The Florida Senate

PROFESSIONAL STAFF ANALYSIS AND ECONOMIC IMPACT STATEMENT

(This document is based on the provisions contained in the legislation as of the latest date listed below.)

Prepared By: Health Policy Committee

BILL:	SB 1210
INTRODUCER:	Senator Wise
SUBJECT:	Rehabilitation of Children Who Have Moderate to Severe Brain Injury
DATE:	March 12, 2007 REVISED:

	ANALYST	STAFF DIRECTOR	REFERENCE	ACTION
1.	Garner	Wilson	HP	**Pre-meeting**
2.			HA	
3.				
4.				
5.				
6.				

I. Summary:

This bill requires the Agency for Health Care Administration (AHCA) and the Department of Health (DOH) to develop and administer a program to make available financial support for timely and comprehensive inpatient and outpatient rehabilitation for each child in Florida who has moderate to severe traumatic brain injury.

The bill requires the Office of Trauma in the DOH to conduct a survey of all existing trauma centers in the state that are designated to care for injured children in order to develop an inventory of regionally available rehabilitation facilities, an estimate of the potential volume of the rehabilitation services required by the bill, and an acceptable per diem payment for such rehabilitative services which reflects local costs and appropriate economic indicators.

The bill requires the AHCA to identify funds from current Medicaid payments that are designed to enhance the care of children and that can be used to cover the services required in this bill, and to commit any such funds to support the availability of these rehabilitative services.

The bill also requires the DOH to ensure the rehabilitation services required by this bill and the clinical outcomes of such services are recorded in the trauma registry in a manner that integrates the management of data between the rehabilitation facility and designated trauma center and allows an annual audit of outcome trends and system performance.

The bill authorizes the AHCA and the DOH to adopt rules to administer the provisions of this bill.

This bill creates one undesignated section of law.

II. Present Situation:

Traumatic Brain Injury

A brain injury is defined as "an insult to the skull, brain, or its covering, resulting from external trauma, which produces an altered state of consciousness or anatomic, motor, sensory, cognitive, or behavioral deficit" (s. 381.745, F.S.). The term "brain injury" is often used interchangeably with head injury; however, brain injury is a more specific term. Most traumatic brain injuries (TBI) occur in association with accidents or physical assaults, although brain injury can occur in other ways, including oxygen deprivation from suffocation or drowning, stroke, aneurysms, infection, and toxic effects of medications or drugs.[1]Not all blows or jolts to the head result in a TBI. The severity of a TBI may range from "mild," i.e., a brief change in mental status or consciousness to "severe," i.e., an extended period of unconsciousness or amnesia after the injury.[2]

Traumatic Brain Injury Statistics
According to the Centers for Disease Control and Prevention, TBIs contribute to a substantial number of deaths and permanent disability each year. At least 5.3 million Americans, about 2 percent of the U.S. population, currently have a long-term or lifelong need for help to perform activities of daily living due to TBI. Each year in the United States, at least 1.4 million persons sustain a TBI. Of the 1.4 million who sustain a TBI each year in the United States:

- 50,000 die;
- 235,000 are hospitalized; and
- 1.1 million are treated and released from an emergency department.

Effects of Traumatic Brain Injuries
Physical challenges of TBI may include fatigue, headaches, and problems with balance or motor skills, sensory losses, seizures, and endocrine dysfunction. TBI often leads to respiratory, circulatory, digestive, and neurological diseases, including epilepsy, Alzheimer's disease, and Parkinson's disease.

Traumatic Brain Injuries Outcomes
According to the Brain Injury Association (BIA) of America, poor outcomes after TBI result from shortened length of stays in both inpatient and outpatient medical settings; insurance coverage denials for rehabilitative treatment; and inadequate funding for public services. The BIA argues that too often individuals with TBI are prematurely discharged to untrained, unsupported family caregivers or inappropriately placed in nursing homes, psychiatric institutions, or correctional facilities.

The BIA also argues that maximal recovery and long-term health maintenance for people with brain injury can only be achieved through a comprehensive, coordinated neurotrauma disease management system providing for immediate treatment, medically-necessary rehabilitation, and supportive services delivered by appropriately trained TBI specialists in the public and private

[1] http://www.floridainstitute.com/Resources/AcuteWeb.pdf (last visited on March 12, 2007)
[2] http://www.cdc.gov/ncipc/tbi/TBI.htm (last visited on March 12, 2007)

sectors.[3] Lifetime costs of TBI totaled $60 billion in 2000. This includes direct medical costs and indirect costs such as lost productivity.[4]

Traumatic Brain Injury in Children

Head injuries are very common with children. Modes of injury include motor vehicle accidents, bicycle accidents, falls, sporting injuries, and child abuse. Many of these head injuries result in moderate to severe brain injuries. In fact, the two age groups at highest risk for TBI are 0 to 4-year-olds and 15 to 19-year-olds.[5] Among children ages 0 to 14 years, TBI results in an estimated:

- 2,685 deaths;
- 37,000 hospitalizations; and
- 435,000 emergency department visits annually.[6]

Certain aspects of brain injury are unique to children. For example, it is more difficult to measure the loss of brain function in a child. In adults, there are prior academic records, I.Q. scores, and job histories to rely on. At one time, it was assumed that children were more resistant to brain trauma than adults because their developing brains could rewire over time. However, mounting evidence seems to suggest otherwise. In fact, it may be that children are more susceptible than adults to permanent brain damage even when the forces involved are equivalent.

In children, some neurologic deficits after head trauma may not manifest for many years. Frontal lobe functions, for example, develop relatively late in a child's growth, so that injury to the frontal lobes may not become apparent until the child reaches adolescence as higher level reasoning develops. Since the frontal lobes control our social interactions and interpersonal skills, early childhood brain damage may not manifest until such frontal lobe skills are called into play later in development. Likewise, injury to reading and writing centers in the brain may not become apparent until the child reaches school age and shows signs of delayed reading and writing skills.

For many years, the idea existed in the medical field that equivalent brain damage to a child and an adult would lead to less problems in a child than in the adult. This view came to be called the "Kennard Principle" based on studies with monkeys. The idea was that a child's brain, while evolving, exhibited "neuroplasticity," enabling it to work around or adapt to organic brain damage. However, many recent studies have shown that the "Kennard Principle" is wrong, and that in fact the outcome for children suffering traumatic brain injury is far worse than the outcome for an equally injured adult.[7]

[3] http://www.biausa.org/elements/pdfs/invisible_dhhs_qxp.pdf (last visited on March 12, 2007)
[4] http://www.cdc.gov/ncipc/Spotlight/BIAM.htm (last visited on March 12, 2007)
[5] http://www.biausa.org/elements/media/facts_about_tbi.pdf (last visited on March 12, 2007)
[6] http://www.cdc.gov/ncipc/tbi/TBI.htm (last visited on March 12, 2007)
[7] http://www.braininjury.com/children.html (last visited on March 12, 2007)

Florida's Brain and Spinal Cord Injury Program

Florida's Brain and Spinal Cord Injury Program (BSCIP) is a state government administered program funded through traffic-related fines, surcharges for driving under the influence and boating under the influence convictions, temporary license tag fees, and a percentage of funds from the motorcycle specialty tag. These funds are deposited into the BSCIP Rehabilitation Trust Fund. These funds are used to assist individuals and their families identify and access all available federal, state and third party and community resources to treat brain and spinal cord injuries. The trust fund can be used to access services not paid for by any other source.[8]

The program is administered through the DOH's Division of Health Access and Tobacco. The BSCIP provides direct services by employing 21 case managers, 21 rehabilitation technicians and 5 regional managers. Children 18 and younger receive services from 12 Children's Medical Services nurse case managers, 2 human service counselors, and an administrator. Services include: case management, acute care, inpatient and outpatient rehabilitation, transitional living, assistive technology, home and vehicle modification, and long-term community-based supports funded under contract with specific not-for-profit agencies.

In addition, the program funds education, prevention, and research activities and expands its services by funding contracts with the Brain Injury Association of Florida, Florida Alliance for Assistive Services and Technology, the Florida Spinal Cord Injury Resource Center, and the Florida Association of Centers for Independent Living.

For those needing lifetime supports, the BSCIP also provides home and community based services for individuals who are at risk of nursing home placement through its Medicaid Home and Community-based Services Waiver. The purpose of the waiver is to provide Medicaid eligible clients who meet the state definition of brain and spinal cord injury and who meet nursing home level of care with the long-term community-based services and supports required to live safely and independently in the community at an annual cost not to exceed that of skilled nursing placement.

The BSCIP supports three comprehensive statewide resource centers. These centers maintain information on the most up-to-date information pertaining to brain and spinal cord injury, assistive technology, medical, social and financial resources, and other information. They provide linkages to related initiatives and specific information to help individuals and their families cope with injury and its aftermath. The BSCIP also supports prevention and education activities through contracts with community-based partners. The program supports research in brain and spinal cord injuries at the University of Florida and the University of Miami.

Any Florida resident who has sustained a traumatic brain or spinal cord injury meeting the state's definition of such injuries and who has been referred to the BSCIP Central Registry is eligible for services under the program. The individual must be medically stable to be eligible for services, and there must be a reasonable expectation that with the provision of appropriate services and support, the person can return to the community.

[8] http://www.doh.state.fl.us/workforce/brainsc/GenInfo/geninfohome.htm (last visited on March 12, 2007)

Trauma Centers in Florida

Florida began developing a statewide system of trauma care in the early 1980s. By the middle of the decade, as many as 33 hospitals identified themselves as trauma centers and were certified by state officials. As the cost of maintaining specialized trauma services increased, hospitals began to withdraw from trauma care. By 1988, there were only 12 designated trauma centers in Florida. In 1990, the Florida Legislature enacted a comprehensive program to provide the foundation for the statewide trauma system, including establishing 19 trauma service areas and a trust fund for financing the system. There are currently 21 trauma centers in Florida.

The DOH licenses trauma centers at three levels. A trauma center can be a level I trauma center, a level II trauma center and/or a pediatric trauma center. Florida Statutes mandates that level I Trauma Centers must also be pediatric trauma centers.

Level I trauma centers require 15 specific physician specialists to be on call and available 24 hours a day, 7 days a week. The center must have either an in-house burn unit or a transfer agreement with a hospital that operates a burn unit. Level I trauma centers are required to provide extensive education and are generally located on the campuses of university teaching hospitals.

Twelve of Florida's 21 trauma centers carry a level II designation. Level II centers are required to provide coverage from the same specialists and sub-specialists as level I centers but the time requirements and in-house staff requirements are different. However, all designated physicians are required to respond on-call within much more stringent time frames than a non-trauma hospital emergency department. It should be noted that the major differences between level I and level II centers are found in regard to pediatric specialists being required in level I centers and requirements of teaching hospital designation required of level I centers.

A pediatric trauma center is defined as "a hospital that is verified by the department to be in substantial compliance with pediatric trauma center standards as established by rule of the department and has been approved by the department to operate as a pediatric trauma center."[9] Pediatric trauma centers have the responsibility to meet the same criteria as adult trauma centers; however, they must have a pediatric emergency department, pediatric resuscitation equipment in all patient areas, and a Pediatric Intensive Care Unit (ICU). Pediatric trauma centers are required to have on staff trauma surgeons that are credentialed for pediatric care. Pediatric trauma staff must be trained in the complex problems of treating children, including infants, and the staff must have numerous hours of specialized pediatric care training. Florida has 10 pediatric trauma centers, two of which are pediatric-only trauma centers.[10]

[9] s. 395.4001(9), F.S.

[10] The ten pediatric trauma centers in Florida include: All Children's Hospital; Arnold Palmer Hospital; Delray Medical Center; Miami Children's Hospital; Sacred Heart Pediatric Hospital, University of Florida's Pediatric Hospital; St. Mary's Hospital, St. Mary's Pediatric Center; St. Joseph's Hospital; Shands Jacksonville-Pediatric Hospital, Jacksonville Pediatric Center; Tampa Children's Hospital; and Tampa General Hospital. Found at: http://www.floridaacs.org/www.floridaacs.org/events/events5.html (last visited on March 12, 2007)

III. Effect of Proposed Changes:

The bill requires the AHCA and the DOH to develop and administer a program to make available financial support for timely and comprehensive inpatient and outpatient rehabilitation for each child in Florida who has moderate to severe traumatic brain injury. The inpatient care must be provided for at least 4 weeks to ensure that all potential for recovery is addressed and to identify and provide for seamless continuation of the appropriate level of care for the child.

The Office of Trauma in the DOH's Division of Emergency Medical Operations is required to conduct a survey of all existing trauma centers in the state that are designated to care for injured children. The DOH, based on the survey results, must develop an inventory of regionally available rehabilitation facilities, an estimate of the potential volume of the rehabilitation services required by the program, and an acceptable per diem payment for such rehabilitative services, which reflects local costs and appropriate economic indicators.

The bill requires the AHCA to identify funds from current Medicaid payments that are designed to enhance the care of children and that can be used to cover the services required for the program, and to commit any such funds to support the availability of these rehabilitative services. The agency is authorized to seek additional funds if necessary.

The DOH is required to ensure that the rehabilitation services required by this program and the clinical outcomes of such services are recorded in the trauma registry in a manner that integrates the management of data between the rehabilitation facility and designated trauma center and allows an annual audit of outcome trends and system performance.

The bill authorizes the AHCA and the DOH to adopt rules pursuant to ss. 120.536(1) and 120.54, F.S., to administer the provisions of this section.

The bill will take effect July 1, 2007.

IV. Constitutional Issues:

A. Municipality/County Mandates Restrictions:

The provisions of this bill have no impact on municipalities and the counties under the requirements of Article VII, Section 18 of the Florida Constitution.

B. Public Records/Open Meetings Issues:

The provisions of this bill have no impact on public records or open meetings issues under the requirements of Article I, Section 24(a) and (b) of the Florida Constitution.

C. Trust Funds Restrictions:

The provisions of this bill have no impact on the trust fund restrictions under the requirements of Article III, Subsection 19(f) of the Florida Constitution.

V. Economic Impact and Fiscal Note:

A. Tax/Fee Issues:

None.

B. Private Sector Impact:

The bill would likely increase per diem payments to rehabilitation facilities treating children with moderate to severe traumatic brain injuries. Private facilities would benefit from these increased per diem rates. The full fiscal effect is indeterminate at this time because it would be based on the survey results derived from subsection (2) of the bill.

C. Government Sector Impact:

The bill would likely have a significant effect on state government by increasing Medicaid expenditures for children with moderate to severe brain injuries. The full fiscal effect is indeterminate at this time because it would be based on the survey results derived from subsection (2) of the bill, and because it is not clear whether Medicaid funds will only be used for Medicaid recipients or coverage of all rehabilitative services specified in subsection (1) of this bill.

VI. Technical Deficiencies:

None.

VII. Related Issues:

On page 2, lines 22 through 29, the bill is unclear whether Medicaid funds are to pay for only Medicaid eligible persons or all rehabilitative services specified in subsection (1) of the bill for all children with moderate to severe brain injuries regardless of Medicaid eligibility.

VIII. Summary of Amendments:

None.