

Colorado Traumatic Brain Injury Program

Report to the General Assembly

February 1, 2007

Program Overview

The Colorado Traumatic Brain Injury (TBI) Program 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. This statute created the Colorado Traumatic Brain Injury Trust Fund (Trust Fund) to finance program activities, and the Colorado Traumatic Brain Injury Board to oversee the operations of the Trust Fund.

The TBI Trust Fund receives revenue from surcharges assessed for convictions of certain traffic offenses. The Trust Fund receives \$15 for each conviction of driving under the influence of alcohol (DUI) or driving while ability is impaired (DWAI), and \$10 for each conviction of speeding. Moneys in the Trust Fund pay for all program services and program administration.

By statute, approximately 65 percent of the moneys collected for the Trust Fund are used to provide services to persons with traumatic brain injuries; 30 percent are used to support research related to the treatment and understanding of traumatic brain injuries; and 5 percent are used to provide education for individuals with traumatic brain injuries and to assist educators, parents, and non-medical professionals in the identification of traumatic brain injuries so as to assist such persons in seeking proper medical intervention or treatment.

The TBI Board is located within the Colorado Department of Human Services (CDHS). Three members are designated in statute and ten members are appointed by the Governor with the consent of the Senate. Attachment A is a list of current Board members. The Board has established three ongoing committees: Services, Research, and Education.

The Board is required to submit a report on February 1st of each year to the Joint Budget Committee and to the Health and Human Services Committees of the House of Representatives and the Senate. This report must address the operations of the Trust Fund, the moneys expended, the number of individuals with traumatic brain injuries offered services, the research grants awarded and the progress on such grants, and the educational information provided pursuant to the statute.

Revenue and Expenditures

During calendar year 2006, the Trust Fund received \$1,875,754, and expended \$1,401,517.

The TBI Trust Fund began receiving revenues in January 2004, and program services began in stages throughout 2004. During the first three years of the program, revenues have exceeded expenditures, however, the monthly differential between revenues and expenditures steadily decreased as the program progressed towards full implementation. The TBI Board plans to expend most of the current funding reserve over the next several years, and then maintain a modest fund balance in order to responsibly manage the monthly fluctuation that occurs in both revenue and expenditures. The Department's budget request for Fiscal Year 2008 includes a decision item to increase the appropriation by \$400,000 to provide services to more clients and to fund additional research grants and educational projects.

Revenue Study

In 2006, the TBI Board arranged for a study of the revenue collection system. The study: a) identified the different ways in which surcharges on traffic offenses are assessed, collected and transferred to the Trust Fund; b) determined the extent to which the Trust Fund is receiving revenues to which it is entitled; and c) identified potential opportunities to increase revenues by improving the revenue collection processes. Overall, the study found that the Trust Fund is receiving the revenue that it should be receiving, and there are very few opportunities for improving revenues by improving the collection processes. One area where there is some opportunity to increase revenues is to improve the voluntary participation of municipalities to assess the brain injury surcharge on violations of local speeding ordinances. During the last few months of 2006, a pilot project was conducted to increase participation of municipalities, however, this effort was proving to be very challenging. In 2007, the TBI Board will assess the results of the pilot project and determine whether to continue with, modify, or discontinue efforts to increase voluntary participation of municipalities.

Services

Client services began in 2004, accelerated in 2005, and reached full implementation in 2006.

All individuals receiving assistance from the Trust Fund receive care coordination services. Care coordination is designed to provide clients with skills they can use throughout their lifetimes, and to connect clients with resources in their

communities that will be there after they leave the Trust Fund Program. In addition, the Trust Fund may be used to provide a variety of other services including but not limited to:

- community residential services;
- structured day program services;
- psychological and mental health services for the individual with the traumatic brain injury and the individual's family;
- prevocational services;
- supported employment;
- companion services;
- respite care;
- occupational therapy;
- speech and language therapy;
- cognitive rehabilitation;
- physical rehabilitation; and
- one-time home modifications.

These additional services (beyond care coordination) are referred to as “purchased services.”

The Trust Fund may not be used to pay for institutionalization, hospitalization, or medications.

Intake, Eligibility and Referral Services

The Department of Human Services contracts with the Brain Injury Association of Colorado (BIAC) for client intake, eligibility and referral services. BIAC is a statewide non-profit organization that provides information and referral services to the brain injury community, and is known to many brain injury survivors, family members, and professionals throughout the state. Individuals seeking services through the Trust Fund apply to the Brain Injury Association for program services. BIAC assists individuals with the application process, determines program eligibility, and refers eligible individuals to the contracted care coordination agency for services.

In 2006, BIAC reviewed 93 applications for children’s services and 331 applications for adult services. Ninety-eight percent of applicants under age 21 were determined eligible for Trust Fund services, and 96 percent of adults were determined eligible for Trust Fund services.

In August 2006, the application process was revised to implement the requirements of House Bill 06S-1023 to verify the legal presence in the United States of all persons 18 years of age or older who apply for services through the TBI Trust Fund Program.

Children's Services

Children's care coordination services began July 1, 2004. During 2004 and 2005, the Department of Human Services had an Interagency Agreement with the Colorado Department of Public Health and Environment (CDPHE) to provide care coordination services to children under age 21. The Health Care Program for Children with Special Needs within CDPHE contracted with 14 regional health departments to provide care coordination services to children with special needs throughout the state. This program is well known to schools, parents of children with special needs, and other community resources, and was a logical choice for providing care coordination services for children with traumatic brain injuries.

CDPHE was unable to provide purchased services because it is not a covered entity under the Health Insurance Portability and Accountability Act (HIPAA). The TBI Board, Department of Human Services, and Department of Public Health and Environment worked throughout 2005 to find a way to provide purchased services while maintaining the role of the State and local health departments in providing care coordination for program clients. In November 2005, the Department of Human Services signed a contract with Denver Options, Inc. to operate the children's services program for the Trust Fund, effective January 1, 2006. Denver Options, Inc. is the Community Centered Board providing services to CDHS clients with developmental disabilities in Denver, and provides both care coordination and purchased services to this population. For the Children's TBI Program, Denver Options, Inc. provides purchased services, and subcontracts with the Department of Public Health and Environment to provide care coordination services to children and their families.

In 2006, Denver Options and CDPHE provided services to 127 children and their families. The children's services program reached its capacity at the end of 2006, and a wait list will begin in early 2007.

Adult Services

Adult care coordination services began October 1, 2004, and purchased services began in February 2005.

During the first two years of the Trust Fund Program, the Department of Human Services contracted with Goodwill Industries of Colorado Springs to provide services to adults. Goodwill Industries of Colorado Springs utilized care coordinators from all three Goodwill Industries in Colorado (Denver, Pueblo and Colorado Springs) and contracted with other organizations and individuals to provide care coordination and purchased services throughout the state.

In 2005, concerns arose regarding the timeliness of adult services and the ability of the care coordinators to meet the needs of clients and the expectations of the

TBI Board and the Department of Human Services. In February 2006, the Department issued a Request For Proposals to re-bid the adult services contract. On July 1, 2006, the contract for adult services transitioned from Goodwill Industries to Denver Options, Inc. CDHS staff worked with both vendors throughout the transition to ensure that clients continued to receive services without interruption, and that client and other program records were transferred to the new contractor.

In 2006, Goodwill Industries and Denver Options combined to provide services to 204 adults with traumatic brain injuries.

At the end of 2006, there were 227 adults on a wait list for services. Newly eligible clients are placed on a wait list when the demand for program services exceeds the funds available for services. Since each client receives services for one year, some cases are closed each month and clients at the top of the wait list begin their year of services. The amount of time that clients who are added to the end of the wait list are expected to be on the wait list before beginning services was 14 months at the end of 2006.

By statute, 65 percent of Trust Fund moneys are designated for client services, 30 percent for research, and 5 percent for education. Therefore, it is possible to have a wait list for services, even though total program expenditures may be less than the appropriation for the fiscal year.

Proposed Changes to State Rules for the TBI Program

In January 2007, the State Board of Human Services adopted changes to the rules for the TBI Program that limit each program client to one year of services in his or her lifetime. The TBI Board proposed this rule change because the number of applicants for services consistently exceeds the number of clients who can be served with the funds that are available. Without a lifetime limit on services, the wait list would continue to grow to the point where the program would be virtually inaccessible to new clients seeking services. Even with a lifetime limit on services, and even if the Department's request to increase the appropriation by spending down the current fund balance is approved, there will still be a wait list for services, however, the wait list will be measured in months and not in years. It is particularly important to note that care coordination and other rehabilitation services can have the greatest benefit for the client if these services are provided within the first year after the individual experiences a traumatic brain injury. Therefore, a long wait list would significantly reduce the effectiveness of the services that are provided.

Evaluation of Client Services Program

The Department of Human Services contracted for an evaluation of the client services program in 2006. The evaluation includes a client survey, review of client records, and interviews with contractor managers and staff. Some data collection activities were delayed when the adult services program transitioned to a new vendor so that the evaluation could include services provided by the new vendor. The evaluation will be completed within the first quarter of 2007, and the results will be included in the annual report to the Legislature for 2007.

Research

The TBI Board has established the following three research priorities for the research program:

1. Basic Science: Mechanisms of neuroplasticity following TBI; mechanisms of cell death and rescue following TBI; and neurogenetics of TBI.
2. Clinical Science: Pharmacologic and/or non-pharmacologic interventions for the purpose of neuroprotection or the treatment of cognitive, emotional, behavioral, or neurological problems following TBI. These projects may involve either novel or existing therapeutic approaches.
3. Health Services and Outcome Research: The effects of TBI on developmental transitions across the lifespan; identification of gaps in the types and availability of healthcare services for persons with TBI; and the effects of cognitive rehabilitation on long-term outcome following TBI.

The Board awarded the first 5 research grants in the spring of 2005. Each award was for \$50,000, for 1 year. Grant work began in July 2005. One project was completed in 2006; the other 4 projects requested and received no-cost extensions and will be completed by June 30, 2007.

The Board awarded 3 new research grants in the spring of 2006. Each award was for \$50,000 per year, for 2 years. Research grants were awarded for the following projects:

Title: Survival After TBI in Colorado: A Population-Based Study
Principal Investigator: Cynthia Harrison-Felix
Institution: Craig Hospital, Englewood, CO

Title: Social Communication Skills Training for Persons with Traumatic Brain Injury
Principal Investigator: Cynthia Dahlberg
Institution: Craig Hospital, Englewood, CO

Title: Comparison of Female Endocrine Function After Traumatic Brain Injury and Spinal Cord Injury

Principal Investigator: David L. Ripley, M.D.

Institution: Craig Hospital, Englewood, CO

During the first two years of the research program, the TBI Board did not receive as many applications for research grants as it anticipated. In addition, several of the applications were not recommended for funding by the independent reviewers who reviewed and scored the applications. As a result, the program has not expended a large portion of the research dollars that have been available. The Board received feedback on the research program from a number of researchers in Colorado. In response to this feedback, the Board significantly revised the research program. Major changes to the program include:

- increasing the maximum amount of funding from \$50,000 to \$250,000 per grant per year;
- increasing the maximum grant period from 2 years to 5 years;
- adding institutional indirect costs as an allowable expenditure;
- adding Principal Investigator salaries as an allowable expenditure; and
- reviewing applications and awarding grants 3 times each year rather than once a year.

These changes were implemented in December 2006 through the release of a new Research Program Announcement, and have been well received by the TBI research community. The Board expects these changes to result in a significant increase in the number of grant applications received and the amount of funding requested.

Education

Towards the end of 2005, the Board established an education grants program. The goal of this program is to educate people throughout Colorado about traumatic brain injury by funding a variety of grassroots community education projects. The first 16 projects were completed between January and June 2006, for a total cost of \$43,034. Due to the overwhelming response to and success of these initial education grants, the TBI Board significantly increased the portion of the education budget that is designated for community education grants. The Board solicited applications in the spring of 2006 and awarded 15 grants for projects that would be completed during Fiscal Year 2007. The total amount of funds awarded was \$78,390, with individual awards ranging from \$2,490 to \$10,000. Education grants were awarded for the following projects:

Organization: Southwest Board of Cooperative Services

Amount: \$3,000

Geographic Area: Cortez

Description: Three initiatives to build capacity of the brain injury team to provide ongoing education to students, families, educators, coaches, nurses and the community.

Organization: San Juan Board of Cooperative Services
Amount: \$2,500
Geographic Area: Durango
Description: Provide a one-day training workshop for health care providers, community agencies, school personnel and parents.

Organization: Cherry Creek School District
Amount: \$2,500
Geographic Area: Aurora
Description: Mentor the Aurora public school district TBI team.

Organization: Thompson School District
Amount: \$5,000
Geographic Area: Loveland
Description: Provide trainings on TBI for educators.

Organization: CTAT Training
Amount: \$10,000
Geographic Area: Denver
Description: Provide a series of 10 training sessions for brain injury survivors and family members.

Organization: CTAT Training
Amount: \$7,500
Geographic Area: Denver (4) and Statewide (1)
Description: Provide a series of 5 training sessions for professionals providing employment services for survivors of TBI.

Organization: CTAT Training / Denver Options
Amount: \$7,500
Geographic Area: Front Range
Description: Provide 3 half-day training sessions for siblings of children with TBI, and provide a resource guidebook to their families.

Organization: Penrose-St. Francis Healthcare
Amount: \$2,490
Geographic Area: Colorado Springs

Description: Build and maintain the "Rehab Buddy Education Center" on the acute rehabilitation unit at Penrose Hospital.

Organization: Mothers Against Drunk Driving and BIAC
Amount: \$3,460
Geographic Area: Statewide
Description: Develop a presentation to educate Victim Advocates who provide assistance to crime victims with TBI.

Organization: Brain Injury Association of Colorado
Amount: \$2,500
Geographic Area: Statewide
Description: Update BIAC's resource library by purchasing new brochures, books and pamphlets on brain injury.

Organization: Brain Injury Association of Colorado
Amount: \$9,800
Geographic Area: Statewide
Description: Update and improve the BIAC website and online resource directory.

Organization: Marycrest Assisted Living
Amount: \$3,000
Geographic Area: Denver
Description: Provide a series of 8 one-hour interactive seminars on TBI for staff of Marycrest Assisted Living and employees of the King Adult Day Enrichment Program.

Organization: Denver Public Schools
Amount: \$3,000
Geographic Area: Denver
Description: Present 2 one-day workshops for school-based personnel, develop a school reintegration planning guide for students returning to school after a TBI, and train TBI teams on using the BrainSTARS model.

Organization: Greeley/Evans Weld School District
Amount: \$7,440
Geographic Area: Weld County
Description: Have Brain Injury Resource Team receive TBI training from the Center for Community Partnerships (CCP), and then use CCP training to train school psychologists, para-professionals, and special education teachers.

Organization: Moffat County School District
Amount: \$8,700
Geographic Area: Moffat County
Description: Develop a multi-disciplinary TBI team in the school district.

Other educational efforts in 2006 include the following:

Systems Consultation for the Aurora Community Mental Health Center – The Colorado Advisory Board for Brain Injury has identified access to appropriate mental health services as one of the greatest unmet needs for people with traumatic brain injury in Colorado. In response to this need, the TBI Program sponsored training and ongoing system consultation for the Aurora Community Mental Health Center. This project was envisioned as a pilot that could potentially be replicated at other Community Mental Health Centers. The project was designed to enhance the ability of the Mental Health Center to identify and to treat individuals with traumatic brain injury who need community mental health services. Under the direction of Dr. Lisa Brenner, a team of expert clinicians provided a series of training sessions in 2005 to the Mental Health Center’s staff. Following the training sessions, Dr. Brenner and Dr. Kristen Powell provided ongoing consultation to an adult services team, and to a children’s services team, respectively. The purpose of the ongoing consultation was to assist these teams to identify and better serve their clients who have traumatic brain injuries. Consultation with these teams continued through the summer of 2006.

Program Brochure – The Trust Fund Program brochure was redesigned and updated. English and Spanish language brochures were distributed throughout the state.

Participation at Professional Conferences and Community Events – Program staff and Board members staffed exhibit booths and spoke at a number of professional conferences and community events during 2006. The program’s exhibit booth featured a display board on the TBI Program, flyers with information on the children’s services, adult services, research opportunities and education efforts of the program, and a traumatic brain injury “fact sheet” from the Center for Disease Control.

Program Website – The TBI Program website at www.tbicolorado.org was expanded and enhanced in 2006. The website includes the program vision and mission, information on client services and how to access services, information on the research and education programs, Board meeting minutes, annual reports, State rules, the State statute creating the Trust Fund and Board, and more.

Expectations for 2007

The Colorado Traumatic Brain Injury Program was implemented in 2004 and has grown dramatically over the last three years. During the past year, the Trust Fund provided services to 385 children and adults, awarded 3 research grants totaling \$300,000, awarded 15 community education grants totaling \$78,390, and enhanced the system for serving Colorado citizens with traumatic brain injuries in a variety of ways. As the program nears the end of its third year of operations, it continues to grow and evolve to meet the needs of people with TBI and their families.

Children's Services – The Trust Fund has a capacity to provide services to 82 children and families each year. Demand for children's services began slowly, however, the program reached its capacity for the first time in November 2006, and is expected to remain at capacity throughout all of 2007. A wait list will begin in early 2007, and will be maintained throughout the year.

Adult Services – The Trust Fund has a capacity to provide services to 190 adults each year. Demand for adult services has been high since the outset. At the end of 2006, there were 227 adults on a wait list for services and the wait time was approximately 14 months. The TBI Board expects the strong demand for adult services to continue, and for the wait list to continue to grow. Rule changes that will limit the amount of services each client may receive will take effect in March 2007, however, these changes will not impact the wait list until 2008.

Research Grants – Work on the 5 research grants awarded in 2005 will conclude in June 2007. The results of these research projects will be reported on the program website. Work on the 3 research grants awarded in 2006 will continue through 2007 and conclude in 2008. The TBI Board expects the changes it has made to the research grants program to generate a number of applications, and result in awarding a number of new grants in 2007.

Education Grants – Work on the 15 community education grants awarded in the spring of 2006 will be completed in June of 2007. The TBI Board plans to award grants in the spring of 2007 for projects that will be completed during Fiscal Year 2008.

Moving Beyond Program Implementation – During the past three years, the TBI Board and program staff have directed their efforts towards developing and implementing the client services, research and education components of the Trust Fund Program. Each of these program areas provided opportunities and presented challenges. By the end of 2006, the Trust Fund Program was fully implemented. In 2007, the TBI Board and program staff will be moving beyond implementation and into the next stage of the program's development. During the next year, the Board and staff will be increasing program monitoring and

evaluation activities, identifying ways to utilize program data to improve the program, and developing performance measures that will provide better indicators of program outcomes. In addition, the Board will be looking towards the future and exploring long-term opportunities for the program to increase its revenues to better meet the needs of people of all ages for care coordination and other rehabilitation services and supports.

Program Administration

The TBI program is administered by the Department of Human Services, Office of Behavioral Health and Housing. CDHS staff work closely with the TBI Board and perform the following functions for the program:

- financial management – staff monitor Trust Fund revenues, pay invoices, track expenditures, prepare and update the program budget, and report revenues and expenditures to the Board monthly.
- policy development – staff research policy options and develop draft policies for Board consideration.
- program development and implementation – staff design, implement and modify the Trust Fund program based on Board policies and decisions.
- contract management – staff write requests for proposals, conduct competitive bid processes, and develop and manage contracts with vendors.
- program monitoring – staff perform monitoring activities to determine program performance and contractor compliance with contract requirements.
- administrative support – staff provide support to the Board and its committees including scheduling meetings, preparing agendas, taking and transcribing minutes, photocopying, records maintenance, and other administrative functions.
- web site maintenance – staff develop and maintain the program web site.
- public assistance and information – staff assist clients and their families, health care professionals and service providers, State and local agencies, and other stakeholders by answering questions, providing information, resolving problems, and distributing materials about program activities.

- reporting – staff report to the Board on program activities, accomplishments, challenges and opportunities for improvement, and develop an annual report for the General Assembly.
- marketing and public relations – staff represent and increase the awareness of the TBI program at public and professional meetings, conferences, trainings, and other forums.

Additional Information

For additional information on the Traumatic Brain Injury Program, please visit the program website at www.tbicolorado.org or contact: Sandy McCarthy at 303-866-7477, or by email at Sandy.McCarthy@state.co.us

Attachment A

Colorado Traumatic Brain Injury Board Members

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This position is Vacant at this time.