



# COMMONWEALTH of VIRGINIA

JACK BARBER, M.D.  
INTERIM COMMISSIONER

DEPARTMENT OF  
BEHAVIORAL HEALTH AND DEVELOPMENTAL SERVICES

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October 1, 2015

The Honorable Walter A. Stosch, Co-Chair  
The Honorable Charles Colgan, Co-Chair  
Senate Finance Committee  
10th Floor, General Assembly Building  
910 Capitol Street  
Richmond, VA 23219

Dear Senator Stosch and Senator Colgan:

Item 307. P. of the 2014 Appropriations Act requires the Department of Behavioral Health and Developmental Services to *“report on the number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities and/or community services boards to the House Appropriations and Senate Finance Committees by October 1 of each year. The report shall provide, to the extent possible, the following information: (i) the general fund and non-general fund cost of the services provided to individuals; and (ii) the types and amounts of services received by these individuals.”*

Please find enclosed the report in accordance with Item 307.P. Staff at the department are available should you wish to discuss this request.

Sincerely,

A handwritten signature in blue ink that reads "Jack Barber".

Jack Barber, M.D.

Enc.

Cc: William A. Hazel, Jr., M.D.  
Joe Flores  
Susan E. Massart  
Mike Tweedy



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October 1, 2015

The Honorable S. Chris Jones, Chair  
House Appropriations Committee  
General Assembly Building  
P.O. Box 406  
Richmond, VA 23218

Dear Delegate Jones:

Item 307. P. of the 2014 Appropriations Act requires the Department of Behavioral Health and Developmental Services to “*report on the number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities and/or community services boards to the House Appropriations and Senate Finance Committees by October 1 of each year. The report shall provide, to the extent possible, the following information: (i) the general fund and non-general fund cost of the services provided to individuals; and (ii) the types and amounts of services received by these individuals.*”

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Virginia Department of  
Behavioral Health &  
Developmental Services

# **Services Provided to Individuals with Acquired Brain Injury with Concurrent Behavioral/Mental Health Diagnoses**

**Pursuant to  
Item 307.P. of the 2014 *Appropriation Act***

**the Chairs of the  
Senate Finance and House Appropriations Committees**

**October 1, 2015**

**Introduction**

Pursuant to Item 307 P of the 2014 Appropriations Act, “*The Department of Behavioral Health and Developmental Services (DBHDS) shall report on the number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities and/or community services boards to the House Appropriations and Senate Finance Committees by October 1 of each year. The report shall provide, to the extent possible, the following information: (i) the general fund and non-general fund cost of the services provided to individuals; and (ii) the types and amounts of services received by these individuals.*”

The number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services from either DBHDS mental health hospital or community services boards (CSBs), the general and non-general fund cost of those services and the types of amounts of these services received are new data elements to both DBHDS and the CSBs, thus many of the responses are incomplete. Little information is currently available from the CSBs. The data included in this report, reflecting July 1, 2014 through June 30, 2015, have not been previously recorded. To gather data after July 1, 2015, DBHDS has been working to identify these elements for its hospitals and modify the performance contract with the CSBs to require their reporting on these elements as well. As a result, DBHDS expects that reports in subsequent years, starting in October 2016, will be able to better capture the specific variables described in 307P. The table below represents DBHDS’ best efforts to report the elements requested.

**Data and Discussion**

<b>State Mental Health Facilities</b>	<b>DBHDS Response</b>	<b>State Community Services Boards</b>	<b>DBHDS Response</b>
The number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities.	32 individuals with a diagnosis of acquired brain injury received treatment at DBHDS managed facilities in FY 2015.	The number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring CSB services.	Unknown at this time. Unrecorded: will prepare for October 2016 report.
The general fund cost of the services provided to individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities.	The total cost attributed to the episodes of care for the 32 individuals with acquired brain injury receiving services in state facilities in FY 2015 was \$3,275,810.	The general fund cost of the services provided to individuals with acquired brain injury exhibiting behavioral/mental health problems requiring CSB services.	Unknown at this time. Unrecorded: will prepare for October 2016 report.
The non-general fund cost of the services provided to individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities.	Specific general vs. non-general fund costs for services are unknown at this time. Unrecorded: will prepare for October 2016 report.	The non-general fund cost of the services provided to individuals with acquired brain injury exhibiting behavioral/mental health problems requiring CSB services.	Unknown at this time. Unrecorded: will prepare for October 2016 report.

State Mental Health Facilities	DBHDS Response
The types of service received by individuals with acquired brain injury in state mental health facilities	<ul style="list-style-type: none"> <li>• Psychiatry <ul style="list-style-type: none"> <li>• Assessment/evaluation /diagnosis</li> <li>• Medication prescription and monitoring</li> <li>• Specialist referrals if needed</li> </ul> </li> <li>• Comprehensive nursing care</li> <li>• Occupational Therapy</li> <li>• Physical therapy</li> <li>• Speech therapy</li> <li>• Adjunctive therapy</li> <li>• Group and individual therapy</li> <li>• Family therapy</li> <li>• Dietary consultation</li> <li>• Education for family and individual concerning symptom management, self-care, resources, supports and ongoing treatment recommendations</li> <li>• Medical (primary care) treatment and monitoring</li> <li>• Psychology services</li> <li>• Assessment and evaluation</li> <li>• Testing</li> <li>• Behavioral support and management planning</li> <li>• Social work services</li> <li>• Psychosocial needs assessment</li> <li>• Discharge/community integration planning</li> <li>• Case coordination and consultation with community partners and support systems</li> <li>• Safety and support planning</li> </ul>
The amounts of services received by individuals with acquired brain injury in state mental health facilities.	Total inpatient days: 7,838.

State Community Services Boards	DBHDS Response
The types of service received by individuals with acquired brain injury from CSBs	<p><i>All CSB's provide</i></p> <ul style="list-style-type: none"> <li>• Emergency Services- (pre-screen for possible TDO/psychiatric Hospital Admission)</li> <li>• Information and Referral</li> <li>• Intake</li> <li>• Case Management (Mental Health)</li> </ul> <p><i>Some CSB's</i></p> <ul style="list-style-type: none"> <li>• Outpatient Counseling</li> <li>• Medication Management, Psychiatric Care</li> <li>• Psychosocial Rehabilitation Programs (Club House)</li> <li>• Substance Use Disorder Counseling</li> <li>• Group Therapy (MH and SUD)</li> <li>• Supported Living (MH and SUD); primarily adults</li> </ul>
The amounts of services received by individuals with acquired brain injury from CSBs.	Unknown at this time. Unrecorded: will prepare for October 2016 report.

According to 2013 data collected through the Virginia Department of Health, 1,437 deaths and 5,390 inpatient hospitalizations were attributable to traumatic brain injury. However, these numbers do not reflect the sustained, functional limitations that may require ongoing support and more specifically, behavioral health support. The Brain Injury Association of Virginia (BIAV) provides the following definitions. These definitions do not speak to functional limitations, but do frame the differences in brain injury.

- *Acquired Brain Injury: Acquired Brain Injury (ABI) is a term used to include both traumatic and non-traumatic injuries. It is an injury to the brain which is not hereditary, congenital, degenerative, or induced by birth trauma and that has occurred after birth.*
- *Non-Traumatic Brain Injury: Non-Traumatic Brain Injury occurs as a result of internal forces such as strokes, lack of oxygen, infection, brain tumors, and exposure to toxic substances. The challenges someone with a non-traumatic injury faces can be different, but are often very similar to those faced by someone with a traumatic injury.*
- *Traumatic Brain Injury: Traumatic Brain Injury (TBI) occurs as a result of external forces such as falls, motor vehicle accidents, and assaults. TBIs fall into two categories. Open head injuries are those in which the skull is crushed or seriously fractured. Open head injuries also happen when the skull is penetrated, as in a gunshot wound. Closed head injuries, in which the skull is not damaged, occur much more often.*

(Retrieved from: <http://biav.net/brain-injury-101.htm>)

**The number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities:** This number reflects all individuals served within state operated facilities where mental health services are a primary function of the hospital and have ICD-9 coding representing brain injury. The specific code set used was:

- 800.00 – 801.99 Fracture of skull
- 803.00 – 804.99 Other and multiple skull fractures
- 850.0 – 854.19 Concussion, Cerebral lacerations and hemorrhage after injury
- 950.1 – 950.3 Injury to optic nerve and pathways
- 959.01 Head Injury Unspecified
- 348.1 Anoxic Brain Damage (other than birth trauma)
- 799.52, .55, .59 Cognitive Communication deficit,
- Frontal Lobe Executive Function deficit, Other cognitive

The codes were provided by both BIAV and the Department for Aging & Rehabilitative Services (DARS) contracted neurobehavioral research team, and reflect the relative ICD-9 codes for acquired and traumatic brain injury (that coexist with ICD-9 mental illness codes); in other words, the patients with dual diagnoses who received treatment in Virginia’s mental health hospitals.

The diagnosis list used to represent this population is not typically a presentation that is coded within the mental health facilities; the primary reasons for admission are typically psychiatric in nature and the individual’s history of brain injury may not be captured as part of their billed diagnosis list. Additionally,

these data were derived from discharge diagnosis and not admission diagnosis. Both have the potential to be incomplete, and neither would necessarily reflect the acute needs and services for an individual with ABI.

The state hospitals included in the data reported above were the Virginia State Mental Health Hospitals, Hiram Davis Medical Center (HDMC), and Virginia Center for Behavioral Rehabilitation (VCBR). The numbers do not include information from Virginia's training centers, where the primary mission is to serve individuals with intellectual and developmental disabilities.

**The number of individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services of Community Services Boards:** The specific number of individuals served by CSBs with both ABI and behavioral/mental health issues is unknown at this time, and was not previously an identified cohort for data collection. It is anticipated by DBHDS that these data will be collected over FY 2016 to report in October 2016. To that end, DBHDS will establish a new agreement and identify specific data elements for reporting with DBHDS' Office of Community Contracting, the Data Management Committee, and the CSB Executive Directors.

**The general fund and non-general fund cost of the services provided to individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services in state mental health facilities:** Specific general vs. non-general fund costs for services are unknown at this time; such a separation of funding sources for this cohort is new for FY 2015. Attempts are underway to define the data points necessary to prepare this information for the October 2016 report. Limitations may be incurred due to the billing structures for institutional reimbursement.

The total costs for facility based services are achieved by multiplying the reimbursement rates for the level of care within the specific facility by the number of total inpatient days for those meeting the established criteria.

**The general fund cost of the services provided to individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services of community services boards and the non-general fund cost of the services provided to individuals with acquired brain injury exhibiting behavioral/mental health problems requiring services of community services board:** The specific cost for services and the use of general vs. non-general funds by CSBs for individuals with both ABI and behavioral/mental health issues is unknown at this time, and was not a previously an identified cohort for data collection. It is anticipated by DBHDS that these data will be collected over FY 2016 to report in October 2016. To that end, DBHDS will establish a new agreement and identify specific data elements for reporting with the DBHDS Office of Community Contracting, the Data Management Committee, and the CSB Executive Directors.

**The types of service received by individuals with acquired brain injury in state mental health facilities:** The state mental health hospitals include the usual wide range of medical and behavioral supports: psychiatry, comprehensive nursing care, medical rehabilitation, group and individual therapy, family therapy and dietary consultation; education for family and individual concerning symptom management, self-care, resources, supports and ongoing treatment recommendations; medical treatment and monitoring, psychological assessment, evaluation, testing, behavioral support and management planning; and social work services such as discharge/community integration planning, case coordination and consultation with community partners and support systems, and safety and support planning.

**The types of service received by individuals with acquired brain injury from Community Services Boards:** Virginia's 40 CSBs provide a wide range of services that are local and age specific. Thirty CSBs, for example, provide Early Intervention (EI) Services for individuals whose brain injury occurred

prior to age three. The other ten EI programs are operated out of agencies such as the Department of Education or Department of Health. These services include case management, developmental services, occupational therapy, physical therapy, speech and language, hearing and vision therapy.

Brain injuries sustained prior to the age of 18 resulting in cognitive delays consistent with an intellectual disability (ID) and associated functional limitations receive case management from all CSBs. Those experiencing a brain injury prior to the age of 22 resulting in a developmental disability other than ID may receive case management through the Developmental Disability (DD) waiver private case management system.

Some CSBs also provide direct services to these individuals such as day services (center based day, community based day, and employment); residential services (congregate care, in home support, and supported living); therapeutic consultation (behavior supports). These services are consistent with those provided through the ID, Day Support and DD waivers.

If brain injury occurs at any time and co-presents with mental health or substance use disorders (SUD), irrespective of age, all CSBs offer emergency services (pre-screen for possible temporary detention order/psychiatric hospital admission), information and referral, intake, and case management (mental health). Some CSBs also provide outpatient counseling, medication management, psychiatric care, psychosocial rehabilitation programs (Club House), substance use disorder counseling, group therapy (mental health (MH) and substance use disorder (SUD)) and supported living (MH and SUD - primarily for adults 22 years and over).

**The amounts of services received by individuals with acquired brain injury in state mental health hospitals:** The amount of services provided all individuals served within state operated mental health hospitals coded for a co-occurring brain injury are calculated by the summed total number of inpatient days per individual.

**The amounts of services received by individuals with acquired brain injury from Community Services Boards:** The specific amounts of services provided by CSBs for individuals with both ABI and behavioral/mental health issues is unknown at this time and was not a previously an identified cohort for data collection. It is anticipated by DBHDS that these data will be collected over FY 2016 to report in October 2016. To that end, DBHDS will need to establish a new agreement and identify specific data elements for reporting with the DBHDS Office of Community Contracting, the Data Management Committee, and the CSB Executive Directors.

## **Conclusion**

The report demands specific data relative to the number of individuals served and types of services offered by the state and state funded CSBs. The state mental health hospital based data highlights 32 individuals with ABI receiving services from mental health hospitals at a cost of \$3,275,810 for 7,838 days of service. There is no reference to functional limitations or the relationship to need for services. There is no specified significance for providing this information for brain injury and concomitant mental illness. These data do not identify any potential gap in services, nor do they identify issues around access to care. DBHDS respectfully recommends that inclusion of this type of information may make future reports more useful to the General Assembly.

In the coming year, upon establishing a new agreement for reporting with the DBHDS Office of Community Contracting, the Data Management Committee, and the CSB Executive Directors containing the specific data elements, DBHDS intends to provide a more complete summary of the information requested.