



Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice: Proceedings Report

January 2013

Supported by Grant #H21MC06763-04-00 from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB).

Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice: Acknowledgements



Department for Aging and Rehabilitative Services (DARS) **(Federal HRSA TBI Grantee)**

Patricia Goodall, Federal TBI Grant Project Director
Kristie Chamberlain, Federal TBI Grant Program Specialist

Brain Injury Association of Virginia (BIAV) **(Virginia HRSA TBI Grant Subcontractor)**

Anne McDonnell, Executive Director
Kristy Joplin, Grant Coordinator

Virginia Commonwealth University (VCU)

Thanks to the following VCU staff for their assistance in facilitating and recording small group discussions and preparing the initial drafts of the Proceedings Report:
Valerie Brooke, Katherine Inge, Ph.D., Jennifer McDonough, Grant Revell

Thank you to **Rebecca Desrocher**, Assistant Director, Federal TBI Program, Health Resources and Services Administration (HRSA), for attending and participating in our Policy Summit.

Special recognition goes to **Delegate James Scott** and **Senator Dave Marsden** of the **Virginia General Assembly** for their unwavering commitment to this issue for nearly two decades and who advocated for a 2007 Code of Virginia amendment requiring the Secretary of Public Safety to report the incidence of TBI among adult and juvenile offender populations. The 2008 report revealed “one in five offenders has a history that raises the possibility of TBI.” Their dedication and persistence served as an impetus for Virginia’s three-year project to research, develop, and implement a screening tool used by the Virginia Department of Juvenile Justice.

And, of course, many thanks to the representatives from **Minnesota, Nebraska, Texas, Utah,** and **Virginia** who contributed their time, knowledge, and experience to the Policy Summit. Your participation was critical to the success of this effort and we appreciate it!



Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice: Proceedings Report

INTRODUCTION

In 1996, Congress established the Federal Traumatic Brain Injury (TBI) Program, which is operated by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA). The goals of the Federal Traumatic Brain Injury Program are to help state and local agencies develop resources so that all individuals with TBI and their families will have accessible, available, acceptable, and appropriate services and supports. HRSA funds two types of grants to states: Implementation Partnership Grants which focus on statewide systems change that enhance access to appropriate care and services for individuals with TBI and their families, and grants to state Protection and Advocacy organizations to facilitate the rights and entitlements of people with brain injury through training and legal services.

During each funding cycle, HRSA identifies certain priority areas to be addressed by grantees submitting proposals for funding through the TBI Program. HRSA recognized that, although traumatic brain injury among incarcerated youth and adults was of national concern, there is limited information on incidence, screening, and treatment. This became one of the priority goals of the HRSA Implementation Partnership Grants and several applicants proposed projects to address these concerns within their states. Many projects involved forming partnerships with the criminal justice system to implement screening programs upon admission and during incarceration to better identify individuals with TBI (U.S. Department of Health and Human Services, Health Resources and Administration, 2011). Other grant funded activities included providing training programs for staff, educating inmates and families, providing advocacy training, offering information and referral services, and developing TBI curricula to help juveniles in the criminal justice system.

In Virginia, following several years of hard work, Delegates James Scott and David Marsden of the Virginia House of Delegates successfully advocated in 2007 for an amendment to the Code of Virginia requiring the Secretary of Public Safety to analyze and report the incidence of TBI among adult and juvenile offender populations. The report, which was issued on November 1, 2008, revealed that “one in five offenders has a history that raises the possibility of TBI.” These results generated significant interest within the Commonwealth's Department of Juvenile Justice (DJJ) and the Department for Aging and Rehabilitative Services (DARS) – the state’s lead agency for brain injury - which ultimately led Virginia to include a collaborative project in its Federal HRSA Grant proposal to further understand and respond to this issue. Simultaneously, leaders in other states to include Minnesota, Nebraska, Texas, and Utah began dialogues on the need to identify the incidence of TBI among adult and juvenile offender populations.

The Department for Aging and Rehabilitative Services (DARS) – formerly the Department of Rehabilitative Services (DRS) – and the Brain Injury Association of Virginia (BIAV) sponsored a national policy summit on brain injury and juvenile justice in Richmond, Virginia on June 13-14, 2012. The **Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice** was one of the activities of Virginia’s 2009-2013 federal TBI grant, which provided funding for the Policy Summit. The purpose of the Policy Summit was to convene a small group of leaders from across the country involved in identifying and supporting youth with traumatic brain injury (TBI) in the juvenile justice system. This venue allowed service providers, researchers, and policymakers to share information, resources, and effective screening and intervention strategies to improve services within each state and to move toward achieving a consistent national approach to screening and intervention.

Along with Virginia, four other states serving youth with traumatic brain injury (TBI) in the juvenile justice system were invited to participate in the Policy Summit: Minnesota, Nebraska, Texas, and Utah (Minnesota’s project involved adults, not juveniles). The two-day Policy Summit provided an opportunity for representatives from these states to engage in in-depth discussions on project outcomes, policy implications and recommendations, as well as suggestions for project sustainability and future study. A total of 29 participants attended the Policy Summit from the five states, the Brain Injury Association of America, and HRSA. The following table provides the participants' names listed by state, their organizations and e-mail addresses.

Table 1: Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice: Participants		
Brain Injury Association of America		
Amy Colberg	BIAA	acolberg@biausa.org
Health Resources and Services Administration		
Rebecca Desrocher	HRSA	rdesrocher@hrsa.gov
Minnesota		
Charlotte Johnson	MCF-Stillwater	charlotte.johnson@state.mn.us
Pete Klinkhammer	Brain Injury Association of Minnesota	petek@braininjurymn.org
Adam Piccolino	MCF-Shakopee	adam.piccolino@state.mn.us
Nebraska		
Keri Bennet	Nebraska Vocational Rehabilitation	keri.bennett@nebraska.gov
Michele Borg	Nebraska Department of Education	borgworks@gmail.com
Kate Jarecke	Brain Injury Association of Nebraska	kkj.biane@gmail.com
Texas		
Bettie Beckworth	Office of Acquired Brain Injury	bettie.beckworth@hhsc.state.tx.us
Utah		
Mike Conn	Juvenile Justice Services	mconn@utah.gov
David Litvack	State Legislature	dlitvack@slco.org
Nita Smith	Brain Injury Council	nitasmith@phoenixservices.org

Table 1: Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice: Participants

Virginia		
Robin Binford-Weaver	Department of Juvenile Justice	robin.binford@djj.virginia.gov
Jusolyn Bradshaw	Department of Juvenile Justice	jusolyn.bradshaw@dce.virginia.gov
Bill Brock	Department of Juvenile Justice	william.brock@djj.virginia.gov
Karen Brown	Brain Injury Services, Inc.	kbrown@braininjurysvcs.org
Kristie Chamberlain	Department for Aging and Rehabilitative Services	kristie.chamberlain@dars.virginia.gov
Lisa Crutchfield	Department for Aging and Rehabilitative Services	lisa.crutchfield@dars.virginia.gov
Patti Goodall	Department for Aging and Rehabilitative Services	patti.goodall@dars.virginia.gov
Nancy Hsu	Virginia Commonwealth University	nhhsu@vcu.edu
Kristy Joplin	Brain Injury Association of Virginia	kristy@biav.net
Jeff Kreutzer	Virginia Commonwealth University	jskreutz@vcu.edu
Patti Lanier	Cumberland Hospital	pattimpaul@aol.com
Stephanie Lichiello	Virginia Commonwealth University	slichiello@vcu.edu
Anne McDonnell	Brain Injury Association of Virginia	anne@biav.net
Debbie Pfeiffer	Department of Education	debbie.pfeiffer@doe.virginia.gov
Teresa Poole	Brain Injury Association of Virginia, Board of Directors	yogajazz@cox.net
Jim Rothrock	Department for Aging and Rehabilitative Services	james.rothrock@dars.virginia.gov
Jim Scott	Virginia House of Delegates	deljscott@aol.com

BACKGROUND

Nationally, there has been an increasing awareness of the existence and possible correlation between offender populations and undiagnosed brain injury (Wald, Helgeson, and Langlois, 2008). The Bureau of Justice Statistics (BJS) reported that the total U.S. prison population at year-end 2010 was 1.6 million people (Guerino, Harrison, and Sabol, 2010). In addition, at year-end 2010, about 7.1 million people, or one in 33 adults, were under the supervision of adult correctional authorities in the U.S. The Annual Survey of Jails' most recent data reported that jails in the United States confined 236 inmates per 100,000 U.S. residents or 735,601 inmates in June of 2011. During the 12 months ending midyear 2011, local jails admitted an estimated 11.8 million people. Jail authorities were also responsible for supervising 62,816 offenders outside of the jail facilities including 11,950 under electronic

monitoring, 11,369 in weekend programs, 11,660 in community service programs, and 10,464 in other pretrial release programs (Minton, 2011).

According to jail and prison studies, 25-87% of inmates report having experienced a head injury or TBI as compared to 8.5% in a general population reporting a history of TBI (Schofield, Butler, Hollis, Smith, Lee, & Kelso, 2006; Slaughter, Fann, & Ehde, 2003). The Traumatic Brain Injury in Minnesota Correctional Facilities project, funded by a 2006 TBI State Agency Grant Award, found that of the 1,000 adult males admitted to the Minnesota prison system in 2007, 80% screened positive for brain injury. In other states, screening results reported positives of 87% in Washington, 75% in California, 25% in Illinois, 83% in Indiana, and 68% in Kentucky.

Information on the number of juveniles with brain injury incarcerated nationally is lacking. As part of its initial project activities, Virginia researchers conducted an extensive literature review and identified no more than 15 studies. These studies have reported higher rates of TBI among children and teens who have been convicted of crime (U.S. Department of Health and Human Services, Health Resources and Administration, 2011). For example, Hux and her colleagues (1998) surveyed parents of students enrolled in a public middle school or high school in a Midwestern U.S. community and parents of middle or high school students admitted during a 9-month period to a Midwestern U.S. correctional institution for juvenile delinquents. Results revealed that delinquent and non-delinquent adolescents differed significantly in their likelihood of sustaining blows to the head; almost half of the delinquent youth had one or more head injuries, while fewer non-delinquent youth had similar histories.

Timonen and colleagues (2002) found in their study that TBI during childhood or adolescence increased the risk of developing mental disorders two-fold. In addition, TBI was significantly related to later mental disorders with coexisting criminality in the study's male cohort members. Perron and Howard (2008) conducted interviews with 720 residents of 27 Missouri Division of Youth Services rehabilitation facilities in 2003. They found that approximately one-in-five of the youth interviewed (18.3%) reported a TBI. Youth were significantly more likely to be male and report an earlier onset of criminal behaviors/substance abuse issues.

Lewis and her colleagues (2004) reported on eighteen males condemned to death in Texas for homicides committed prior to the defendants' 18th birthdays. They received systematic psychiatric, neurologic, neuropsychological, and educational assessments, and all available medical, psychological, educational, social, and family data were reviewed. All of the inmates but one experienced serious head traumas during childhood and adolescence. All but one came from extremely violent and/or abusive families in which mental illness was prevalent in multiple generations. While this study is limited due to the small sample size, the authors concluded that brain damage and/or severe psychopathology compromise the emotional stability, judgment, and impulse control of adults with mature, fully developed brain structure and function. Such brain dysfunction and mental illness would present even greater social adaptational challenges to adolescents.

In light of these findings, it is interesting that almost every state screens for mental health problems within the juvenile justice system, but screening for TBI has not been universally adopted (Helgeson, 2011). Researchers have noted that inmates who reported brain injuries are more likely to have disciplinary problems during incarceration, may experience seizures or mental health problems, may exhibit anger or irritability that is difficult to control, and may display impulsive or unacceptable sexual behavior (Silver, Yudofsky, and Anderson, 2005). In addition, aggressive or violent behavior has been associated with recidivism (Coid, 2005). These brain injury-related problems can lead to incidents with corrections staff and other inmates, thus placing others at risk of injury. Ward and her colleagues suggest that there is a need for a more detailed screening questionnaire to more accurately identify offenders with a history of TBI. If prison staff and officials are aware that these problems are related to a TBI, support in the way of interventions may result in more effective management, rehabilitation, and community reintegration (Ward et al., 2008).

BRAIN INJURY

The impact of a traumatic brain injury on an individual is related to the cause, location, and the severity of the injury. For example, individuals who sustain injuries to the left side of the brain will have different functional challenges than those with injuries to the right. Left side injuries may cause difficulties in understanding language, speaking, depression and anxiety, verbal memory deficits, and impaired logic. Injuries to the right side of the brain can cause challenges such as visual-spatial impairment, altered creativity, visual memory deficits, and decreased awareness of deficits (BIAA, 2007). The severity of the injury, as well as whether the injury is an open or closed head injury, also impacts functional deficits. The following table presents examples of impairments related to a TBI. This is not an all inclusive list but is offered as examples of the challenges that are faced by individuals with a TBI. These challenges will impact an individual's daily functioning and would likely pose additional challenges if an individual is incarcerated.

Executive Functioning Impairments	<ul style="list-style-type: none"> • Distractibility. • Difficulty with changes in routine. • Impaired ability to evaluate what is important. • Impaired ability to think abstractly. • Difficulty understanding cause and effect. • Impaired safety awareness.
Behavioral / Emotional Changes	<ul style="list-style-type: none"> • Aggression or property destruction. • Yelling and angry outbursts. • Self-injury. • Depression. • Impulsivity and hyperactivity. • Inappropriate sexual behavior.

Sensorimotor Impairments	<ul style="list-style-type: none"> • Headache, seizures. • Paralysis or paresis. • Balance or coordination problems. • Fatigue, decreased physical endurance. • Increased sensitivity to light or sound. • Hearing / visual impairment. • Chronic pain.
---------------------------------	--

Brain Injury Association of America (2007)

POLICY SUMMIT AGENDA

Representatives from five states met for two days of facilitated discussion focused on project overviews and outcomes; policy implications and recommendations; and ideas for project sustainability and future studies. The agenda for the Policy Summit follows.

Wednesday, June 13, 2012	
9:00-9:30	Welcome and Introductions
9:30-11:00	Project Overviews and Current Status
11:00-11:45	Break
11:15-1:00	Identification and Screening Procedures
1:00-2:00	Lunch
2:00-3:15	Overview of Project Results to Date
3:15-3:30	Break
3:30-5:00	Small Group Discussions - Topical Areas <ul style="list-style-type: none"> • Evaluation and Screening • Treatment and Intervention • Education and Outreach
Thursday, June 14, 2012	
9:00-9:15	Overview of the Day
9:15-10:15	Small Group Discussion Reports: Summary of Topical Areas from June 13
10:15-10:30	Break
10:30-12:30	Peer Group Discussions (Advocates; State Agency; Researchers): Policy Implications
12:30-1:30	Lunch
1:30-2:45	State-Specific Discussions: Policy Recommendations / Future Study
2:45-3:00	Closing Remarks

PROJECT OVERVIEWS AND CURRENT STATUS

June 13th, 9:30 to 11:00

During the first morning session of the Policy Summit, all five states presented an overview of their individual projects and current status. Representatives were asked to bring a one page summary and a PowerPoint presentation to report on their respective projects and to share information with the other participants. The following project summaries include information from the Policy Summit as well as information gathered after the event.

Minnesota Project Overview and Current Status

Minnesota began its efforts in 2006 with a TBI State Agency Grant Award from the Maternal and Child Health Bureau (Title V, Social Security Act), Health Resources and Services Administration, Department of Health and Human Services. A second grant was secured in 2010. In 2006, the data revealed that of 998 adult offenders approximately 82% met the criteria for having incurred a TBI at some point in their lives. Juvenile data was obtained on a smaller sample of 50 participants. Of the 50 male offenders (15-20 age range) interviewed, 49 reported having experienced a head injury.

The project's most important accomplishment has been bringing to the forefront the need to recognize TBI as a significant factor that affects the lives of offenders. This includes addressing the needs of offenders with TBI during their incarceration and upon their return to community living. The most significant challenge has been securing contracts to obtain the technical help and assistance needed to carry out the grant's objectives. A state government shutdown in 2011 significantly delayed the ability to secure contracts. Once the shutdown was over, there was a backlog of "critical" positions that required attention. This has significantly delayed the project's ability to offer and secure contract positions. To date, the Minnesota project has achieved the following outcomes:

- Initiated use of the Brain Injury Screening Questionnaire (BISQ) with all new admissions to three co-occurring disorders programs.
- Piloted TBI screening instrument to be used in high volume correctional intake facility.
- Established case management technical assistance designed to support release planning
- Published Native American Resource Guide to assist Native American offenders find culturally competent community supports upon release.
- Translated eleven brain injury resource documents into Somali for use by offenders and their families.

The project is continuing to expand and modify assessment approaches and clinical protocols designed to identify, assess, and refer offenders with TBI in state correctional facilities. Webinar trainings intended to assist community partners support offenders after release are planned. "Listening Sessions" or "Talking Circles" are planned to ask Native

American communities /Native American offenders what supports and systems are needed for offenders returning to their communities.

Nebraska Project Overview and Current Status

The Nebraska Traumatic Brain Injury (TBI) Implementation Partnership Grant was funded in April 2009 by the TBI Implementation Partnership Grant from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). To date, it is unknown how many juveniles (or adults) have been identified with TBI in Nebraska correctional facilities. The Nebraska Project has two primary goals. The first goal is to increase the knowledge and skills of providers and agency staff with a focus on the targeted service delivery systems for children, juvenile detainees, service members and veterans, and the elderly. This is being achieved by increasing awareness of brain injury and providing training on brain injury, assessment tools and quality services/strategies. The second goal is to increase and expand Nebraska's system capacity to provide services to individuals with brain injuries and their families, with a focus on juvenile detainees. Providers and agency staff in the service delivery systems for children, juvenile detainees, service members and veterans, and the elderly are the primary focus of this project. Nebraska has adapted the DJJ Brain Injury Screening Tool developed by Virginia Commonwealth University; however it has not yet been implemented.

The TBI Implementation Partnership Grant does not permit provision of "services," however grant funds have been used for general public TBI awareness (Annual Brain Injury Conference) and some targeted training activities for providers and agency staff serving children (0-4), veterans and the elderly. To date, no targeted skill training has been provided for staff serving juvenile detainees. Thus far, the project's most important accomplishment has been gathering a small but dedicated task force of professionals and advocates to address issues pertaining to juvenile detainees who may have experienced brain injury. The most significant challenge has been implementing a brain injury-screening pilot to identify youth in the Juvenile Justice System who may have experienced a brain injury.

In May 2011, the Nebraska Department of Health and Human Services (DHHS) approved a research proposal to determine the prevalence of historical (lifetime) traumatic brain injury among the juvenile populations at the Youth Rehabilitation and Treatment Centers (YRTC) in Geneva and Kearney. Shortly after approval, DHHS attorneys determined that active parental consent was also necessary prior to screening, which could have significantly decreased the number of participants. The impact of this decision was communicated to DHHS and an alternative proposal to conduct the research as an internal study was not approved. To date, no significant outcomes have been achieved. The project plans to implement a screening pilot, provide targeted training for service providers and agency staff and expand the availability of community based services for youth in the Juvenile Justice System with brain injuries.

Texas Project Overview and Current Status

In 2007, Texas approved the Office of Acquired Brain Injury and in 2009 received federal funding for its Texas Juvenile Justice TBI Screening Pilot Project. The purpose of the Pilot Project is to use the electronic Brain Injury Screening Questionnaire (BISQ) to screen children and youth ages 10 – 18 in the state's juvenile justice system with pre-diagnosed mental health and substance abuse issues to determine if TBI may be a contributing factor to their behavioral dysfunction. Currently, all juveniles adjudicated to secure facilities are receiving the BISQ at intake. Texas' initiative also includes the provision of the appropriate array of services/therapies through partnerships across multi-system collaboratives, parental, school involvement, and educational programs. A robust training and education program is in place for all Texas juvenile justice professionals, probation and parole officers, attorneys, judges, law enforcement agencies offering Continuing Education Units. A specialized web-based course for Texas teachers, school administrators, nurses, counselors, special education and 504 evaluators is in place to raise awareness of the needs and accommodations required by students with TBI.

Utah Project Overview and Current Status

The Utah project is funded by the Utah Department of Human Services, Division of Juvenile Justice Services. Its target audiences include Juvenile Justice Services Administration, correctional facilities administrators and staff, as well as the juveniles and their families. The project has two primary goals and objectives. The first is to determine a prevalence rate for TBI for youth in Utah's secure care settings. The second is to evaluate the need to create or adjust facility treatment services and daily programming for TBI youth in the state's secure correctional facilities to better serve their needs. When a youth is identified with TBI, staff collaborates and coordinates with the Department of Human Services and the Division of Services for People with Disabilities to evaluate the individual treatment needs of the youth and provide the necessary services required. These services can include, but are not limited to, medical care, physical therapy, occupational therapy, speech therapy, special education services, and mental health therapy.

Using a grant from HRSA, Utah developed a "train the trainer" model series on TBI for its Juvenile Justice System. The training has modules for beginning front line staff, for advanced counselors, and for those who manage medication. Developed by Utah Brain Injury Council, the Center for Persons with Disabilities at USU, and the JJS training team, there is approximately 5-6 hours of training provided during the series. The project piloted, revised, and turned the completed training over to Juvenile Justice System to implement. To date, some classes have been conducted and some private provider contractors have been included. Implementation of trainings and screening system wide has been slower than was originally anticipated due to budget constraints.

The primary outcome achieved thus far is that facility staff is becoming more aware of TBI as a treatment issue. To date, the project's most important accomplishment is its current effort to train graduate students to use the Minnesota Intake Screening Instrument, the

Traumatic Brain Injury Questionnaire (TBIQ). Interviews using the instrument are set to begin in late 2012. Project staff members now need to complete the interview training for the graduate student interns, administer the screening instrument, and compile and analyze the data gained from the interviews. Anticipated completion date for the project is May, 2013.

Virginia Project Overview and Current Status

The Virginia project was funded by a grant from Virginia's Commonwealth Neurotrauma Initiative Trust Fund with a funding cycle from July 1, 2009 until June 30, 2012. One of the core successes of the project has been the collaboration across partners. This unique collaboration included the Brain Injury Association of Virginia (BIAV), VA Department of Juvenile Justice, Virginia Commonwealth TBI Model System, VA Department of Correctional Education, Virginia Department of Education, and the Virginia House of Delegates.

The three major objectives addressed by the Virginia project were 1) to determine how many incarcerated Virginia juveniles have a self-reported history of head injury as measured by the DJJ Brain Injury Screening Tool; 2) to determine the characteristic neuropsychological profile of incarcerated juveniles; and 3) to determine the historical prevalence of other neurological conditions among incarcerated juveniles. The Virginia project began with a review of the literature, which revealed limited research on the prevalence of TBI among juvenile offenders. The next step was to review existing screening protocols that led to the development of a practical test battery.

The target audiences reached by this grant included correctional facilities, policy makers and other diverse audiences interested in educational information regarding the prevalence of TBI in correctional facilities and its impact on neuropsychological functioning. The Virginia project has achieved several important outcomes. One of the projects most important accomplishments was the participation of a large sample size of 867 juveniles. Many studies in this area contain much smaller and more limited sample sizes, which limits the generalization of the results to other similar populations. Virginia identified that over half of their participants (52.5%) reported a history of hitting or hurting their head. This finding revealed the need for resources and interventions including individual treatment plans for incarcerated youth.

The project's screening included a battery of six neuropsychological tests that proved effective and efficient in identifying the number of incarcerated juveniles with TBI in Virginia. Project staff members believe that other facilities would benefit from using a similar protocol for identifying juveniles with TBI. The project recognized that it would be beneficial for correctional facilities interested in collecting and better understanding the neuropsychological functioning of their detainees to develop a standard protocol for doing so. Future research may benefit from a more comparative analysis (individuals reporting TBI vs. those that did not report TBI) as opposed to focusing only on those who reported TBI.

A great deal of the project's outreach work was conducted in collaboration with the Brain Injury Association of Virginia (BIAV). Through this collaboration, a series of short videos

were produced to provide education on brain injury to front-line staff working for the Virginia Department of Juvenile Justice. The videos were also designed for public viewing by a broad audience to include educators, healthcare professionals, and survivors of TBI, family members of survivors, and other interested individuals. In addition, brochures and informational packets were distributed with a Professional's Guide titled "Working with Individuals with Brain Injury."

IDENTIFICATION AND SCREENING PROCEDURES

June 13th, 11:15 to 1:00

As previously mentioned, almost every state screens for mental health problems within the juvenile justice system, but screening for TBI has not been universally adopted (Helgeson, 2011). The state representatives were asked to present on the instruments and procedures used for TBI screening during the late morning and early afternoon. The five states attending the Policy Summit were at varying stages in the development and implementation of evaluation and screening processes. Representatives from each state provided an overview of their progress in this area.

Minnesota Identification and Screening Procedures

The primary goal of the Minnesota project has been to demonstrate a TBI Screening assessment and linkage process for use in a correctional setting including TBI specific community re-entry. This includes building TBI related capacity for staff, offenders, families, and communities with specific attention to Native American communities; improving systems and enhancing capacity at the statewide level. Adult male and female offenders with an emphasis on offenders who are currently participating in co-occurring (mental illness and substance abuse) treatment programs are the primary focus of the project.

For the male and female adult offenders, the project provides TBI screenings at intake facilities and at various points thereafter and embedded neuropsychologists in the adult men's and women's co-occurring programs for the purpose of identifying and serving offenders with TBI in these respective programs. The project has a TBI-specific release planner and has developed a family liaison position to help offenders and their families understand TBI and the resources that are available once the offender returns to community living. The project also has a Native American liaison. The liaison's role is to enhance cultural competence in staff members that support Native American offenders and to establish Native American re-entry technical assistance and support. The project uses the Traumatic Brain Injury Questionnaire (TBIQ) and Brain Injury Screening Questionnaire (BISQ). In addition, they are currently devising a screening instrument to be used in high volume intake facilities.

Nebraska Identification and Screening Procedures

The Nebraska project reported having a great deal of difficulty in implementing a screening process in their state. Initially, they had planned to use passive consent forms. All of their screenings were to be de-identified but at the point of implementation, the consent issues became an issue. At the time of the Summit, they were moving towards using active consent forms through their IRB approval process. Since the Summit, the project reported that it is planning to implement a screening pilot.

Texas Identification and Screening Procedures

Texas' work at the time of the Summit was in the pilot stage. The project is using the Brain Injury Screening Questionnaire (BISQ) developed by the New York TBI Model System. Texas has screened approximately 3,000 children and youth in the juvenile detention and 203 youth served through the Texas Juvenile Probation Commission for unrecognized TBI. The state is using its HRSA TBI Systems Change Implementation Partnership Grant to conduct the screening.

Initially, the Texas project staff conducts an interview with the child including a review of the medical records and evaluations if these are available. Then, they determine if the BISQ needs to be completed. The BISQ administration is computerized. If the juvenile has the capability of completing the test without assistance, it is a self-test. If not, trained staff assists the juvenile with completion. The project wanted the test to be administered in Spanish as well but has found this to be cost prohibitive. If needed, someone who speaks Spanish helps the child complete the screening process.

Utah Identification and Screening Procedures

During the Policy Summit, Utah representatives reported that screening typically is done at the pre-sentence phase. They were using the *Level of Service Inventory* for screening. If an individual is identified using this tool, he or she is sent for neuropsychological evaluation. However, the Utah project felt that the screening tool had not met their needs. Four years ago, the project conducted an assessment to determine the prevalence of TBI in Utah's correctional facilities. They experienced inter-rater reliability problems with the screening instrument. The data suggested a prevalence rate of about 25% at that time.

Since the Policy Summit, the Utah project has decided to adopt the Minnesota TBIQ. In its effort to identify the number of juveniles identified with TBI in Utah's correctional facilities, the project is currently preparing nine graduate student interns to interview all youth placed in any of the state's secure care facilities. The intent is to determine a prevalence rate of TBI for this population. Nine graduate students and Mike Conn from Utah Division of Juvenile Justice Services will be interviewing approximately 130-150 youth incarcerated in five secure correctional facilities located across the state of Utah.

Virginia Identification and Screening Procedures

The information presented by Virginia was the most detailed of the states represented at the Policy Summit. The Virginia project has done a significant amount of work in this area, and Dr. Jeffrey Kreutzer presented on the project's activities and outcomes. One of Virginia's primary goals was to develop an effective screening system for all juveniles entering the Department of Juvenile Justice (DJJ) system. To address this goal, the project sought to answer the following questions:

- How many juvenile detainees in Virginia have a history of traumatic brain injury?
- What screening, evaluation, and treatment protocols are currently used in Virginia?
- Are there standard protocols for screening and treatment of TBI within juvenile justice populations around the country?

Initially, the project staff reviewed numerous screening protocols to include 1) Brief Screening for Possible Brain Injury; 2) TIRR Symptom Checklist; 3) Brain Injury Screening Questionnaire; 4) Pediatric Test of Brain Injury; 5) HELPS Questionnaire; 6) Mental Health Screening Questionnaire for Adolescents; and 7) Alaska Screening Tool for Dual-Diagnosis and TBI. In order for an instrument to be included in the review, it had to be sensitive, economical, and readily administered by well-trained paraprofessionals. The outcome of Virginia's work in this area was the development of the *VCU Brain Injury Screening Tool*.

During his presentation, Dr. Kreutzer recommended using a combination of methods for screening and evaluation to determine if a juvenile entering the DJJ system had sustained a TBI. This included 1) medical records review, 2) self-reported symptoms, 3) self-report history, and 4) psychological testing. Presently, Virginia does not have a person to do a full neuropsychological evaluation. However, by using the listed combination of screening and evaluation methods, the project has been able to yield good evaluation data. Virginia project participants agreed that no one method alone will yield a complete picture of the individual.

Dr. Kreutzer discussed self-reported information, noting that it is not useful when used by itself for evaluation but has been useful to prompt additional questions. The *DJJ Brief Brain Injury Screening Tool* is being used by the Virginia project to collect self-reported data. This tool includes items that are relevant to children and adolescents and is designed to determine both the likelihood of TBI history and the severity of the injury. The four categories of questions from this Tool include the following:

- A. Did you ever hit or hurt your head?
- B. When you were hit on the head, did you see a doctor?
- C. At any time(s) after you hit your head, did you lose consciousness?
- D. After you hit your head, did you (or a teacher or family member) notice any new problems?

Dr. Kreutzer also presented on other instruments that are included in Virginia's Neuropsychological Screening Component. The following table presents a brief summary of these instruments:

Test	Function Measured	Testing Measure	Admin Time
Symbol Digit Modalities Test (oral administration)	Attention, visual scanning	Total # correct	90 sec
Trail Making Test A; Intermediate, Adult Version	Executive functioning, motor control and speed	Speed of completion, number of errors	<5 min
Trail Making Test B; Intermediate, Adult Version	Executive functioning, motor control and speed, cognitive flexibility	Speed of completion, number of errors	<5 min
Rey-Osterrieth Complex Figure Test, copy and recall	Non-verbal memory; visuospatial abilities; planning; organizational and problem-solving strategies; perceptual, motor, and visuoconstructional functions	Points for accurate reproduction of figure and recall following 3-min delay	~8 min
Rey Auditory Verbal Learning Test	Verbal learning & memory	Total number of words recalled Trial 1 - 5	10 - 15 min

The ultimate goal of the Virginia project is to develop a systematic, empirically-based process for reliably identifying brain injury. Their current activities and plans include 1) conducting data analysis in collaboration with DJJ; 2) developing education and training materials for DJJ personnel related to screening, evaluation, and treatment; and 3) disseminating information regarding prevalence, screening, and intervention protocols. Several states indicated that they would have a problem implementing Virginia's model, because they often do not get the necessary medical records at the juveniles' point of entry into the system.

SMALL GROUP FACILITATED DISCUSSIONS

June 13th, 3:30 to 5:00

During the afternoon of June 13th, participants divided into small groups to discuss three specific topics related to their projects' outcomes and activities. This included 1) evaluation and screening; 2) treatment and intervention; and 3) education and outreach. Participants were allowed to "self-select" the small group that they wanted to attend. Each group was asked to keep notes on what was discussed and to identify a person to report back to the large group for a summary discussion of each area.

The questions addressed during each of the small group discussions (i.e., evaluation and screening; treatment and intervention; and education and outreach) are listed in the following table:

Table 3: Facilitation Questions for Small Group Discussions
1. What have been the effective practices that your project has implemented for _____ (evaluation and screening; treatment and intervention; education and outreach)?
2. What did your project do that facilitated these promising practices?
3. What have been the barriers?
4. What has your project done to overcome these barriers?
5. How are you evaluating sustainability? What do you recommend?

Evaluation and Screening Small Group Discussion

Question #1: *What have been the effective practices that your project has implemented for evaluation and screening?*

The Evaluation and Screening Group was comprised of representatives from most of the states in attendance. Group participants agreed that they were able to identify several effective practices in the area of evaluation and screening. All group participants agreed that it would be impossible to evaluate a juvenile without substantial medical records. They emphasized the importance of focusing on the individual’s functional deficits. Participants expressed concern that much of their time can be spent “chasing an etiology” when it is really the behavior that is important. Unfortunately, all agreed that community services require the “cause” of impairment, because this is what drives and funds services. In addition, etiology can become important when developing state and national policy. In conclusion, members of this group agreed that if projects are able to identify etiology, it is an important pursuit and emphasized that an individual could have multiple causes of injury.

The Utah project indicated that a screening tool needs to be developed for administration to incarcerated youth by professionals / staff who may not have a clinical psychology degree. There appeared to be consensus on the questions that need to be asked and the importance of each, but participants cautioned that it was important not to get too detailed in regard to symptoms and to stay focused on health questions. They indicated that screenings are helpful to make decisions while acknowledging that there are limited resources and time. Projects need to filter who has priority status and in need of the greatest attention. Group members noted that problems occur when an evaluator is looking solely at an individual's TBI since the brain injury might not be the sole condition. Simply asking questions about where or how a head injury occurred isn’t enough. Other medical questions need to be asked that might reveal other issues such as fetal alcohol syndrome, birth trauma, hypoxia, or near drowning.

The Evaluation and Screening Group noted that there are screening tools that insurance companies will authorize, but in general the group found these tools to be imprecise. All participants agreed that there is a need to assess motivation, which led to a discussion on the need for psychological testing. Participants asked themselves if this area should be a component of the screening. In Virginia, every youth that comes through the Department of Juvenile Justice (DJJ) gets a full psychological and IQ tests. As a result of this procedure, Virginia's DJJ has added new categories such as a trauma list and have since discovered that Post Traumatic Stress Disorder (PTSD) is showing up in 50% of girls. Similar to Virginia juveniles, Minnesota juveniles are receiving a full battery of tests. In Nebraska, some youth who are long term placements will get a full psychological. Participants were unsure if this practice was the norm for all youth when they first come into the system.

Group participants discussed their perceptions of how states are handling mental health assessment and substance abuse. They agreed that there is a wide variation of systems completing such assessments. Some states may have one or two psychologists across the entire state so it becomes an impossibility to test all juvenile offenders. Participants highlighted national organizations that deal with criminal justice, think tanks that are criminally justice driven, where mental health and substance abuse have become integrated but this practice is not seen with TBI services. There are multiple tools that states can use, but this is not available for TBI at this time. Participants hoped that as an outcome of the Policy Summit this type of comprehensive evaluation and screening could be highlighted.

Question #2: *What did your project do that facilitated these promising practices?*

There was consensus on this question that there really is no clear cut evidence that one practice is superior over another. Some states were further along in this area than other states, but all agreed that it was important to spend time talking with other experts in this field and to have opportunities to learn from each other. Participants who had major accomplishment in this area had developed strong team approach with DJJ as a key partner. Participants agreed that it would be helpful to critically document promising practices and identification of best measures. In order to do that, projects must come together to develop a consistent protocol that can be used across all projects. There was agreement that a lot of flexibility would be needed in order for this to happen. If the screening process were 10 or 15 minutes, then participants felt that it was possible to conduct the same initial screening in all project states.

Question #3: *What have been the barriers?*

A major barrier facing all projects is that TBI is generally discussed as an entity unto itself rather than integrated with other factors impacting youth in the juvenile justice system. There was general consensus that there was not adequate information or national focus on these issues. They agreed that a national organization or initiative looking at these issues would be helpful. Projects recognized that they are really at the forefront of research in a field where there are fewer than 15 studies on how many children and youth with a TBI are in the

juvenile justice system. Participants were hopeful that the type of work that they are doing now could push a new national focus.

Question #4: *What can be done to overcome these barriers?*

Regular communication and sharing of information about what is and is not working was identified as a step to overcoming these barriers. This type of interaction would help to identify some of the best approaches for moving forward. Participants noted that science moves forward incrementally, and there is a real concern regarding how the projects could collectively best impact the field. One idea suggested was the publication of “white papers.” This might be an effective strategy to promote a national dialogue. Another idea was to plan a follow-up meeting to the Policy Summit and have an identified outcome for the meeting: a set of measures that the involved states will agree to use (i.e., a certain questionnaire or psychological test) and then reconvene in a year to assess process and outcomes. The Nebraska project indicated that this would be very helpful for them in getting a “toe hold” in their state. They felt that this type of process would give credibility to moving such a project forward within their state.

Question #5: *How are you evaluating sustainability?*

The group felt that the best way to effectively move toward project sustainability was to have a consensus conference with all state projects. The outcome would be to agree to use the same screening procedures and then reconvene in one year to evaluate the results. Part of this process would be the feasibility testing of the instruments. Participants agreed that they cannot just focus on reliability and validity; it is also feasibility of the testing as well as addressing which questions to ask under what circumstances and what level of training is needed to use the screening tool. Screenings have to work within the systems that they are being used.

Treatment and Intervention Small Group Discussion

Question #1: *What have been the effective practices that your project has implemented for treatment and intervention?*

The Treatment and Intervention Group had representation from all of the states at the Policy Summit. Group participants agreed that there were four major effective practices necessary to support juveniles with a TBI in the juvenile justice system. These practices are: 1) functional behavior management; 2) programs that stimulate brain/nerve development through eye-hand coordination exercises; 3) exclusion of non-delinquent/low risk youth from juvenile commitment centers; and 4) written transitional/reintegration services for youth upon release specific to meeting their needs as an individual with a traumatic brain injury.

When delivering services to youth with brain injuries in the juvenile justice system, group members agreed that services provided within the correctional program for incarcerated

youth should include a team that consists of medical staff, therapists, education, recreation, and family members / guardians. All participants agreed that services should be presented in a transitional wrap-around manner. These services would identify a community team that at a minimum would include vocational rehabilitation, recreational therapy, and educational services. The transitional wrap-around services should be parallel to the existing community mental health systems and should involve a Multi-systemic Therapy (MST) style approach. Another example that was cited by group participants was the Assertive Community Treatment (ACT) team, where case management, treatment, and employment services serve together on an integrated service team.

The majority of the group participants agreed that their projects placed an emphasis on continuity between the correctional center and the community. It is important for the juvenile correction program to coordinate with the community public education program to assure continuity of education programs. Utah's juvenile correction system was cited as an example where the same case manager who works with a juvenile while she/he is in the correction center follows the youth into the community and has at least monthly face to face contact with the youth until the he/she is released from the juvenile justice system. (Note: The Utah case management approach is not specific to youth with brain injuries. The follow along by case managers is done for all juveniles released from the juvenile centers.)

Question #2: *What did your project do that facilitated these promising practices?*
(Note: discussion involved what would a project do since these are projected, not completed, activities)

Individual state projects noted the importance of using a variety of activities to promote promising practices. Across all projects there was consensus that networking with critical stakeholders is vital to the success of the program. In addition, group participants emphasized that using sound clinical practices to provide mental health services is very important to the wellbeing of the juvenile.

Question #3: *What have been the barriers?*

While all of the group participants were very positive about the individual successes of their programs, they were also able to list several barriers that were slowing the implementation and growth of their project. One such barrier was the lack of funding and resources. With current budgets and predictions of shortfalls, participants were not optimistic about future funding options. A second barrier that was cited by the group was the lack of knowledge and research on best practices. Finally, group participants acknowledged that in the near future, they need to come together and build consensus towards a consistent course of action.

Question #4: *What has your project done to overcome these barriers?*

State projects agreed that they are in the early discussion stages for treatment and intervention and they hope to be ready in the near future for a continuity of conversation with emphasis on information gathering. No specific actions were identified.

Question #5: *How are you evaluating sustainability? What do you recommend? (Note: discussion focused on recommendations)*

All group participants agreed that evaluating sustainability was critically necessary. Ideas for such evaluation included 1) written education plan and a mental health services treatment plan (MHSTP) for every juvenile in the system who would transition with the plan into the community;; 2) greater involvement of correctional education in the juvenile justice system; 3) continuity of case manager (Utah example referenced earlier); 4) systemic strategic plan that addresses need for wrap around transitional services at the court, correctional center, and community services levels; 5) cataloging of existing resources in the various community services systems; and 6) a pilot study on the delivery of wrap around services for juveniles with brain injuries who are in the juvenile justice system.

Education and Outreach Small Group Discussion

Question #1: *What have been the effective practices that your project has implemented for Education and Outreach?*

The Education and Outreach Group had representation from all of the participating states. There was group agreement that much of the work that is occurring is at the awareness level of learning. Accurate information about TBI is now getting into the hands of professionals so they can begin to not only understand TBI but also the potential connection to criminality and how to begin to make changes. This would involve strong and effective partnerships with the Department of Education, Social Services, Corrections and others. Many of the states have developed and field tested in-service training curriculum targeted to such groups as first line staff, correction officers, counselors, educators, and diagnosticians. Some of the best trainings have secured representation from multiple agencies to assist with the development and delivery of the training. This practice has led to new agency partnerships taking an investment in the work. In the end, a training curriculum that might have been unused previously is now being utilized. Many of the projects have also used technology to increase the dissemination of the training curriculum through online course and the development of DVDs. Projects have also created specialized training products for Spanish learners, veterans, family members, guardians, and caregivers.

Question #2: *What did your project do that facilitated these promising practices?*

State projects have been very creative in identifying effective methods that would facilitate promising practices. The Virginia and Minnesota state projects identified diverse

group participation as a key factor in their success. This practice involved the active contribution of professionals from a variety of different departments/agencies. This single practice helped not only to improve the final product but also increased overall dissemination by sharing the product with various agencies and departments. In Texas, there was collaboration in offering Grand Rounds on Brain Injury for public health care providers. Texas also developed an online instructional course: Brain Injury, the Silent Epidemic. Utah had success when they found a bank to co-sponsor their training event, which supported the offering of CEUs and ultimately resulted in an increase in the number of specialists in TBI.

Question #3: *What have been the barriers?*

As with any new initiative, the state projects identified multiple barriers to success. Many of the barriers faced by the projects could be described as separating myth from fact, and educating others about what is true with regard to brain injury. There is an underlying attitude that people get hit in the head all of the time and this is just a normal part of living. There is no awareness that these injuries might be mild to moderate brain injury. In addition, some states were told that if they identified a “new” need, then they were ultimately responsible for addressing this unmet need. This type of attitude does not promote interest or support for an in-depth needs assessment. There is also a stigma attached to BI in many parts of the country. Parents may be reluctant to report a fall, for fear that they are charged with neglect. Finally, individuals within the juvenile justice system are sometimes not a sympathetic group with many feeling that brain injury is just an excuse and that these are “bad kids” who are not deserving of special resources and attention.

Question #4: *What has your project done to overcome these barriers?*

All state projects work every day to address barriers. States that were not as far along as other states were going to use some of the individual state project data to convince their home states that using a set of effective practices will ultimately save the state money. Overall, there was agreement to 1) identify passion which can sometimes replace a lack of funding to help move things forward, 2) encourage volunteers to work on community boards to disseminate information, 3) share information and resources, and 4) use technology.

Question #5: *How are you evaluating sustainability? What do you recommend?*

The issue of evaluation and sustainability was on the minds of all Policy Summit participants. It is a common perception that evaluation occurs after a project ends. In reality, data collection should be built into the project design and should be ongoing for evaluative purposes so it can shape project design and sustainability for the life of the project. Securing and maintaining the commitment of the cooperating agencies to collect essential data is critical to evaluating a project’s success. All agreed that evaluation is critical to each state project. Other ideas for sustainability include: use of technology, build strong partnerships, get information into the right hands, keep expectations high, be creative and do more with less,

partner with a local university to provide pre-service training to professionals, and get involved with local policy makers to change public policy.

SMALL GROUP DISCUSSION REPORTS: SUMMARY OF TOPICAL AREAS

June 14th, 9:15-10:15

The second day of the Policy Summit began with each group from the previous day presenting a summary of its discussions to the larger group and responding to questions. Productive large group discussions resulted on evaluation and screening; treatment and intervention, and education and outreach. A summary of each follows.

Evaluation and Screening

The most important step forward for evaluation and screening is to evaluate each state's existing procedures and determine what everyone is doing. This would help build consistency and success across projects. There is a strong need to determine if there are similarities across the states and systems. It appears that in some places there is a hierarchy of testing that is being used. The group would like to determine if all projects could conduct the same screening and then individualize the process in each state as resources allow. Group participants want to determine if there are common data elements that all projects could use. They also discussed data security. Minnesota thought that some of their information could not be shared or released.

States are gathering information but until this Policy Summit, the information has not been shared. If projects could get more consistency and share more information as well as be more consistent in the data that is collected, projects could learn from one another. Group participants noted that sharing data can be "political." One idea was to compile the data as a whole and de-identify the state specific outcomes. There would be a need to find some kind of funding source and bring people together to identify the data variables. Both the National Institutes of Health (NIH) and the National Institute of Disability and Rehabilitation Research (NIDRR) are funding groups that conduct or sponsor research. This could potentially be a source of funding once common data elements are identified before embarking on more in-depth national research in this area. These and other Federal government agencies will not be able to compare project data because of the current lack of consistency. This is a major obstacle to future replication.

Education and Outreach

There is a concern about children and youth with brain injury being labeled as having other disabilities such as learning disabilities. The danger is that TBI changes over time, and the system might not be able to provide the most effective treatment when needed as compared

to a learning disability, which is consistent regardless of the age span. The difficulty is not properly identifying the disability and responding correctly initially.

Identifying an accurate cause of impairment is important for therapeutic intervention. Too many people with brain injury fall through the cracks because of incorrect diagnosis. There is a need to develop services that fit the identified cognitive deficits that are exhibited. In the past, programs treated patients who may have had an undiagnosed brain injury and ultimately the individuals did not benefit because intervention and treatment were not properly matched to the support needs. Treatment plans must be individualized to serve each child or youth with a TBI.

Treatment and Intervention

A major focus of discussion was the development of treatment teams inside the facility. Treatment teams could be used to determine the juveniles' needs and to develop strategies for building skills in areas of deficit and challenges – and enhancing skills in areas of strength. In one system when youth are problematic, the system uses Dialogue for Behavior Therapy (DBT). This strategy has been found to be effective by using a functional behavior approach. A behavior is targeted, an intervention is developed, and a training plan is created and implemented. There are multiple repetitions, so the youth receive consistent responses and ultimately a habit is created. By and large, youth respond well to positive behavior support. Plans work when they are specific, behavioral, and the whole team is involved. Group participants also discussed Multi-Systemic Therapy (MST), which has also proven to be effective. However, for a program that wants to use this approach, it is important to educate the state legislature since this treatment approach can be expensive. Despite the cost, this treatment method is effective when there is one therapist to six to seven children or youth. The approach has very individualized treatment plans, and the system of care is based on wrap around treatment that is child-centered.

In addition to the treatment approach, there needs to be strategic thinking and planning about intervention. Practices should be developed based upon research (“evidenced based”). Participants expressed a need for a best practice manual for interventions. Youth need to be supported, and there must be coordination between the schools to help the young person advance his or her education. It is recognized that the higher the education levels of youth, the lower the crime rate. It is easier to get consistency in some states over others. For example, Virginia has a county system and procedures are different in each system. Utah on the other hand can send out one tool and it can be implemented across the entire state.

PEER GROUP DISCUSSIONS: POLICY IMPLICATIONS

June 14th, 10:30-12:30

The next activity for the Policy Summit was to divide the participants into small groups for discussion on policy implications. There were two parts to these discussions: 1) peer group discussions (advocates; state agency; researchers) and 2) State-specific group discussions. The peer group discussions consisted of three peer groups: advocates, state agency personnel, and researchers.

The two questions that provided guidance for these discussions are listed in Table 4, below. Each group was asked to identify a participant to report on behalf of the small group to the larger group for later discussion. A summary from each of the small peer group discussions follows.

Table 4: Facilitation Questions for Peer Group Discussions
1. What state policies were implemented that facilitated services?
2. What state policies need to be changed or developed for future study?

Advocates

Question #1: *What state policies were implemented that facilitated services?*

The Advocates peer group considered effective state policies that they found helpful in facilitating state services to youth with a TBI in the juvenile justice system. In Utah, a TBI outreach and education fund was initiated. Funds could not be used for direct services. A sports concussion law was passed, and resource facilitation funding was made available through the Department of Health. In Minnesota, resource facilitation funding through DOH was made available, with an emphasis on utilizing resources that were already available. In Nebraska, a trust fund and TBI registry were implemented. In Virginia, funding for statewide regional resource coordination was contracted to the Brain Injury Association of Virginia (BIAV) by the Department for Aging and Rehabilitative Services.

Question #2: *What state policies need to be changed or developed for future study?*

The Advocacy group discussed state policies that need to be changed or developed for future study. There are a variety of rules that may not be in legislative code that states operate under when serving youth with TBI who are in the juvenile justice system. There is a need for terminology to be defined and used consistently across systems. More emphasis is needed on prevention; for example, a focus on use of helmets and seatbelts. There is a need for an increase in Medicaid funding for persons with TBI and a front end policy making cognitive rehabilitation available to those who need this service. There is an overall need for an increase in funding for services to youth with TBI in the juvenile justice systems, as well as mandated

training for staff working with these youth. Screening services for youth entering the juvenile justice system need to be expanded and enhanced to more readily identify those with TBI. Participants expressed interest in gaining clarification across systems on guidelines as to when individuals in sports may return to play as well as a standard screening policy/tool.

State Agency Group

Question #1: *What state policies were implemented that facilitated services?*

Policy Summit members on the state agency peer group considered effective state policies that they found helpful in facilitating state services to youth with brain injury in the juvenile justice system. Overwhelmingly, it was agreed that the Individuals with Disabilities Education Act (IDEA) 2004 opened many doors to services by identifying traumatic brain injury as a disability in need of special education and related services. In defining the purpose of special education, IDEA 2004 clarifies Congress' intended outcome for each child with a disability. Students must be provided a free and appropriate education (FAPE) that prepares them for further education, employment, and independent living. Following this 2004 legislation, Texas included head injury as a category on their school entrance form, and this led to the development of new services and supports in that state.

Question #2: *What state policies need to be changed or developed for future study?*

The state agency peer group also discussed specific state policies that would facilitate service enhancement and future study in this area. Some members thought that it would be helpful to have a policy supporting court level assessment when there was the presence of a head injury (pre-dispositional). Another idea was to support research on standardization of screening processes. Members wanted to have guidelines for screening for TBI and for training screeners as well as relevant parties such as education, mental health staff, and parents in recognizing the presence of a head injury. Further, members pushed for the development of standards on how to determine when someone with a TBI should be referred for full or more extensive evaluation. There was group consensus on the need for expansion of brain injury case management services and support for informed treatment for individuals with TBI. Finally, members wanted to see a pilot research programs to develop promising practices.

Researchers

Question #1: *What state policies were implemented that facilitated services?*

The Research peer group stated that research in this area is the beginning stages and there is much more research to be done. In the absence of funding, it will take time to find money for the necessary research to identify evidence-based practices. Current funding has provided only a handful of projects to begin work in this important area. Cooperative agreements must be established across state agencies and departments to share vital information. Ultimately, this comes down to personal relationships and trust.

Question #2: *What state policies need to be changed or developed for future study?*

To effectively serve persons with TBI, state systems and organizations need to be open to integration of services and supports within the criminal justice system. If individuals with TBI are only viewed through a lens of substance abuse and mental health issues, progress will not be made. Members expressed an interest in building momentum and collaboration with national organizations to secure funding for research and demonstration. There is the beginning of a model that needs more research so the TBI and criminal justice communities can implement this model.

STATE GROUP DISCUSSIONS: POLICY RECOMMENDATIONS / FUTURE STUDY

June 14th, 1:30-2:45

Minnesota Summary

The Minnesota participants met and discussed what they had learned from the other projects and assessed implications for their project. Minnesota participants reviewed their TBI screening procedures and continue to believe that the Traumatic Brain Injury Questionnaire (TBIQ) is serving their population well. The Minnesota group agreed that it would be helpful to have a shared database where projects could collect the same set of data variables for reporting on success. Members acknowledged that these data could become very political but that should not prevent the projects from realizing this goal.

Nebraska Summary

At the close of the Policy Summit, the Nebraska participants met to reflect on what they had learned from the Policy Summit and to begin thinking about the development of future action steps. State specific findings and recommendations included making greater use of Department of Education and school districts because they retain responsibility no matter where a child is placed. It was noted that Individualized Education Plans (IEPs) can facilitate wrap-around services. Strategic plans are needed to educate systems on how to gain access to systems for screening purposes. Determination is needed for what screening tools to utilize with each population and at what point in the process to use these tools. A plan is needed for tracking youth with TBI who have been incarcerated in a juvenile justice facility, and who are placed or returned to the community. It would be important to identify a best approach to facilitating transition and what comprises the best transition team is needed.

Future action steps identified by the Nebraska participants include: development of strategic plans; implementing discussions regarding Burst (response) Teams; training parent advocates; begin a "TBI 101" training initiative across systems; implement a Phase 2 Tracking system, starting with a visit to other areas of the country to look at their tracking systems; expand task force membership; and utilize information from this Policy Summit to help

determine appropriate screening tools. It was noted that there is a national need for use of an effective screening tool to identify youth who have experienced a TBI.

Texas Summary

Texas was represented by a single participant. She shared with the group that the two-day event was enormously helpful and that Texas would like to host the next Policy Summit. The Texas project is going very well with its multiple collaborating partners to include county probation departments, state-operated secure facilities for felony offenders, half-way houses, and group homes. The special TBI, behavioral and cognitive center that was established at the Juvenile Justice Department's mental health secure facility is having a very positive effect. Texas has been very active producing training and educational programs and they will continue these efforts.

Utah Summary

At the close of the Policy Summit, the Utah participants met to reflect on what they had learned from and to develop future action steps. As their first action step, they were going to review their TBI Screening and Assessment and determine effective practices for integrating TBI into correctional treatment. Specifically, members wanted to implement screening processes for TBI at juvenile courts, Department of Juvenile Justice Services, Corrections, and Substance Abuse and Mental Health. Participants agreed that they needed to enhance and expand existing community-based services for TBI and to find champions to promote TBI discussions. One example was to use returning veterans and football players to highlight the need for attention and services for persons with TBI. Group members also discussed the impact of the Utah Medicaid Waiver Plan to address the need for eligibility for services for persons with TBI. Finally, members agreed that they need a legislative action group to study TBI in the areas of statutory gaps, service gaps, and knowledge gaps.

As the group reviewed the Utah Department of Juvenile Justice Services, they recommended the need to 1) define TBI and the levels of care, 2) develop data collection infrastructure related to TBI and 3) study prevalence of TBI in partnership with University of Utah. Data collection and analysis regarding persons with TBI and the Juvenile Justice System are critically needed. In addition, they reported a need to engage national organizations to study and /or discuss TBI and include Performance Based Standards (PBS), National Council of State Legislatures (NCSL), Council of State Governors (CSG), Bureau of Prisons (BOP), Office of Juvenile Justice and Delinquency Prevention (OJJDP), and the Commission on Criminal and Juvenile Justice (CCJJ). Finally, group members acknowledged that there are culturally related TBI issues among ethnic groups such as: Latinos, Polynesians, Native Americans, African Americans, and Vietnamese. These cultural differences must be better understood before effective services can be designed.

Virginia Summary

Virginia participants met as a group to consider the focused discussion that they had participated in over the last two days. Group members felt strongly that a consistent set of measures and shared database at the national level would go a long way toward advancing this area of TBI research. Members acknowledged that this would be the quickest way to effectively identify evidence-based practices. In addition, they agreed that they needed to look at technology to help disseminate project findings and best practices, including the use of webcasts and online seminars as low cost techniques and strategies to accomplish knowledge translation. Virginia participants recognized that a natural next step would be to look at appropriate treatment and intervention strategies for youth with brain injury who are identified within the juvenile justice system. How to train staff in effective approaches and achieve consistency across the system is a challenge, but one that Virginia is hoping to tackle in the near future.

CONCLUSION AND RECOMMENDATIONS FOR FUTURE STUDY

June 14th, 2:45-3:00

Appreciation was expressed to the Virginia project for initiating and hosting the *Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice*. Many of the participants had interacted with each other at national conferences or via telephone and e-mail, but had not had the opportunity to have in-depth discussions about their projects, outcomes, and future sustainability. All felt that the event was extremely beneficial and hoped that the activity could be repeated in the future.

The following is a list of recommendations that resulted from the Policy Summit discussions:

- A **universal screening protocol** that could be adopted (and adapted) by states attending the Policy Summit (and, ultimately, by all states) should be developed. States use a variety of tools for screening youth with brain in the juvenile justice system, but all have similar procedures / protocols. Documentation and a critical review of these various approaches must be conducted. It is critical to identify effective screening instruments and approaches that will lead to the development of a consistent, accepted universal screening protocol that could be used and tested across all participating states
- An initial step toward development of a universal screening protocol is that Policy Summit participants determine **common data elements** that could be used within their individualized screening instruments and protocols, as state resources and staffing allow.

- A **national focus** on the issue of brain injury among youth in the juvenile justice system is needed. Currently there is inadequate information and it is recommended that efforts are made at state and national levels to conduct research that looks at this issue in a more structured and cohesive manner.
- States currently addressing this issue should communicate regularly and continue to share effective practices. This type of **group approach** would help to identify promising practices that could be adopted nationally. Participants noted that science moves forward incrementally, and there is a real concern regarding how the projects could collectively best impact the field. One idea suggested was the publication of **white papers** at state and national levels.
- A **consensus conference** involving all state projects would facilitate sustainability for continued study and implementation of promising practices. The goal would be to reach agreement on the use of a single screening instrument and procedure and to reconvene in one year to evaluate the results. Part of this process would be the feasibility testing of the instruments.
- Recommended ideas for **evaluating sustainability of systematic screening and intervention approaches** include 1) written education plan and a mental health services treatment plan (MHSTP) to transition every juvenile back to the community; 2) greater involvement of correctional education in the juvenile justice system; 3) continuity of case management (Utah example referenced earlier); 4) systemic strategic plan that addresses need for wrap around transitional services at the court, correctional center, and community services levels; 5) cataloging of existing resources in the various community services systems; and 6) a pilot study on the delivery of wrap around services for juveniles with brain injuries who are in the juvenile justice system.

It is clear that there is a lot of work to be done in the area of identifying and treating youth with brain injury in the juvenile justice system. These recommendations are the very beginning of statewide initiatives to address these issues in a more systematic manner. By continuing the momentum of the Policy Summit and strategizing ways to implement the recommendations in this Proceedings Report, these lead states could become effective change agents in identifying, treating, and successfully transitioning juveniles from corrections back to community settings.

The **Virginia Collaborative Policy Summit on Brain Injury and Juvenile Justice** was viewed as a productive, informative, and successful undertaking. All participating states expressed the desire to continue working together on this topic and wanted to reconvene as feasible to continue the exchange of information and ideas. The ultimate goal of developing and testing a common screening approach will move forward if the states are able to continue work collaboratively and provide leadership within their own states and at the national level.



References

- Brain Injury Association of America (2007). *The essential brain injury guide* (4th Edition).
Vienna, VA: Brain Injury Association of America.
- Guerino, P. & Sabol W.J. Prisoners in 2010 (NCJ 236096). Available from: <http://www.bjs.gov>.
- Glaze, L.E. (2010). *Correctional Population in the United States, 2010* (NCJ 236319). Available
from: <http://www.bjs.gov>.
- Helgeson, S.L. (2011). Identifying brain injury in state juvenile justice, corrections, and homeless
populations. *Brain Injury Professional*, 7(4). Available from:
http://www.brainline.org/content/2011/01/identifying-brain-injury-in-state-juvenile-justice-corrections-and-homeless-populations-challenges-and-promising_page4.html
- Hux K, Bond V, Skinner S, Belau D, Sanger D. (1998). Parental report of occurrences and
consequences of traumatic brain injury among delinquent and non-delinquent youth.
Brain Injury. 12(8), 667-81.
- Lewis, D. O., Yeager, C.A., Blake, P., Bard, B., & Strenziok, M. (2004). Ethics questions raised by
the neuropsychiatric, neuropsychological, educational, developmental, and family
characteristics of 18 juveniles awaiting execution in Texas. *J Am Acad Psychiatry Law* 32,
408–29, 2004. Available from: <http://jaapl.org/content/32/4/408.full.pdf>
- Minton, T.D. (2011). *Jail Inmates at Midyear 2011: Statistical Tables* (NCJ 237961). Available
from: <http://bjs.gov/index.cfm?ty=pbdetail&iid=4235>
- Perron, B.E., & Howard, M.O. (2008). Prevalence and correlates of traumatic brain injury among
delinquent youths. *Criminal Behavior and Mental Health*, 18, 243-255.
- Schofield PW, Butler TG, Hollis SJ, Smith NE, Lee SJ, Kelso WM. (2006). Traumatic brain injury
among Australian prisoners: Rates, recurrence and sequelae. *Brain Injury*, 20(5), 499-
506.
- Silver JM, Yudofsky, SC, Anderson KE, (2005). Aggressive Disorders in *Textbook of Traumatic
Brain Injury*, Silver JM, McAllister TW, Yudofsky SC, editors. Washington, D.C. American
Psychiatric Publishing. pp. 259-277.
- Slaughter B, Fann JR, Ehde D. (2003). Traumatic brain injury in a county jail population:
Prevalence, neuropsychological functioning and psychiatric disorders. *Brain Injury*,
17(9):731-41.

U.S. Department of Health and Human Services, Health Resources and Administration, (2011). Traumatic brain injury and the U.S. criminal justice system. Available from: <http://www.disabilityrightsOhio.org/sites/default/files/ux/hrsa-criminal-justice-fact-sheet.pdf>

Timonen M, Miettunen J, Hakko H, Zitting P, Veijola J, von Wendt L, Räsänen P. (2002). The association of preceding traumatic brain injury with mental disorders, alcoholism and criminality: The Northern Finland 1966 birth cohort study. *Psychiatry Res.*, 113(3), 217-26.

Wald, Helgeson, & Langlois (2008). Traumatic brain injury among prisoners. *Brain Injury Professional*, 5(1), 22-25. Available from: http://www.brainline.org/content/2008/11/traumatic-brain-injury-among-prisoners_pageall.html

Supported by Grant #H21MC06763-04-00 from the U.S. Department of Health and Human Services (HHS), Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB).