

REPORT: TRAUMATIC BRAIN INJURY & JUVENILE JUSTICE



Alabama Department of Rehabilitation Services Alabama Head Injury Program

This report is a summary of lessons shared by states addressing youth with traumatic brain injury in juvenile justice systems during a 2016 meeting convened by the Alabama Department of Rehabilitation Services to in order to improve outcomes for adjudicated or at risk youth with a traumatic brain injury in Alabama.

*A Discussion on
Identifying and
Treating Youth with
Traumatic Brain
Injury within State
Juvenile Justice
Systems*

Report: Traumatic Brain Injury & Juvenile Justice

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PREFACE

In 2014, the Alabama Department of Rehabilitation Services (ADRS), as the lead state agency for traumatic brain injury (TBI), was awarded a four-year Federal TBI State Implementation and Partnership Grant administered by the U.S. Health Resources and Services Administration (HRSA). In keeping with the grant guidance, the Alabama grant proposal identified youth with TBI within juvenile justice systems as a priority population to address barriers to services, which includes screening, professional training, information & referral services and resource facilitation, as required by the federal grant program. The ADRS Head Injury Program is responsible for carrying out grant activities. The Federal TBI State TBI Implementation Partnership Grant program is authorized by the TBI Act of 1996, as amended and the Federal TBI State Grant Program has since been transferred to the Administration for Community Living (ACL) within the U.S. Department of Health and Human Services.

A TBI occurs when a sudden trauma causes damage to the brain, which can result when the head suddenly and violently hits an object, or when an object pierces the skull and enters brain tissue. Every TBI is different, depending on the extent of the damage to the brain and the area of the brain that is injured. While some symptoms appear immediately, others may appear several days or even weeks or years later. Resulting problems may include issues related to 1) cognition, including thinking, memory, problem solving, judgment, communication, and controlling impulses; 2) emotional and behavioral issues, including mood swings, changes in personality, depression and sexual inappropriateness; and 3) physical problems, including hearing loss, headaches, seizures, and mobility. These disability-related issues may impact the health, educational, cognitive, emotional and rehabilitation needs of youth in juvenile justice programs, which ultimately may affect how successful they are with regard to community re-entry and integration.

In recent years, national studies have been or are being conducted to raise awareness of the number of young people with a TBI who are adjudicated who may not even be aware of previous TBI and the impact the injury may have had on their cognitive and emotional functioning. Furthermore, studies are showing the likelihood of co-occurring conditions, including substance abuse and mental health, associated with a TBI. Thus, some state government brain injury programs across the country are working with their state juvenile justice systems and correctional systems, largely through Federal TBI State Grant, to identify youth and adults with TBI within these systems and the necessary interventions and accommodations to address TBI-related disabilities with the intent to ensure better outcomes once the individual is released. An example is the 2010 project entitled "TBI in Minnesota Correctional Facilities: Systems Change for Successful Return to Community," which was a four-year Federal TBI State Implementation and Partnership Grant awarded to the Minnesota Department of Human Services (MN-DHS) in collaboration with the Minnesota Department of Corrections (MN-DOC). As the result of this work, the project found a high rate of TBI among its offender populations and through its grant, began helping offenders to transition successfully back into the community with appropriate supports.

To assist ADRS with its grant project, the State Head Injury Program convened a meeting with representatives from nine states held August 16, 2016, in Birmingham, Alabama. The purpose of this report is to capture information shared among the states in order to help the Alabama Head Injury Program with its work in this arena. To assist with the meeting and this report, the Department contracted with the National Association of State Head Injury Administrators (NASHIA), a nonprofit organization formed to help states in promoting partnerships and building systems to meet the needs of individuals with brain injuries and their families.

INTRODUCTION

The Alabama Department of Rehabilitation Services (ADRS) Head Injury Program administers several programs and services to assist Alabamians with a traumatic brain injury (TBI) to regain independence and achieve maximum level of functioning as possible in order to live at home and in the community. The Interactive Community-Based Model (ICBM) program includes a statewide system of Care Coordinators/Rehabilitation Counselors who provide a wide range of services to assist Alabamians recovering from a TBI to return to home, community and work. Through a previous federal grant, ADRS developed PASSAGES to provide similar services to children and young adults with TBI to assist with transitioning to education and other community services designed to support children and youth. The Alabama Head Injury Program contracts with the Alabama Head Injury Foundation for additional resource facilitation and to provide other needed assistance to individuals and their families.

The 2014 Alabama Federal TBI State TBI Implementation and Partnership Grant builds on that infrastructure in order to identify and provide appropriate accommodations to youth with TBI adjudicated in the juvenile justice (JJ) system with the overall goal of improving successful community reintegration and to deter re-incarceration.

The project activities are designed to increase access to rehabilitation and other services by: (1) screening to identify individuals with TBI; (2) building a trained JJ workforce; (3) providing information to families and referrals to appropriate service providers; and (4) coordinating access to needed services through resource facilitation.

BACKGROUND

To assist ADRS in developing and implementing proposed grant activities, the agency invited states which have also addressed or plan to address youth with TBI in juvenile justice, as well as adults with TBI in correctional systems, to a meeting held in Birmingham, August 16, 2016. This meeting provided an opportunity to learn how state brain injury programs have partnered with their sister state and community agencies involved in juvenile justice systems to address youth with TBI who are in these systems. Participants which attended represented the following states: Alabama, Colorado, Iowa, Indiana, Maine, Missouri, Nebraska, Pennsylvania, and Texas (see appendices for list of participants). Prior to the August 16th meeting, Alabama grant project staff sent charts to each state for them to complete covering their activities with regard to screening, professional training, Information & Referral (I&R) services, and resource facilitation. The information gathered was then provided to participants to help facilitate discussion and to make the best use of time during the meeting.

While these states have common goals to address youth or adults or both populations who are adjudicated or incarcerated, states vary considerably in capacity for TBI service delivery and how services are delivered overall. State TBI programs are housed in different agencies across the country, including state health, human services, and vocational rehabilitation agencies. States may pay for services, supports and staff directly or through contracts or both, using state revenue, trust fund revenue (earmarked funds, usually from traffic related fines), and/or through a Medicaid TBI Home and Community-based Services Waiver. Services offered vary considerably across states and within states. Thus, capacity for screening, training, information and referral, and resource facilitation or service coordination within the existing systems vary as well, leaving some states to use federal funds to assist with developing these functions. States may contract with nonprofit organizations to carry out the majority of the grant project work or may carry out the work with existing state staff or in combination of state and contracted staff and organizations. States may also partner with TBI Model Systems and other partners to carry out their work.

With funds from a 2010 Federal TBI State Implementation and Partnership Grant, Texas conducted a four year research project that required the provision of TBI screening and pre-neuropsychological testing for Texas juvenile justice system involved youth who had been pre-diagnosed with mental health and/or substance use issues. Activities relating to adjudicated youth with TBI were conducted with funds from a 2010 Federal TBI State Implementation and Partnership Grant. This research effort was led by Dr. Wayne Gordon in collaboration with the Mt. Sinai Injury Control Brain Injury Research Center (BIRC); an additional partnership with the Mount Sinai BIRC supported the implementation of the Youth Short Term Executive Plus (YSTEP) program in the El Paso Texas Probation Department. This effort was funded by the Centers for Disease Control and Prevention was designed to facilitate the development of executive functioning in adolescents that have been identified as possibly having a TBI. Nebraska also conducted a TBI screening pilot of youth referred to the Nebraska Vocational Rehabilitation from juvenile justice referral sources using its 2010 Federal TBI State Implementation Partnership Grant, but is not currently engaged in activities.

Similar to Alabama, most states targeted one or two sites to pilot this work. Just as TBI service delivery differs among the states, state juvenile justice systems also differ with responsibilities spread among state, community, county and court facilities, programs and jurisdictions. Colorado has partnered with three county jails, specific probation sites (including both adult and juvenile populations), problem solving courts, and the Division of Youth Corrections to identify and support youth with TBI and incarcerated adults. Missouri targeted adults in correctional facilities only for their focus. Missouri is collaborating with a new correctional re-entry facility designed to assist incarcerated adults who are within six months of being released to the community by referring eligible inmates to the Adult Brain Injury Program's service coordinators in that region. Indiana has targeted individuals in a work release facility, individuals on Parole in Marion County, and more recently, offenders in the Marion County Problem-Solving Courts.

Even though there are differences among the states, states have similar issues with regard to establishing collaboration and support among agencies; available resources to carry out and sustain the projects, and knowing that the results of these activities may uncover other unforeseen issues.

LESSONS SHARED

Although some participants had laid the foundation for their activities from a previous grant project, most states are mid-way through their Federal TBI State TBI Implementation and Partnership Grant project. Regardless as to the status of their work, participants are involved in the following areas, which provided the focus of the meeting discussion.

1) Collaboration Among Agencies: Laying the Groundwork

To carry out successful projects, it is critical to have a consensus across participating agencies as to the purpose for engaging in activities and commitment to seeing the activities through. So how do states develop relationships with JJ/corrections programs and systems? This seems to vary among the states. Some states report that they have a member of their TBI advisory board or council representing JJ/corrections who has provided an entrée to key people. In some instances, it appears that the "timing" was right to undertake the project. For example, in Missouri, the Missouri Department of Corrections was opening a new metro area re-entry center for inmates who are nearing their parole date (within 6 to 12 months). The corrections department was interested in bringing community resources together for inmates with TBI who were being released.

In addition, at least two states (Colorado and Pennsylvania) had already established relationships with their juvenile justice/corrections systems prior to their 2014 Federal TBI State TBI Implementation and Partnership Grant either through previous grant funding or through previous collaborative efforts with regard to training and other assistance. The Colorado Brain Injury Program established a partnership

with the Division of Youth Corrections about five years ago, when the Brain Injury Program was able to provide funds for training staff in that division. The Brain Injury Program was then able to work closely with them to develop a screening and assessment protocol. The Denver Juvenile Probation staff had contacted the Brain Injury Program and the Colorado Brain Injury Alliance regarding children with TBI in their system previously, and the Brain Injury Program subsequently provided funds for them to hold a conference for judges, attorneys, probation, and so forth. Through these partnerships, the program had an entrée to the Colorado Judicial Branch, which led to a series of training opportunities through conferences. Furthermore, the trust fund advisory board had members who were connected in some way to the JJ field. Findings resulted in the program applying for Federal TBI State Grant funds to further the work.

Through prior grant funding, the Iowa Department of Public Health had established a good working relationship with the Iowa Department of Corrections (IDOC) and also had ties to the Iowa Coalition Against Domestic Violence (ICADV) through a federal Violence Against Women Act (VAWA) grant. These agencies met to discuss how the three agencies could work together with both identified populations in the TBI grant, incarcerated women and survivors of domestic violence, and then, identified other stakeholders for the project. They then implemented a pilot project to screen incarcerated women who were up for parole or work release or who were currently on parole or work release.

Although the Virginia Community-Based Traumatic Brain Injury program did not participate in this meeting, they too used an earlier grant to target TBI and JJ. Part of its impetus came from the Virginia House of Delegates which successfully advocated in 2007 for an amendment to state law requiring the Secretary of Public Safety to analyze and report the incidence of TBI among adult and juvenile offender populations. The report ultimately led Virginia to include a collaborative project in its 2010 Federal TBI State Implementation and Partnership Grant proposal.

Building and sustaining partnerships are key to successful implementation and to sustain the project. Indiana developed a Leadership Board comprised of stakeholders which convenes monthly to review progress and to identify opportunities to strengthen the partnership. Colorado has implemented a variety of formal and informal measures for obtaining input from all of target sites and other stakeholders. Formally, the Colorado Brain Injury Program created an advisory team that is comprised of representatives from each target sites, representation from partners, and subject matter experts in screening, assessment and brain injury. This group meets quarterly. The Advisory Team has also conducted focus groups with all the target sites and with our clinicians assisting with screening. Pennsylvania partners with the Juvenile Court Judge's Commission, the Juvenile Detention Center Association of Pennsylvania and various providers in the community who work with juvenile offenders.

In summary, states reported collaborating with a number of stakeholders to implement their projects: state juvenile justice/correctional services agency; community providers of services for youth involved in the juvenile justice system, including county juvenile probation officers, juvenile court judges, juvenile detention facilities, mental health providers, court appointed special advocates, juvenile justice educational programs; state affiliate of the Brain Injury Association or Alliance or Head Injury Foundation; Protection & Advocacy programs, vocational providers, and so forth. In some states, the state brain injury advisory board/council has also been the impetus to bring collaborators together.

2) Screening and Identification

The purpose of screening is to identify youth in the general population who may not have been identified before as having a TBI, which may impact their cognitive and behavioral functioning. Some states reported implementing a screening process at the time of in-take for those who are entering the system, while others are conducting screening on all individuals already within a facility or a program. In Colorado, everyone in the identified site is screened. In Missouri, individuals are screened on in-take as admitted into the correctional re-entry program. Pennsylvania screens youth who enter the juvenile

detention facilities, as part of the initial screening process. Maine is planning for the staff at the correctional settings to complete the screening at the time of intake.

Identifying a TBI among youth who may not have been previously identified may be challenging as screening tools may require the individual to self-report. Most youth will not have access to their medical records, should the records even provide documentation with regard to treatment for a TBI in the emergency room (ER), hospital or physician's office, as most may not have been treated medically at all. Screening tools provide an avenue for posing general questions to gather past information relating to the possibility of a TBI which may require further testing to determine if a TBI is impacting cognitive and behavioral functioning.

Key questions:

- *Who conducts initial screening*
- *What screening tools are used*
- *What happens after identified: referrals, supplemental testing and follow-up*
 - *How is the information reported*
 - *How will this be sustained after the grant ends*
 - *Challenges*

Who conducts initial screening?

Colorado has designated specific units within the county jails, specific probation sites, and the Division of Youth Corrections' sites to conduct screening for lifetime history of brain injury. Everyone in those identified sites is screened by staff at the sites for lifetime history of brain injury. If screened positive, they are referred to the University of Denver, whose staff then conduct a neuropsychological for impairment, with the exception that the Division of Youth Corrections conducts all aspects of screening and evaluations for the division run sites. In Alabama, JJ probation officers and family court mental health case managers staff conduct the screening and in Indiana, the parole officers and PACE (a community social services organization) case managers conduct the screening.

Missouri relies on screening conducted by the Department of Corrections (DOC) Unit Supervisors and the Medical/Mental Health Providers at the Department of Corrections facility at intake. Nebraska Vocational Rehabilitation staff conducted screening in implementing its previous grant to identify transition-aged youth having juvenile justice system involvement with TBI. The Texas Juvenile Justice Department intake staff conducted screenings at participating facilities.

In Pennsylvania, screening is primarily conducted by the project funded NeuroResource Facilitator, along with a trained volunteer with significant experience working with individuals with brain injury to conduct screenings. The project is currently working with the nursing staff from the company contracted to provide services in the Youth Detention Centers where screening is taking place. The detention centers have made a commitment to integrate brain injury screening into their process and will be trained by TBI project staff as soon as the technical aspects of getting the screening into their system are completed.

Of concern to some is what the requirements should be for the person who is screening in terms of degree and/or certification. Participants acknowledged the importance of people understanding TBI in order to conduct screening and also the potential of over screening should questions posed be too broad. Participants also talked about the problem with individuals being able to self-report past injuries.

What screening tools are used?

In Texas, the project used the Brain Injury Screening Questionnaire (BISQ) developed by the Icahn School of Medicine at Mount Sinai, New York City. The BISQ is an administered questionnaire to determine if a person has experienced a blow to the head or a medical emergency, with an associated

loss of consciousness or a feeling of being "dazed and confused." It then uses a list of symptoms to determine if the person being screened has the kinds of persisting problems typically found after brain injury that suggest he or she should be tested (with neuropsychological tests) to determine if TBI is the likely cause of these symptoms. The BISQ is completed via interview or can be self-administered. It is electronically scorable.

The format for the BISQ is based on the "HELPS" instrument, developed by Picard, Scarisbrick, and Paluck (1991) at Mount Sinai's TBI Rehabilitation and Prevention Center. The list of symptoms in the BISQ was adapted from the TBI Symptom Checklist (Medical College of Virginia, undated) and the TIRR Symptom Checklist, created by Don Lehmkuhl (1988). The "HELPS" instrument is used by Iowa and was used with modifications by Nebraska for screening.

Most of the other states participating in the meeting are using the Ohio State University TBI Identification Method (OSU TBI-ID) or a modified version of the instrument, which Colorado modified with permission of the tool's author, so as to not "over" screen. The screening is a standardized procedure for eliciting lifetime history of TBI via a structured interview. The instrument is based on Center for Disease Control and Prevention's (CDC); National Center for Injury Prevention and Control, 2003, case definitions and recommendations for TBI surveillance. The OSU TBI-ID was designed to use self- or proxy-reports to elicit summary indices reflecting TBI's occurring over a person's lifetime. Colorado modified the OSU TBI-ID with input and approval from Dr. John Corrigan, Ohio State University, and uses this tool, except for the Colorado Division of Youth Corrections, which developed its own screen for lifetime history. Missouri, and Maine, also reported using a modified version. Pennsylvania reported using the OSU as designed, but also uses the "Other Central Nervous System (CNS) Compromise, which is designed to be used in conjunction with the OSU TBI-ID. This is because the project is interested in screening for, and providing intervention for non-traumatic brain injury as well as for a traumatic brain injury.

Maine participants reported that Goodwill Industries is creating a screening tool to use for multiple populations, including adult and juvenile justice settings.

What happens after identified? Referrals, supplemental testing and follow-up

In Colorado, individuals in designated sites who are screened positive based on established criteria are then referred by the site to student clinicians from the University of Denver for a neuropsychological screen. With the exception of the Division of Youth Corrections, who conducts all aspects of screening, the neuropsychological screen includes: structured interview, Automated Neuropsychological Assessment Measure (ANAM), and three effort test. The Division of Youth Corrections has its own on-site psychologist and a neuropsychologist and, therefore, has the capacity to conduct neuropsychological screens and evaluations when indicated. If the team deems it necessary the juvenile may also be referred internally for a full neuropsychological evaluation. After a youth is referred for case management support, the Brain Injury Alliance of Colorado is conducting the Mayo Portland Assessment Inventory Participation Index to measure function and progress.

Indiana is also using the Mayo Portland Assessment Inventory Participation Index to determine TBI-related disability for those who are determined to have a moderate or severe TBI. Indiana provides follow up testing for individuals who have been screened as moderate to severe brain injury and who elect to enroll in the program. A portion of those individuals are referred to the Indiana Vocational Rehabilitation Services to receive a full Neuro-vocational Assessment. In Indiana, the three sources referred to are: Indiana Department of Corrections Parole, Duvall Work Release Center of Marion County Community Corrections, and Marion County Mental Health Court/Substance Abuse and Veterans Courts.

In Alabama, two pilot projects are underway with Jefferson County Family Court and Calhoun County JPO's, and referrals will come from these two locations. A follow-up intake is conducted via phone calls

using the Alabama Department of Rehabilitation Services (ADRS) Head Injury Follow-up Interview form to obtain more detailed information. Follow-up providers are Children's Rehabilitation Services TBI Care Coordinator for those who are under the age of 16 and the ADRS Adult TBI Care Coordinator for those youth who are age 16 and over. Similarly, in Missouri, inmates with a positive TBI will be referred to the Missouri Adult Brain Injury Service Coordinator in the pilot region (Kansas City) for follow up. Not everyone will be automatically referred for assessment, unless referring for health or mental health reasons.

How is the information reported?

In Alabama, results are sent to the neuropsychologist (NP) consultant along with the screen and social history. The neuropsychologist consultant reviews all materials and makes recommendations, including accommodations/strategies and resources, and the report, along with the Follow-up Interview form are sent to ADRS to be reviewed by staff. A Summary Report is prepared. The neuropsychologist consultant reviews all materials, compiles findings, impressions, comorbidity, academic, social/behavioral history, and makes recommendations including accommodations/strategies and resources, to be included in the summary (1 ½ to 2 pages). If full NP is needed, this will be obtained via NP consultant (16 and over) or pediatric NP consultant (those under 16).

Indiana shares the results among the treatment team and are used for direct case planning and management. In Maine, Goodwill Industries is collecting the information and reporting to the state. In Missouri, positive screenings are shared with the Department of Health and Senior Services' (DHSS) Adult Brain Injury Service Coordinator. The Missouri Department of Corrections will track aggregate screenings and share with the health department and project coordinator. The Pennsylvania state TBI program collects the data from the Brain Injury Association of Pennsylvania. Colorado staff provides information to youth and family with regard to strengths and weaknesses.

How is screening to be sustained once grant funding ends?

Alabama has proposed using on site mental health coordinators as one consideration for sustaining this aspect of the project once the federal grant ends and using the state's TBI Trust Fund resources to support the neuropsychological assessment. Maine is considering the state psychiatric hospital for providing a neuropsychological assessment for adults and the Brain Injury Association of Maine to provide the assessment for youth with funding through Medicaid. Missouri is relying on continued collaboration with DOC and its existing state Adult Brain Injury Program to sustain the project.

Challenges

States report that the reliability of the screening tool makes a difference as to who is administering the screening. Some of the problems with initial screening is that those who are being screened often do not want to self-report, particularly if they were abused by a family member and did not report that information; parents may not report the same information that their child reports; people are fearful of legal ramifications if screened positive; and so forth. Over reporting is also a concern, which is why some states have modified screening tools so as not to cast a wide net that would not be useful. Some meeting participants discussed the necessity of screeners to hold certain degrees and/or accreditation.

Another challenge is determining how to provide feedback to individuals and family members about the screening, if the person is screened positive. The Brain Injury Association of Pennsylvania reported that they have a support group to assist youth who are screened positive. Additionally, how and whether to include others with regard to feedback in the course of screening and diagnosis, including parents, is a challenge (e.g. schools, JPOs, judges, and so forth).

3) Professional Training

The target audience for professional training is staff associated with the juvenile justice/correctional systems to help them understand the cognitive and behavioral aspects associated with TBI and to provide interventions and accommodations accordingly. Obtaining support for training staff is critical as

most state juvenile justice/correctional systems will need to consider the time involved with staff time being used for training.

Key questions:

- *How is training provided*
- *Who provides the training*
- *What topics are included*
 - *Who is trained*
- *How is effectiveness/impact of training measured*
- *How will this be sustained*

How is training provided?

States reported that training is provided through on-site training, through on-line training programs, webinars, during conference workshops or as a combination of these methods. Colorado has developing a training curriculum. Nebraska has customized an online TBI training curriculum for state agency staff and service providers.

The Missouri Department of Health and Senior Services Adult Brain Injury Program, University of Missouri-Kansas City Institute for Human Development (UMKC-IHD) and the Department of Corrections (DOC) worked collaboratively to develop a web-based training that will be provided to all DOC staff across the state. This training will be a TBI 101 and is modeled after the Minnesota's Department of Corrections (DOC) Training Module (see references). DOC has also developed another training module that helps DOC staff identify TBI and provides different strategies in working with offenders that have a history of TBI. The online OSU TBI ID training will be utilized for the staff administering the OSU TBI ID, with discussion about the modifications and reasoning for such.

In lieu of specific training, Maine requires ACBIS certification for all Medicaid waiver providers who may be involved with resource facilitation or services, including those who may participate in the JJ project.

Who provides the training?

In some states, the state affiliate (Brain Injury Association of America or Brain Injury Alliance) assists with the training. Other states may use consultant staff or other experts to provide the training. In Colorado the Department of Education (CDE) Brain Injury Consultants provides training for staff involved with youth, similar to training provided to educators and other audiences. In Alabama, TBI staff and consultants provide training on-site. Alabama is also considering on-line training as another alternative or addition.

What topics are included?

Training varies in the states and may consist of an introduction to TBI, executive functions and other disability-related issues, including behavior; identification, assessment, interventions and accommodations; and mental health issues. Indiana created a web-based training that Department of Corrections is requiring all personnel to complete and pass a test, which includes modules on Neurobehavioral Problems, Emotional Problems after Brain Injury, Cognition, and Agitation. The Brain Injury Association of Pennsylvania (BIAPA) is the subcontractor for that project and provides training with regard to these topics:

- Basic brain injury education – types, prevalence, impact of development, effects, strategies for intervention
- The problem of brain injury in the Juvenile Justice System – literature summary
- Impact of brain injury on youth in the Juvenile Justice System
- Brain injury resources for youth in Pennsylvania
- Summary of the grant project: NeuroResource Facilitation for Youth in Juvenile Detention

Who is trained?

In Alabama, training was provided for pilot project staff and core TBI System staff by Dr. John Corrigan, OSU, regarding the use of the OSU TBI-ID, and substance abuse co-morbidity. Training for juvenile justice personnel (juvenile court judges) on the basics of TBI and specific issues related to juvenile offenders (prevalence, identification, screening, assessment and accommodations) was provided by a pediatric neuropsychologist consultant. Training regarding the state Juvenile Justice System: Process, Partners and Courts was provided for core TBI System staff by an Assistant Professor, Department of Criminal Justice, Troy University. Further training covering TBI cause, symptomology, assessment, strategies, accommodations, classroom issues, mental health issues, is planned for fall 2016. Beyond that, targeted training will be conducted for county juvenile justice staff and partners.

In Missouri, the Department of Corrections (DOC) staff across the state will receive general TBI training. Additional training is provided at the Kansas City Re-entry Center where the pilot project is being implemented. This training is with the DOC staff that are administering the OSU TBI ID. Indiana's project goal is to provide education and training to correctional staff and primary health care providers (primarily safety net providers) with the goal of increasing their knowledge and awareness on the issue and effective ways to communicate and treat people impacted by TBI. A presentation will also be made at the Indiana Addictions Recovery Month Symposium in September 2016 and the Marion County Reentry Coalition Annual Conference in October 2016.

During the Texas Brain Injury Screening Research Project audiences of focus included Texas juvenile justice employees (psychologists, counselors, corrections and probation officers, medical personnel and other employees). Currently the Texas Office of Acquired Brain Injury provides training to partners and colleagues across the state, staff and students at institutions of higher education, various audiences at health and human services agencies, community base organizations and providers, law enforcement officers and first responders, educators, athletic trainers, and many others. Maine is also planning to provide training across audiences, including juvenile justice and correctional staff.

Pennsylvania provided a list of those who have been trained:

- Personnel at the two youth detention facilities where the project work is centered
- Personnel at a state-run placement facility with an interest in replicating grant project work in their setting
- Personnel at one Youth Detention Center beyond the two where the grant project is centered
- Court staff and related professionals in a specific county interested in instituting a program to identify youth with brain injury upon intake
- Personnel at 13 of 20 Youth Advocate Agencies (YAP) in Pennsylvania, with a plan to provide training to all agencies
- Personnel at 2 Children and Youth Services Agencies, with outreach in process to offer training to others
- Juvenile Detention Centers of Pennsylvania Board of Directors

The Brain Injury Association of Pennsylvania has also presented at several conferences, including the annual conference for the juvenile court judges commission and juvenile detention centers annual conference.

How is effectiveness/impact measured?

Some states reported that pre- and post-testing with attendees at training is conducted to assess learning of content. Attendees are also asked to complete and an evaluation form. A few states reported using pre and post-testing on the training modules to be administered via survey monkey. Indiana Department of Corrections created a web-based training that is requiring all personnel to complete and pass a test which, includes modules on neurobehavioral problems, emotional problems,

cognition, and agitation. The IHD is assisting the DHHS with evaluating the effectiveness of training, both pre-test and post-test.

How will this be sustained?

States report that it will be challenging to sustain activities. The hope is that some will become part of the juvenile justice/correctional systems staff training by including training on TBI screening, interventions, and accommodations.

4) Information and Referral Services (I&R)

Key questions:

- *Who provides Information and Referral (I&R) services*
 - *What is included*
 - *How is it provided*
- *How is effectiveness/impact measured*
 - *Challenges*

Who provides I&R services?

Most participants reported that this service is provided as part of resource facilitation (service coordination) services whereby youth who are evaluated and determined to have a TBI are referred to the agency providing I&R for services and supports. This service may be delivered by the state affiliate/association of the Brain Injury Association of America (BIAA), the Brain Injury Alliance or Head Injury Foundation under a contract with the state. For example, in Colorado, all individuals referred can access I&R without needing to apply for formalized case management (resource facilitation).

What is included?

The Colorado Brain Injury Alliance under contract with the state brain injury program provides general information about brain injury, resources and refers individuals as warranted. If the needs become consistent then the individual will be moved into the more formalized case management supports. In Nebraska, resources and referrals are determined by the individual needs expressed by each caller.

Pennsylvania cites the following process for I&R:

- Referral to Pennsylvania's BrainSTEPS School Re-entry Program, collaboration with local BrainSTEPS teams on individual cases
- Referral to the Pennsylvania Office of Vocational Rehabilitation (OVR), collaboration with vocational counselors on individual cases
- Referrals for Medical Rehabilitation
- Referrals for Pennsylvania Medicaid Waiver
- Education to youth and families about resources that might be access in the future (at age 21)

How is it provided?

I& R services may be provided by phone, in person or by materials available on website or which is sent to the individual seeking information.

How is effectiveness/impact measured?

Nebraska tracks data on the number of calls placed to the Brain Injury Alliance of Nebraska from letter recipients, needs expressed by callers and the outcome of each call. Indiana tracks service engagement through case management software called Efforts to Outcomes (ETO).

How do you measure effectiveness/impact?

Indiana measures impact through the core evaluation metrics of return to work and recidivism.

5) Resource Facilitation

The term resource facilitation may be used interchangeably with service coordination, care coordination or case management services. How that is provided depends on the capacity of the state brain injury program.

Key questions:

- *Who provides resource facilitation*
- *What services are included with regard to resource facilitation*
 - *How is effectiveness/impact measured*
 - *Challenges*

Who provides resource facilitation (RF)?

Some states are using grant funding to help with resource facilitation (RF) or have used previous grant funding to establish resource facilitation, while other states are incorporating RF in their existing brain injury systems that provide service coordination/case management/care coordination services. States may contract with their state affiliate of the Brain Injury Association of America or Brain Injury Alliance, which may also provide resource facilitation across populations. The Colorado Brain Injury Alliance has both a phone based and in-person case management teams that work collaboratively with the client. The Brain Injury Alliance of Nebraska has two part-time case management staff to provide in-person resource facilitation in Lincoln and Omaha. Alabama is using existing pediatric and adult TBI staff to provide resource facilitation as needed, although the demand thus far has been minimal.

In Indiana, RF services are provided through a partnership between the Rehabilitation Hospital of Indiana (RHI) and PACE, a social service agency that helps citizens with living independently in the community. There are two full-time RFs funded through the grant. One is employed by PACE and the other is employed by RHI. Pennsylvania resource facilitators are also paid for by the federal grant. Indiana has tied this service into its Vocational Rehabilitation system.

What services are included with regard to resource facilitation?

Most states noted that there is not a consensus definition for this service, but that it can be similar to service coordination and case management, whereby, there is an intake process, assessment, service planning, coordinating resources, follow-up, family/client education, and monitoring of services. Similarly, Colorado's comprehensive case management, provided by the state Alliance, includes; intake/assessment, support plan development and implementation and pro-active follow up, and for youth, also education consultation. In Missouri, once the inmate is referred, further assessment/intake will be provided by the Adult Brain Injury Services coordinator who will start the service planning process. Indiana resource facilitation services include referral to and coordination of basic needs services, needed medical care, employment preparation and job training services, primarily.

How is effectiveness/impact measured?

Indiana is proposing to use the Mayo Portland assessment to determine effectiveness with regard to return to work or school. They will evaluate recidivism and success in attaining work within 15 months and also will be looking at re-arrest rates and parole violations. The Missouri Adult Brain Injury Service Coordinators will track number of referrals made and number of resources utilized.

Challenges

Missouri is concerned about adding additional individuals to the service coordinators' case load, although they are not far enough along in the grant process to know the number of inmates who are being released who will want that service. Some states noted they did not have a statewide resource facilitation or service coordination system, unless the service is tied to a brain injury Medicaid Home and Community-Services Waiver Program. In these instances, the state is relying on the grant funding for RF.

6) Data and evaluation

Collecting data is a goal for all states in order to be able to determine the number of TBI within these JJ and criminal justice systems and to be able to track the individuals once released to determine successful integration. Some states are finding that the JJ programs, however, may not collect data over the long term nor will share data among components of their JJ system nor with other state programs. Indiana is collecting information to compare those receiving services with regard to return to work compared to a control group who is not receiving the same level of services. The project is also working with service providers to modify their case management software to collect information regarding participation.

Pennsylvania is collecting basic demographic information about the youth that are screened, in addition to information about their educational history; data from the screening interview (OSU TBI-ID), and data from neurocognitive testing.

Missouri will have information only if the person is enrolled in the state program and the Department of Correction's Unit manager will have the screening information within its data system. Alabama is using an external evaluator to set up the data relating to screening. Pennsylvania reported following inmates a year after release to see if any were incarcerated. The Brain Injury Association of Pennsylvania collects information on services provided.

Colorado discussed the use of REDCap, which is a free, secure, web-based application designed to support data capture for research studies. Discussion was held whether this system could be used within and across states in order to have collective information.

7) Products

Alabama has developed initial fact sheets. Indiana reported that an Interrater Reliability Study of the application of the screening tool (OSU-TBI-ID) will be ready for publication by Fall 2016. Missouri developed an on-line training module that was off of Minnesota and has developed an abbreviated Service Coordination Assessment. Colorado is in the process of developing the following:

- Training curricula for criminal justice settings specifically; brain injury overview for all criminal justice staff and a more in-depth training for mental health staff and probation officers.
- Accommodations guidelines for criminal justice staff.
- A psycho-social educational group curricula. Have already developed a five session group curricula focused on increasing the awareness of brain injury for inmates and probationers identified with brain injury. Also in development, is an implementation guide for this curriculum so it can be implemented across sites.
- Web based toolkit, which will include an overview of brain injury, strategies for screening/assessment and interventions and problem solving guide. This is being modified from a toolkit developed with the last grant specific for mental health clinicians addressing the needs of veterans with brain injury: http://www.mirecc.va.gov/visn19/tbi_toolkit/. This format is also being modified to be more dynamic and user friendly by modeling after a website previously developed for children/youth: www.cokidswithbraininjury.com.

Summary and Considerations

States discussed various challenges with regard to obtaining collaboration and support with juvenile justice/correctional systems to screen, provide needed interventions/accommodations, and to link to TBI community services/resource facilitation. These JJ/correctional systems may be under budget constraints, have staff turnover, and the responsibility for programs and services which may be distributed among state, community, court, and county entities and jurisdictions. Similarly, TBI state programs may not have the necessary infrastructure to support the range of activities and are concerned about sustainability once federal funds end, particularly with regard to neuropsychological

assessment once an individual screens positive, and resource facilitation in some states. Legal issues have also surfaced as to whether prosecutors, defenders, courts, and families should have access to the TBI screening/assessment information and to whether that should impact their adjudication/incarceration in the first place.

However, states that have been successful to date note that many collaborating partners are necessary to carry out the work and that they were successful in obtaining “buy-in” in from their state juvenile justice/corrections systems or community JJ providers. While states noted the potential for reducing recidivism by preparing JJ staff and providing necessary supports to adjudicated youth with TBI, it is still too soon in some states to discern the number of adjudicated youth with TBI and whether appropriate identification, services and assistance results in successful community integration.

Funding to continue the projects once the federal grant fund ends is also a concern to most. States that already have capacity through their existing state system are less worried about that aspect, but are concerned about ongoing screening and training within JJ systems.

Other considerations:

To implement and to continue activities it is helpful to:

- 1) Have a clear vision, purpose and anticipated outcomes for addressing youth/adults with TBI in JJ/corrections systems.
- 2) Have buy-in and support from JJ/Corrections systems and programs. Suggestions:
 - Add or invite JJ/corrections key staffers to participate on the state TBI advisory board/council
 - Develop relationships with individuals key to the project, including judges, courts, community JJ programs, and state systems
 - Offer to present information on TBI or respond to “call for presentations” for conferences sponsored by the JJ and legal community (e.g. judges conferences)
 - Invite the JJ/corrections community/leaders to present at TBI conferences, council/board meetings to better understand these systems
- 3) Establish a working group of key stakeholders to help develop, implement and oversee the project and activities on an on-going basis.
- 4) Have time to develop relationships, to understand JJ/corrections systems, and key players to address adjudicated youth with TBI, and to identify needed policies and procedures which may need to be in place to implement screening, I&R, and resource facilitation; and with regard to release of information gathered in the process (e.g. who should or should not receive information if an adjudicated youth is diagnosed as having a TBI). A four-year grant may not be sufficient time to accomplish these tasks.
- 5) Incorporate screening and staff training within JJ systems/community programs may result in the likelihood of these activities continuing.
- 6) Start with a few identified sites, before expanding to statewide.
- 7) Have TBI services, resources, and infrastructure in place to support needs once released into the community.
- 8) Evaluation and follow-up measures need to be in place to determine if JJ/corrections staff training, I&R and resource facilitation have resulted in better community outcomes for those who were adjudicated or incarcerated (adults).
- 9) How will information be reported to policy makers with regard to incidence/prevalence of TBI among JJ/corrections systems; staff and related expenses necessary to carry out activities; and outcomes or return on investment will need to be considered.

To help states continue this work, participants suggested on-going venues for sharing information through webinars, conference calls, shared Google drive to collect documents (e.g. reports, products) and, perhaps, another meeting. States expressed the need, too, for direction and assistance for

collecting and aggregating data across states to use for national and state policies. Finally, the role of the National Association of State Head Injury Administrators (NASHIA) was discussed with regard to developing a collaborative relationship with the U.S. Department of Justice, who administers juvenile justice grants to states. NASHIA can play a role in bringing the issues to the attention at the national and federal level.

References and Resources

- Bridwell, Ashley and Ross MacDonald. "Traumatic Brain Injury in the Criminal Justice Population." Webinar held by the Council of State Governments Justice Center, New York, NY, February 11, 2014.
<https://csgjusticecenter.org/wp-content/uploads/2014/02/TBI-Slides-2.11.14.pdf>
- "Measuring unmet needs and services among persons with traumatic brain injury," American Congress of Rehabilitation Medicine and the American Academy of Physical Medicine and Rehabilitation, [Arch Phys Med Rehabil.](http://www.ncbi.nlm.nih.gov/pubmed/12161825) 2002 Aug;83(8):1052-
<http://www.ncbi.nlm.nih.gov/pubmed/12161825>.
- MDOC Course: Traumatic Brain Injury 101 – Criminal Justice, with permission from Adam Piccolino, PsyD, LP, ABN, Board-certified Neuropsychologist.
- NASHIA website on children and youth, juvenile justice (state materials):
<http://www.nashia.org/Children&Youth.asp>
- NASHIA website on screening and assessment: <http://www.nashia.org/Screening.asp>
- National Youth Screening Assessment Partners:
http://cp.mcafee.com/d/FZsSd3hJ5wsyOUUMzsTsSzteWb3b8WVJ6WrxEVoKUgenPqdQXEIclzAjqdSrLLK6zBcsrlScJWQqC3_b0GfAZ8tF-AdlTydj9KfAZ8tF-AdlTydj9lQsTvop83D-LP2arb0VDHTbFILcsesupupd7fkhjmKCHuXTaxVZicHs3iq9J4TsTsS02wmFGTdQMSI-cK8v06P1kf8hSxnu8RcCQnxMUS30ec20md41sQg1uGLCy0bqhYSyedRmTF-QNMy1xl
- Piccolino, A.P., & Solberg (2014). The Impact of traumatic brain injury on prison health services and offender management. *Journal of Correctional Healthcare*, 20 (3), 203-212.
- Piccolino, A. TBI Training: Beyond the Screening Process. Presentation from the NASHIA State of the States Conference. 2012. <http://www.nashia.org/pdf/sos2012/pres-piccolino-2012-sos-presentation.pdf>
- TBI in Minnesota Correctional Facilities: Systems Change for Success in Return to Community, Project supported with Health Resources and Services Administration Federal Grant, June 2015. http://www.doc.state.mn.us/pages/files/6714/3456/0599/TBI_White_Paper_MN_DOC-DHS.pdf
- "Traumatic Brain Injury: Emerging Tools for Assessment and Care. Healing Hands." Vol. 12, No., February 2008. This publication was developed with support from the Health Resources and Services Administration:
<https://www.nhchc.org/wp-content/uploads/2011/09/Feb2008HealingHands.pdf>

Appendices

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ACRONYMS

ACBIS -- Academy of Certified Brain Injury Specialists
ACL – Administration for Community Living
ADRS – Alabama Department of Rehabilitation Services
BIAA – Brain Injury Association of America
JJ – Juvenile Justice
I&R – Information and Referral
NASHIA – National Association of State Head Injury Administrators
RF – Resource Facilitation
TBI – Traumatic Brain Injury
USBIA – United States Brain Injury Alliance
VR – Vocational Rehabilitation