehabilitation (DVR). During fiscal year (FY) 2016-17, the CO Legislature initiated a bill which resulted in DVR being moved to the CO Department of Labor and Employment. As a result, as of July 1, 2016, CBIP began reporting directly to the Office of Community Access and Independence. CBIP staff work closely with the Trust Fund 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
Through the TBI Trust Fund, CBIP receives revenue 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). The surcharges are $20.00 for DUI/DWAI convictions and $15.00 for speeding and helmet convictions.
Funds are divided across program areas based on the following percentage minimums: 55 percent for services, 25 percent for research, and 5 percent for education. This leaves 15 percent of funds available and flexible so that the Program Director and Board of Directors can determine program areas in need of an increase in funds during the year.

As of the time of this report which does not account for period 13 FY 2016-17, the Trust Fund received $2,151,783 and expended $2,053,705. CBIP had a spending authority of $2,800,000. Unexpended revenue goes into a reserve fund which is critical to maintain in order to help cover expenses when program revenue is less than anticipated. The current reserve fund is $1,660,102.

Services
Services Provided During the FY 2016-17 Reporting Period

Colorado Brain Injury Program
During FY 2015-16, CBIP issued a request for proposals (RFP) for services provided under the Trust Fund. Historically the CBIP contracted and partnered with several entities to deliver services. After careful review by the CBIP program staff and Board of Directors, it was determined that it would be much more efficient and less confusing for clients and stakeholders if all functions of the program were to be merged under one RFP. As a result, CBIP issued one RFP for the following functions: intake, eligibility, outreach, children and adult case management services and children/youth education consultation. The program received two applicants and, after an extensive review process involving five external reviewers, the contract was awarded to the Brain Injury Alliance of Colorado (BIAC). The new contract began July 1, 2016. In addition, CBIP has an interagency agreement with the Colorado Department of Education (CDE). The focus of the CDE interagency agreement is to build the capacity of school and community providers to better support and serve children/youth with brain injury.

During FY 2016-17, 684 adults applied for services and 814 adults received services during the fiscal year. Due to the change in vendor and because of a new model of services, the program was able to successfully eliminate the wait list for case management support, even though applications increased, for adults that had developed under the former contractor. However, given the growth of applications the program is again facing the potential of a wait list for case management support. At the current rate of growth the projected timeline for a wait list is January 2018. CBIP staff and contractor are working to mitigate this potential through a variety of measures.

As a result of the new RFP and contract for services, the program also contracted with BIAC to provide case management and education consultation to children and youth enrolled in the program. A total of 74 children/youth applied for services with a total of 64 being served during the fiscal year.

As indicated previously, CBIP has an interagency agreement with CDE. The focus of the CDE interagency agreement is to build the capacity of school and community providers to better support and serve children/youth with brain injury. CDE has been involved in many activities this year including: hosting Concussion Action Team (CAT) monthly meetings and managing the CAT listserv with over 382 members (CAT is comprised of school district personnel with a purpose of connecting school districts who are working on concussion issues and providing guidance on best practices); consulting with Brain Injury Teams in the schools, developing concussion management and Return to Activity protocol for non-athletes via a Concussion Committee; and developing a new model to support students with brain injury across the continuum of mild to severe brain injuries. This model includes the development of school-based Concussion Management Teams and the development of BrainSTEPS (Strategies Teaching Educators, Parents and students) teams to support youth with protracted recovery from concussion and those with moderate to severe brain injury. This program is modeled after a successful program in
Pennsylvania. During FY 2016-17 CDE hosted two, two day, statewide BrainSTEPS team trainings with thirteen school districts and 4 Boards of Cooperative Education Services (BOCES) (n=17) opting to enroll as BrainSTEPS teams.

Outreach:
CBIP contracts with BIAC to provide training and outreach. During FY 2016-17, BIAC coordinated 110 outreach activities across the state. Outreach typically consists of meeting with community providers to share information about services and encourage referrals to programs.

Research
CBIP awards grants to support research in Colorado related to the treatment and understanding of traumatic brain injuries. The Research Program has established the following three research priorities: basic science, clinical science and health services and outcome research. 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).

During FY 2016-17, three research grants came to a completion on June 30, 2017 with one researcher requesting a no-cost extension to June 30, 2018. In addition, five new grants were funded and will begin July 1, 2017 (four clinical science and one Health Services and Outcome grant). Expenditure for research grants totaled $573,750 for FY 2016-17. The research grants funded are summarized below.

Title: “Identifying TBI in School Children: A Case Study of the Educational Identification of TBI Process in Colorado”
Principal Investigator: Pat Sample, PhD
Institution: Colorado State University, Occupational Therapy Department
Award: $281,250
Status: Type II project began July 1, 2014 and with a one year no cost extension, ended June 30, 2017.

Title: “Outpatient Follow-up after ED Evaluation of Concussion in Children: Barriers, Facilitators and Benefits”
Principal Investigator: Dr. Joseph A. Grubenhoff
Institution: University of Colorado School of Medicine
Award: $119,595
Status: Type I project began July 1, 2015 and ended June 30, 2017

Title: “Optimized Sleep after Brain Injury: a Pilot Study”
Principal Investigator: Dr. Michael Makley
Institution: Craig Hospital
Award: $300,000
Status: Type II project began January 1, 2016 and ended June 30, 2017

Title: “Fast MRI for Young Children with TBI”
Principal Investigator: Dr. Daniel Lindberg
Institution: University of Colorado
Award: $375,000
Status: Type II project began July 1, 2015 and granted a one year no cost extension so now will end June 30, 2018

CBIP released a competitive request for proposals (RFP) in FY 2016-17. 10 Researchers submitted applications, nine clinical and one health services and outcomes. Five grants were awarded, four clinical and one health services and outcomes research. The following applicants were awarded:
**Clinical Science:**

**Title:** “Role and neuroanatomic basis of concurrent medical conditions in outcome following moderate to severe traumatic brain injury: Development of a TBI-specific index”

**Principal Investigator:** Robert G. Kowalski, MD, MS

**Institution:** Craig Hospital

**Award:** $348,498

**Status:** Type II project began July 1, 2017 and will end June 30, 2019

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**Title:** “Decision Making about Intracranial Pressure Monitoring in Children with TBI”

**Principal Investigator:** Tellen D. Bennett, MD, MS

**Institution:** University of Colorado, Denver

**Award:** $374,254

**Status:** Type II project began July 1, 2017 and will end June 30, 2019

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**Title:** “Strength and Awareness in Action: an Intervention for Post-Acute TBI Headaches”

**Principal Investigator:** Lisa A. Brenner, Ph.D.

**Institution:** University of Colorado, Anschutz Medical Campus

**Award:** $363,183

**Status:** Type II project began July 1, 2017 and will end June 30, 2019

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**Title:** “A Longitudinal, Multi-Dimensional Assessment of Recovery and Added Benefit of a Behavioral Health Intervention for Children with Abusive Head trauma”

**Principal Investigator:** Terri Hoar Lewis, Ph.D.

**Institution:** University of Colorado, Denver

**Award:** $372,418

**Status:** Type II project began July 1, 2017 and will end June 30, 2019

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**Health Outcomes:**

**Title:** “Secondary Analysis of Colorado Traumatic Brain Injury (TBI) Prevalence Data by Geography and Race/Ethnicity.”

**Principal Investigator:** Priscilla “CB” Eagy, MS

**Co-Principal Investigator:** Gale Whiteneck, PhD, FACRM

**Institution:** Craig Hospital

**Award:** $41,692

**Status:** Type I project began July 1, 2017 and will end June 30, 2018

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**Education**

During FY 2016-17, the program issued a request for proposals that resulted in 13 applications with 10 being awarded for a combined total of $112,500.

In addition to education grants, the program continues to collaborate with the State Unit on Aging to partner with county agencies in the provision of A Matter of Balance, a fall prevention curriculum for older adults, across the State of Colorado. The program also helps to support conferences and trainings facilitated by community partners. Finally, the program 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. Funds expended on education initiatives totaled $157,500.