

Feasibility Study for Providing Community Support and Residential Services for Individuals with Acquired Brain Injury

**As Required by S.B. 1, Rider 66, 81st Legislature
Regular Session, 2009**



**Prepared by the Office of Acquired Brain Injury
Health and Human Services Commission**

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Executive Summary

The 2010-11 General Appropriations Act, (Article II, Health and Human Services Commission, Rider 66, S.B. 1, 81st Legislature, Regular Session, 2009) mandated that the Executive Commissioner of the Texas Health and Human Services Commission conduct a feasibility study regarding the need for a system of community support and residential services for individuals with acquired brain injury (ABI). The Executive Commissioner directed the Office of Acquired Brain Injury to form a multi-agency work group of subject matter experts to provide research, recommendations and options for ABI pilot Medicaid waivers.

Brain injury, known as the “silent epidemic” is recognized by the Centers for Disease Control and Prevention (CDC) as a major public health issue in the United States. That agency’s *Report to Congress*, March 2010, revealed that an estimated 1.7 million people sustain a traumatic brain injury (TBI) annually. This figure does not account for the broader ABI or those individuals who were not treated or reported by medical professionals.

It is estimated that more than 144,000 individuals in Texas are diagnosed with TBI annually. Of those, each year more than 5,700 are permanently disabled from these injuries. Texas hospital discharge data report that in 2008 there were more than 47,400 Texans diagnosed and treated for ABI between the ages of 22 – 64. In response to increased awareness of brain injury and its enormous social and economic impact, the 81st Legislature mandated a study to determine the unmet needs for community supports and residential services for individuals with brain injury.

To ascertain the needs and to develop options to provide specific services to the brain injury population, the workgroup researched applicable data and information specific to Texas and best practices across the United States. The group analyzed:

- current statistical data from the Health and Human Services Commission (HHSC); the Department of Aging and Disability Services (DADS); the Department of Assistive and Rehabilitation Services (DARS), the Department of State Health Services (DSHS) and the EMS/Trauma Registry;
- previous reports from other state and federal agencies;
- advisory council and advocacy group reports;
- a statewide stakeholder needs and resources survey; and
- data gathered from 23 other states that provide brain injury waivers.

The workgroup reviewed existing programs within the Health and Human Services enterprise that provide necessary services and supports to individuals with a brain injury, as well as current Medicaid programs available to Texas residents. Within the enterprise, DADS serves the majority of individuals diagnosed with some type of ABI, while DARS Comprehensive Rehabilitation Services provides some services to survivors of TBI and spinal cord injury only.

Reports prepared by the Texas Traumatic Brain Injury Advisory Council, the Brain Injury Association of Texas, the CDC, the Texas Legislative Budget Board and others were examined and compared to the requirements of Rider 66 to determine common needs and resources those groups recommend.

To ensure the representation of stakeholders across the state, the workgroup developed a survey to reflect the needs and opinions of Texans directly affected by or involved with brain injury. Approximately 1,500 unduplicated survey instruments were electronically distributed. It was posted on the HHSC, OABI and DADS websites as well, and 1,316 responses were returned allowing the group to compile and analyze the services and supports most requested.

Research and comparative analysis of other states' Medicaid waiver programs was completed. Of the 23 states that provide brain injury waivers, 17 responded to the group's request and provided information to aid this state in determining the feasibility of an ABI Medicaid waiver.

Based upon research of the services currently offered to individuals with brain injury in Texas by HHSC, DADS, DARS, and DSHS, best practices of other states and the needs expressed by stakeholders, HHSC determined that it would be best to develop a new waiver(s) for individuals with brain injuries rather than amending current waivers. The workgroup developed two possible options that could be used to pilot a brain injury waiver.

Community Support Waiver

This waiver would provide supports in a pilot program for individuals living in the community with functional limitations resulting from ABI. It would be an alternative to nursing home admission so that the individual's age at the time of the brain injury would not be a factor in determining eligibility for the waiver. The pilot would serve 200 people and would be capped at \$15,000 per person, per year. Case management would be provided by DADS case managers located throughout the state in DADS Regional Local Services. It would be a consumer-directed waiver and would allow individuals to choose from an array of services that best fit their individual needs within the annual limit. Entrance into this waiver would be limited to individuals ages 21-64. Individuals older than 64 could continue to be served in the waiver if they entered prior to age 65.

Residential Services Waiver

This waiver would be modeled on the Community Based Alternatives waiver with some limited changes in services targeted to individuals with ABI. It would be an alternative to nursing home admission so that the individual's age at the time of the brain injury would not be a factor in determining eligibility for the waiver. This waiver would contain 200 waiver slots that would include residential care options similar to those available through the Community Based Alternatives waiver. Entrance into this waiver would be limited to individuals ages 21-64. Individuals older than 64 could continue to be served in the waiver if they entered prior to age 65.

HHSC will request an exceptional item for the Community Support Waiver in its 2012-13 Legislative Appropriations Request. Cost estimates for the 2012-13 biennium are approximately \$2.6 million all funds and \$1.2 million general revenue. The cost over five years is \$13.3 million all funds and \$5.8 million general revenue.

Introduction

The State of Texas has been actively involved with brain injury prevention, awareness and advocacy for brain-injured individuals since the inception of the Federal Traumatic Brain Injury (TBI) Program in 1996 when it was awarded one of the U.S. Health Resources and Services Administration's (HRSA) first demonstration grants. In accordance with federal guidelines, the Texas Traumatic Brain Injury Advisory Council (TBIAC) was established September 1, 2003, by the 78th Texas Legislature. The purpose of the Council is to:

- inform state leadership of the needs of people with brain injuries and their families;
- to recommend policies and practices to the Governor and the Legislature to meet those needs;
- to encourage research into the cause, prevention and treatment of traumatic brain injury and care of persons with a traumatic brain injury;
- to promote brain injury prevention and awareness throughout the state; and,
- to identify people with TBI, their family members and caregivers and to improve their access to supports and services.

The TBIAC met this requirement by providing educational materials and programs across the state, including training for 2-1-1 Texas call center specialists. The Council worked with the Legislature and the Texas Department of Insurance to pass legislation protecting brain injury survivors, researched and prepared reports heightening awareness of brain injury in the state and brought about the 80th Texas Legislature's enactment of the Office of Acquired Brain Injury (OABI) in May 2007.

The OABI was functionalized in February 2008 and serves as the lead department in Texas providing guidance, consultation, referral and service coordination for survivors of Acquired Brain Injuries (ABI) and their families, including returning combat veterans, to ensure a comprehensive system of care through federal, state and local resources. The office also provides administrative support for the TBIAC.

Texas has the only statutorily established state office of brain injury and advisory council in the United States and has been recognized by HRSA as a model for the nation.

Rider 66 Requirements

Rider 66 of S.B. 1, 81st Legislature, Regular Session, 2009 (Appendix A), requires the Executive Commissioner of the Health and Human Services Commission to conduct a feasibility study regarding the need for a system of community support and residential services for individuals suffering from acquired brain injury. The rider mandates that the study:

- (1) evaluate current services and supports provided by the state to persons suffering from acquired brain injury;
- (2) assess the need in this state for community support and residential services to persons suffering from acquired brain injury;

- (3) ascertain opportunities available to this state to draw down federal funds for individuals with acquired brain injury for whom the state currently provides services and supports through general revenue funds; and
- (4) determine the feasibility and cost-effectiveness of implementing a system of community support and residential services through either a Medicaid state plan amendment or medical assistance waiver for persons with acquired brain injury.

The Executive Commissioner of the Health and Human Services Commission (HHSC) directed OABI to convene a multi-agency workgroup to conduct research and to prepare a study regarding the cost-effectiveness of ABI services and waivers. Texas does not have brain injury specific Medicaid waivers at this time.

To ensure that Texans directly affected by brain injury were involved in the process, stakeholders statewide were surveyed to request and report their needs and opinions. Electronic surveys were sent to and responded by:

- individuals who have sustained brain injuries;
- family members;
- caregivers;
- medical and other brain injury professionals;
- advocates;
- service providers; and
- others.

Data from HHSC, the Department of State Health Services (DSHS), the Department of Aging and Disability Services (DADS), and the Department of Assistive Rehabilitation Services (DARS) was analyzed for this study. The workgroup consulted with TBIAC, the U.S. Department of Health and Human Services, HRSA, the Centers for Disease Control and Prevention (CDC), the Brain Injury Association of Texas (BIATx), the Brain Injury Association of America (BIAA), and reviewed previous subject matter reports, including a report by the TBIAC and a *Texas State Government Effectiveness and Efficiency* recommendation by the Legislative Budget Board (LBB).

Background

An ABI is an injury to the brain that occurs after birth, is non-congenital and non-degenerative and prevents the normal function of the brain. It may be caused by external blows, jolts or penetrating wounds (also known as TBI); stroke; heart attack; infections producing high temperatures; brain tumors; loss of consciousness; loss of oxygen to the brain from choking, near drowning or other anoxic conditions. According the Epilepsy Foundation and the World Health Organization, brain injuries may cause some forms of epilepsy.

The CDC, the U.S. Department of Health and Human Services, the Brain Injury Association of America, the National Association of State Head Administrators and other agencies, organizations and subject matter experts report that brain injury is one of the national's leading

public health issues. It is the nation's leading cause of death and disability in persons under 45 years old, occurring more frequently than breast cancer, HIV/AIDS, multiple sclerosis, and spinal cord injury combined, according to a study by the Brain Injury Association of America in 1999. The BIAA is currently updating the report; therefore official data citing increased incidences is not available at this time.

Characteristics of Brain Injury

ABI may be mild, moderate or severe and may result in memory loss, change in personality, behavior dysfunction, difficulty managing anger, impaired judgment, loss of impulse control, communication impairments, mobility limitations, alcohol and substance abuse and other challenges. The severity of a brain injury may range from "mild" (a brief change in mental status or consciousness) to "severe" (an extended period of unconsciousness or amnesia after the injury). Individuals with brain injuries may be able to walk, maintain their employment and other routine functions, appearing to have nothing wrong despite unseen, debilitating consequences. For this reason, brain injury is known as the "*silent epidemic*."

Traumatic Brain Injury

TBI, a subset of ABI, results from an external blow or jolt to the head or penetrating head injury that disrupts the function of the brain. Some examples are concussions or skull fractures sustained in motor vehicle crashes, sports and recreational activities, falls, domestic violence, industrial accidents, or wounds sustained from firearms. TBI can cause a wide range of functional changes affecting thinking, sensation, language or emotions.

It is important to note; however, that not all blows and jolts cause brain injury. According to the CDC, about 75 percent of TBIs that occur each year are concussions or other forms of mild TBI. Repeated mild TBIs occurring over an extended period of time (i.e., months, years) can result in cumulative neurological and cognitive deficits. Repeated mild TBIs occurring within a short period of time (i.e., hours, days, or weeks) can be catastrophic or fatal. The CDC estimates that at least 5.3 million Americans currently have long-term or lifelong need for help to perform activities of daily living as a result of a TBI.

There is an increased public awareness of TBI due to the injuries sustained by service members in the wars in Iraq and Afghanistan. Recent studies and reports concerning athletes have enhanced the population's understanding of the causes and dangers of TBI as well.

Incidence

Nationally

Statistics on brain injuries predominantly cite incidences of reported and treated TBI. TBI has been a focus of national attention for the past three decades as medical science has advanced knowledge of treatment and therapies allowing increasing numbers of individuals to survive severe brain injuries. These devastating injuries frequently result in long-term, disabling consequences profoundly affecting the individuals and their families.

The economic burden due to loss of employment, insurance and other benefits on the part of the brain-injured individual, and often family members who must leave their jobs to care for loved ones is staggering. The most recent information gathered in an exhaustive study from 2001-2006 available and published on the CDC website, states that “Direct medical costs and indirect costs such as lost productivity of TBI totaled an estimated \$60 billion in the United States in 2000.” This report did not include information on the broader ABI.

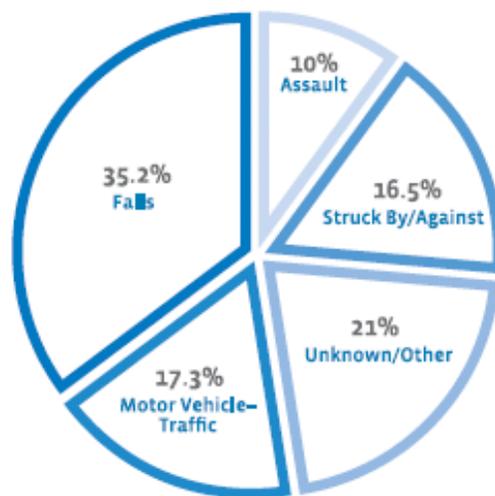
Recognizing the large number of individuals and families struggling to access appropriate and community-based services, Congress authorized the Federal TBI Program in the Traumatic Brain Injury Act of 1996 (PL 104-166). The TBI Act of 1996 launched an effort to conduct expanded studies and to establish innovative programs for TBI. The Act gave the HRSA authority to establish a grant program for states to assist it in addressing the needs of individuals with TBI and their families. The TBI Act also delegated responsibilities in research to the National Institutes of Health, and prevention and surveillance to the CDC. The Traumatic Brain Injury Act of 2008 (P.L. 110-206) reauthorized the programs of the TBI Act of 1996.

In its March 2010 *Report to Congress*, the CDC announced its most recent findings. An estimated 1.7 million people sustain a TBI annually. Of them:

- 52,000 die;
- 275,000 are hospitalized; and
- 1.365 million, nearly 80 percent, are treated and released from an emergency department.

TBI is a contributing factor to almost one-third (30.5 percent) of all injury-related deaths in the United States. About 75 percent of TBIs that occur each year are concussions or other forms of mild traumatic brain injury (MTBI). Figure 1 illustrates the breakdown of TBI by cause.

Figure 1: Estimated Average Percentage of Annual TBI by External Cause in the United States, 2002-2006



Source: Centers for Disease Control and Prevention, March 2010.

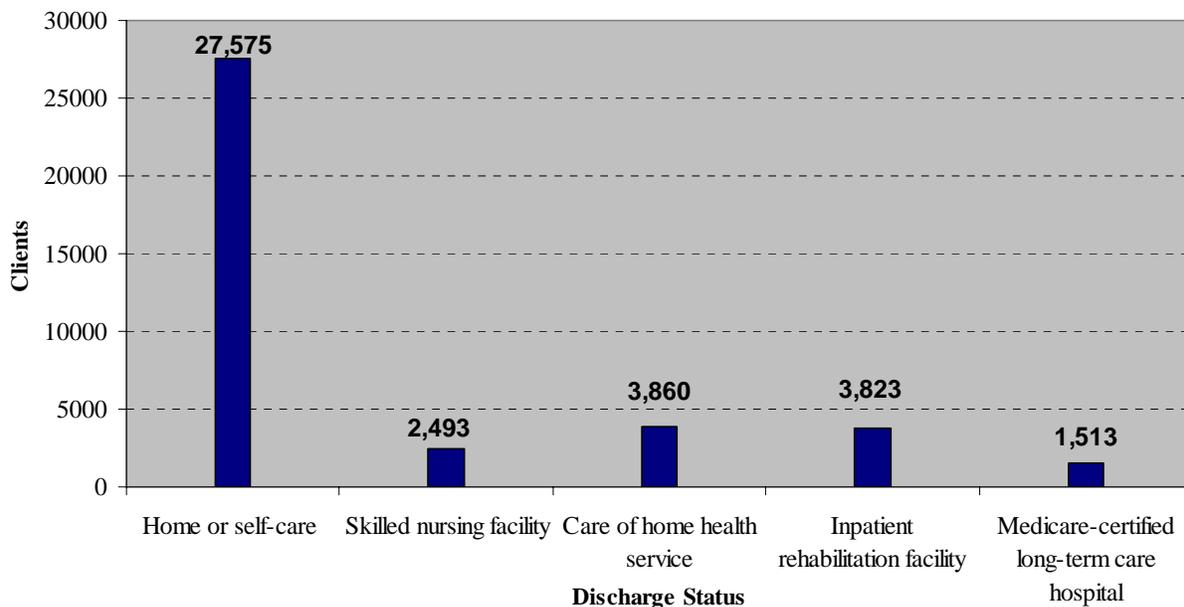
These national statistics represent only the reported TBIs found in hospital discharge data. Estimates fail to capture individuals who have visited physicians' offices, individuals who have not sought treatment for a head injury, state-level TBI data or TBIs counted from federal, military or veterans' hospitals.

Texas

In 2007, the LBB cited a CDC report that 144,000 Texans experience a TBI each year, of which more than 5,700 become permanently disabled. Additionally, an estimated 410,000 Texans live with a TBI disability. As stated elsewhere in this study, these figures account for incidences reported through hospital discharge data and EMS/Trauma Registry. There are no statistics available for visits to physicians' offices or urgent care clinics.

Recently, public agencies, policy makers and advocates have begun to recognize other causes of brain injury in a more inclusive understanding of acquired brain injury. The DSHS 2008 Texas Hospital Discharge Data indicates that there were over 47,000 reported hospitalizations of Texans ages 21-64 due to brain injuries. Approximately 26,000 hospitalizations were from strokes, 13,000 were from non-stroke, non-TBI injuries and 8,000 were from TBI injuries. Figure 2 illustrates some of the settings where most of these Texans with ABI were directed post hospitalization, according to discharge data.

Figure 2: Leading ABI Discharge Status



Source: Texas Hospital Discharge Data, 2008

Current Services and Supports

(1) evaluate current services and supports provided by the state to persons suffering from acquired brain injury

People with brain injuries may receive a variety of services from agencies within the HHS enterprise. Some of those services may be generally available services that are not directly related to the brain injury. For example, people with brain injuries may receive protective services from the Department of Family Protective Services (DFPS) or general public health protections from the DSHS. There are some services that are not specifically targeted for people with brain injuries but address some frequently experienced effects of the injury. For example, DSHS provides mental health and substance abuse services which may assist people with brain injuries. Acute care and some post-acute care services for people with brain injuries may be provided through the DARS Comprehensive Rehabilitation Services (CRS) and Medicaid. In recent years, there have been evaluations of the CRS program and the viability of optimizing Medicaid services within this program. Some of the results of those studies will be included in the section on **Opportunities to Draw Down Federal Funds for Individuals with Acquired Brain Injury**.

People with brain injuries receive services from programs provided by HHSC, DARS (CRS and Vocational Rehabilitation), DADS, DSHS, or a combination thereof. However, services are primarily administered by DADS through Medicaid. An individual with brain injury may receive a narrow or broad array of services, depending on that person's needs, eligibility for services, and availability of funding.

Some services provided are:

- Nursing facility residential care
- Adaptive aids that assist with mobility and/or communication or treat, rehabilitate, prevent or compensate for conditions resulting in disability or loss of function
- Medical supplies
- Behavioral supports
- Adult foster care
- Assisted living
- Residential care in an ICF/MR
- Personal assistance services
- Case management

Waivers

Section 1915(c) of the Social Security Act permits states to apply for and offer, under "waiver of statutory requirements," an array of home and community-based services that an individual needs to avoid institutionalization. This provision allows an eligible individual to receive supportive care services in their homes and communities. Each waiver has an enrollment limit, and there are "interest" lists for each waiver. Applicants may apply for multiple waivers, but may only be served by one waiver at a time.

Eligibility for waiver programs generally requires that the:

- Recipient meet Medicaid guidelines;
- Recipient require institutionalization in the absence of the waiver; and
- Waiver be cost neutral. Total Medicaid cost of serving all the recipients on the waiver cannot exceed the total cost to Medicaid for serving a similar population in an appropriate institutional setting.

Waivers must be approved by the Centers for Medicare and Medicaid Services (CMS) and are current for three years, after which they may be renewed every five years.

Medicaid Home and Community-Based Services (HCBS) waiver programs, authorized under Section 1915(c) of the Social Security Act, are designed to be cost-effective alternatives to institutional placement for providing long-term services and supports. HCBS waivers provide a mechanism for states to obtain federal financial participation for covered services provided to Medicaid eligible individuals. The Federal Medicaid Assistance Percentage (FMAP) for Texas is about 60 percent.

To be eligible for HCBS waiver programs, an individual must meet the financial requirements of a state's Medicaid program for services in a hospital, nursing home, or ICF/MR. Waivers allow states to cover individuals who exceed the income limit for Medicaid while living in the community if their income would allow them to be eligible in an institution. Federal rules allow states to set an income limit for people in institutions or in a waiver up to 300 percent of SSI benefits (\$2,022 per month). Additionally, waiver eligibility is based on the income and assets of the individual applying for services and not the family income.

HCBS waivers are a flexible way to provide a wide range of services and supports that are family and consumer driven. When designing an HCBS waiver, the state is given the opportunity to decide the number of people to serve and the ability to set criteria around age and disability. Texas currently has the following HCBS waiver programs:

- Community Based Alternatives (CBA);
- STAR+PLUS and Integrated Care Management (ICM);
- Community Living Assistance and Support Services (CLASS);
- Home and Community-based Services (HCS);
- Medically Dependent Children Program (MDCP);
- Deaf-Blind Multiple Disabilities (DBMD);
- Texas Home Living (TxHmL);
- Consolidated Waiver Program (CWP); and
- Youth Empowerment Services (YES).

Each program includes a unique array of services and somewhat different eligibility criteria. Based on the services that each Texas HCBS waiver offers, CBA, CLASS, HCS, and TxHmL are the most suited to serve the brain injury population. Table 1 includes an overview of the services available in these waivers. For more detailed information on these waivers, see Appendix B.

Table 1: Existing Waivers in Texas

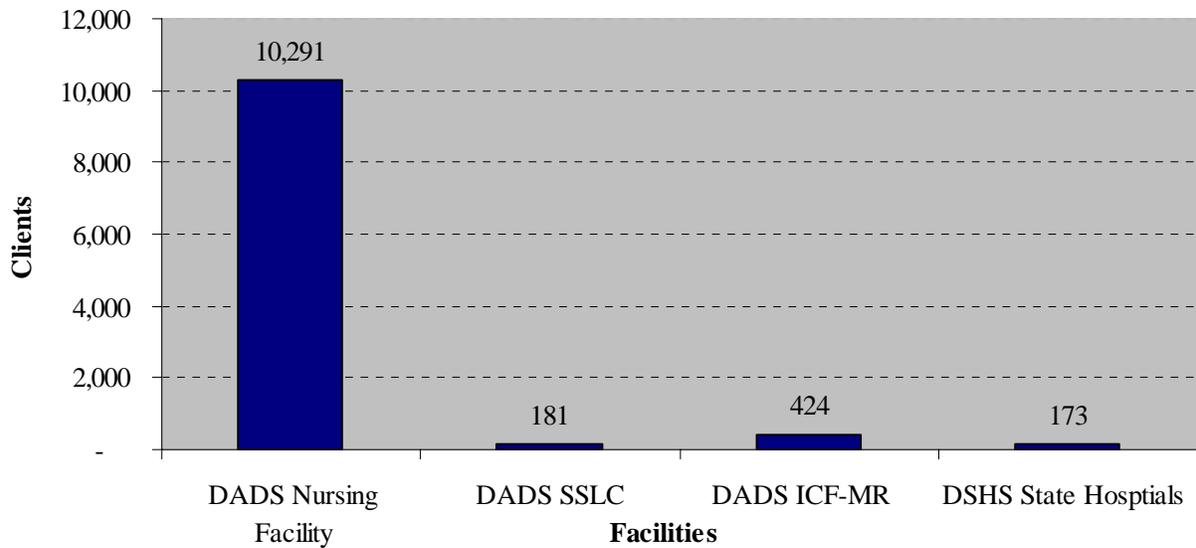
Services	CBA	CLASS	HCS	TxHmL
Habilitation		X	X	X
Personal Assistance Services	X			
Supported Employment		X	X	X
Employment Assistance				X
Home Modifications	X	X	X	X
Adaptive Aids/Supplies	X	X	X	X
Therapies – Occupational, Physical, Speech	X	X	X	
Specialized Therapies		X		
Nursing	X	X	X	X
Behavioral/Support		X	X	X
Dental	X	X	X	X
Respite	X	X	X	X
Case Management*	X	X	X	X
Prevocational Services		X		
Transportation		X	X	
Support Family Services		X		
Residential	X		X	
Transition Assistance	X	X		
Emergency Response Services	X			
Home-delivered meals	X			
Financial Management Services (if using CDS)	X	X	X	X
Support Consultation (if using CDS)	X	X	X	X

* In CBA, HCS, and TxHmL, case management is delivered through the state plan, not as a waiver service.

DADS, DARS and the traditional Medicaid programs administered by HHSC serve the greatest number of individuals with brain injuries. To determine the number of people with brain injuries who are being served and where they receive those services, this study collected and analyzed the diagnosis codes associated with brain injury for clients in various settings (community and institutions).

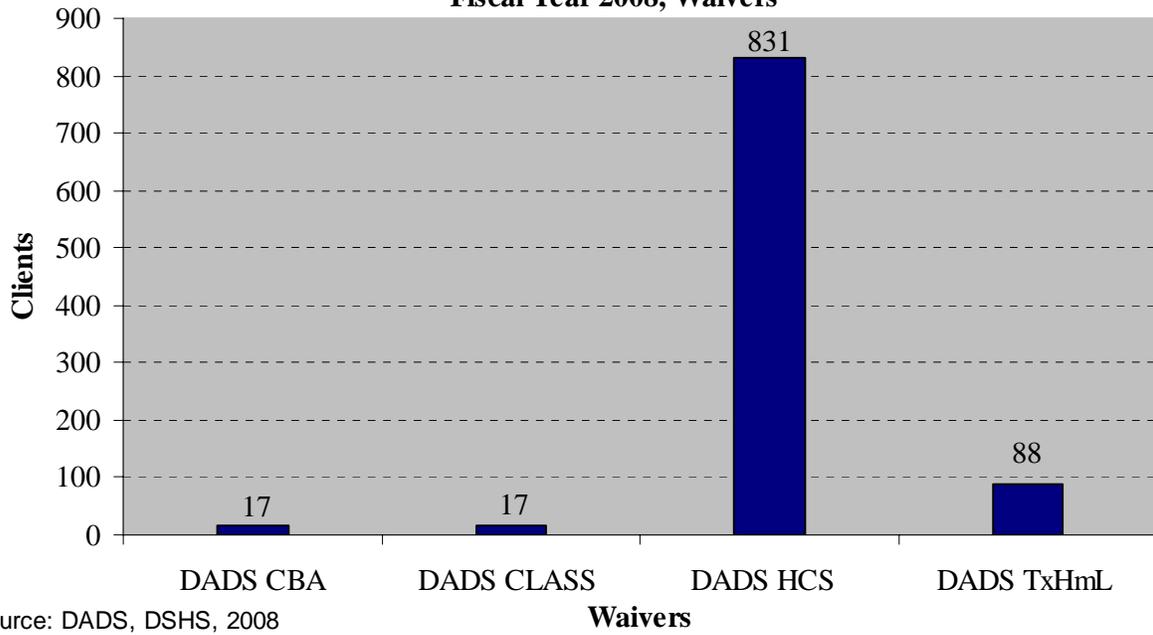
Figures 3 and 4 demonstrate the number of Texas residents with possible ABIs served in various settings. Because individuals are not routinely screened for ABI, many may not be counted in some programs and settings.

Figure 3 :Number of Clients with ABI Diagnosis Ages 22-64, Fiscal Year 2008, Facilities



Source: DADS, DSHS, 2008
 DADS data includes epilepsy diagnosis code.

**Figure 4: Number of Clients with ABI Diagnosis Ages 22-64,
Fiscal Year 2008, Waivers**



Source: DADS, DSHS, 2008
DADS data includes epilepsy diagnosis code.

Need for Community Support and Residential Services for Individuals with Acquired Brain Injury

(2) *assess the need in this state for community support and residential services to individuals suffering from acquired brain injury*

In recent years, a number of reports have analyzed the need for community supports and residential services for people with brain injuries. In addition to reviewing those reports, the workgroup developed a statewide stakeholder survey instrument that was used to determine which services were most needed and desired by people with brain injuries, their family members, caregivers and brain injury professionals.

Resource Reports

A 2006 report entitled *Acquired Brain Injury and Long-Term Care in Texas* produced by the Texas Traumatic Brain Injury Advisory Council noted that:

“Individuals with brain injury who require support often live in a home with their families, in long-term care facilities designed for individuals with mental retardation or geriatric care rather than brain injury care, or in some cases are homeless or in prison. This can be an enormous financial and resource burden to families and society as a whole, as some individuals may need such supports throughout their lifetime.¹”

The report observed that current residential long-term care services were not designed for the specific needs of people with brain injuries. The report indicated that appropriate habilitation/rehabilitation and neurobehavioral/neurocognitive treatment were major concerns for people with brain injuries. The report noted that many people with brain injuries do not have access to current programs because they do not meet the legal requirements of having a developmental disability or of having a medical condition requiring skilled nursing care. It also noted that some of these challenges were due to federal requirements.

The report recommended that DADS conduct a two-year pilot study of 10-15 group homes that would provide a continuum of care to appropriately address brain injuries. This pilot would use a variety of support models including a behavioral program, supported living, and community re-entry. Additional models discussed in the report include assisted living, supported apartments, and community living supports. .

A 2007 *Texas State Government Effectiveness and Efficiency: Selected Issues and Recommendations* report by the LBB² noted that most states provide assistance to individuals with TBI. The recommendation sought to determine if Texas could maximize the services provided in the DARS Comprehensive Rehabilitation Services (CRS) program by including some of those services through either the Medicaid State Plan or a waiver. It reviewed the TBI

¹ Online. Available: http://www.hhsc.state.tx.us/hhsc_projects/abj/index.shtml.

² Online. Available:

http://www.lbb.state.tx.us/Performance%20Reporting/TX_Govt_Effective_Efficiency_Report_80th_0107.pdf.

waivers of 23 states that provide treatment and long-term care support services for people with brain injuries. It observed that “Eligibility criteria set by the federal government are based on physical limitations, rather than cognitive function. This requirement limits states’ ability to provide waiver coverage to all individuals with TBI. However, states can develop programs and set eligibility requirements targeting at least some individuals with traumatic brain injury.”

The recommendation determined that there was some overlap between services provided in CRS and in other states’ waiver programs. These included assessment/evaluation components such as case management coordination, consumer and family education and transportation; inpatient comprehensive medical rehabilitation such as behavioral or psychological services, assistive technology and personal care assistants; and post-acute traumatic brain injury services such as physical, occupational speech psychological and cognitive therapies, counseling and guidance and recreational training.

The LBB report did not directly address the long-term care needs of people with brain injuries.

2010 Survey

To determine gaps in services and the types of community-based, long-term services and supports appropriate to be included in a possible brain injury waiver, the workgroup developed a survey that was distributed electronically to statewide stakeholders (Appendix C). Because the survey respondent population was de-identified for confidentiality and responses were not randomized, these baseline survey findings cannot be considered empirical research.

Approximately 1,500 unduplicated surveys were sent by HHSC to known brain injury survivors, family members, support groups, recreational camps for brain injury survivors, brain injury professionals including physicians, post-acute rehabilitation professionals, neuropsychologists, and others. Addressees were invited to further distribute the survey to other stakeholders. The final number of survey recipients is impossible to determine. However, a total of 1,316 responses were received representing all geographic regions of Texas. In addition to collecting demographic information and basic information about the brain injury, the survey asked: “Below is a list of long-term residential and community services for individuals with brain injury. Check three (3) services which you feel are the most important. There is no need to rank the services you pick, just merely choose three services. If you do not find a service in the list below, you can enter additional services at the bottom of the list under ‘other.’”

Below is a list of long-term residential and community services in descending order of preference by survey respondents:

- Therapies (physical, occupational, speech/language)
- Behavioral Support Services (counseling and psychological services, or behavioral support)
- Residential Long Term Care (residential long term care, or group home)
- Structured Day Program (day habilitation, brain injury day program, adult day care)
- Cognitive Rehabilitation
- Case Management
- Employment Assistance
- Family Training and Support

- Personal Assistance Services (attendant care)
- Assistive Technology (communication aids, lifts, environmental controls, etc.)
- Assistance in moving from an institution to the community
- Transportation Services
- Skilled Nursing/Home Health Aide Services
- Other Therapies (recreational, equestrian, hydrotherapy, music, etc.)
- Home Modifications
- Respite Care
- Other
- Substance Abuse Assistance
- Vehicle Modifications
- Supported Home Living
- Outreach and Education
- Neuropsychological Evaluations
- Post Acute Brain Injury Rehabilitation

Respondents were asked to choose three services from a list, but some only chose one or two, and a few others — due to particularities and limitations of the Survey Monkey software application — listed more.

Opportunities to Draw Down Federal Funds for Individuals with Acquired Brain Injury

- (3) *ascertain opportunities available to this state to draw down federal funds for individuals with acquired brain injury for whom the state currently provides services and supports through general revenue funds*

Most of the community supports and residential services identified in previous reports and in the survey of stakeholders are those that could be covered under a Medicaid waiver and would receive federal matching funds.

Acute Care and Post-Acute Care Services

The DARS Comprehensive Rehabilitation Services (CRS) program is Texas' only program targeted specifically for brain injury. CRS is funded by general revenue and general revenue dedicated dollars derived from traffic-related fines. There have been several assessments in the last few years regarding the viability of matching state funds with Medicaid dollars for these services.

CRS provides only short term, post-acute rehabilitative services (up to 180 days) to individuals with a TBI or spinal cord injury (SCI). It does not provide ongoing community supports or residential services. The CRS program improves the ability of individuals with TBI and SCI to function in communities and decreases the needs for long-term care. All Texas residents, regardless of Medicaid status, are eligible for CRS if they sustain a TBI or SCI. Program funds are limited and services are provided on a first come, first served basis. In August 2010, the waiting list for CRS was 228 with an expected wait time of over four months.

Two recent reports, the previously cited *Texas State Government Effectiveness and Efficiency: Selected Issues and Recommendations* report by the LBB and a report by DARS determined that some services currently paid with general revenue might be paid by Medicaid.

Further, HHSC Strategic Decision Support staff reviewed data from 2006 and estimated that adding the services offered through CRS to the Medicaid state plan for those with TBI and SCI would increase annual Medicaid costs by approximately \$10 million, all funds. However, because CRS currently serves some individuals who are on Medicaid, and the analysis assumes that many of these same clients receive CRS-like services through Medicaid, the general revenue impact of adding these services for those with TBI and SCI would be cost neutral. Additionally, if those services were also expanded to those with non-traumatic brain injuries (including stroke) and non-traumatic SCI, the costs to Medicaid would be approximately \$30 million, all funds, but would lead to only an estimated \$6 million increase in general revenue expenditures. These estimates represent the fiscal impact for client services only and do not include any costs related to system or other changes necessary to implement the benefit. Also, the estimates do not include any healthcare or social services cost avoidance which may result from these rehabilitation services.

Providing services for existing CRS clients through Medicaid results in about \$3 - \$4 million in cost offsets from the federal Medicaid match. If Medicaid assumes care for clients previously served in CRS, costs will increase for Medicaid while costs decrease for CRS. While legislative

or agency leadership might choose to put the cost savings back into the CRS program, that assumption was not made in this analysis.

If Medicaid were to cover CRS-like services for individuals with both traumatic and non-traumatic brain injury and SCI, the majority of new clients would be people whose brain injury was caused by stroke. Because stroke is a non-traumatic brain injury, the current CRS program does not serve clients who have suffered a stroke. Utilization of these Medicaid services by individuals with brain injuries from causes other than trauma and stroke would likely be relatively small.

A more detailed breakdown of the estimated annual additional costs for adding CRS-like services to Medicaid for TBI and SCI (currently covered by CRS) and for non-traumatic brain and spinal cord injury (not covered by CRS) is detailed in the table below.

Table 2: Estimated Annual Additional Costs for Adding CRS-Like Services to Medicaid

Conditions Covered	State Funds	Federal Funds	All Funds
Traumatic brain injury and traumatic spinal cord injury (currently covered by CRS)	\$3,912,720	\$5,869,080	\$9,781,800
Non-traumatic brain injury (includes stroke)*	\$7,511,040	\$11,266,560	\$18,777,600
Non-traumatic spinal cord injury	\$660,480	\$990,720	\$1,651,200
Total	\$12,084,240**	\$18,126,360	\$30,210,600

* All funds for stroke are estimated to be \$15,897,600, the majority of costs for non-traumatic brain injury.

** Does not adjust for GR cost shift from the CRS program as mentioned above. CRS spent approximately \$6 million GR in fiscal year 2007 on consumers eligible for Medicaid coverage.

Community Supports and Residential Services

Although CRS may reduce the need for long term care services, CRS is an acute and post-acute care program and does not provide ongoing community supports or residential services. To determine the need for community supports and residential services, an analysis must be made of long term care service currently available in Texas and a review must be made of other options that are not currently available but might be feasible.

Brain Injury Waiver Programs in Other States

Many states provide services to people with traumatic brain injuries through various types of programs and funding streams. At least 23 states report having 1915 (c) brain injury waiver programs to provide home and community-based services to Medicaid-eligible individuals who might otherwise be admitted to a hospital, nursing facility or ICF to live independently in the community. Under the authority of a 1915(c) waiver, a state can provide additional services that are not typically covered under the state Medicaid program. Additionally, the 1915(c) waiver

allows states to limit services to specific regions of the state and gives them the flexibility to determine the specific financial and non-financial eligibility criteria, targeting specific groups in the state.

The flexibility states are given in designing their 1915(c) waivers allows for variation among the states' waiver programs. While the programs vary in design from state to state, most of the brain injury waivers are relatively small and serve fewer than 1,000 individuals. Out of the 18 states interviewed by workgroup members, six states limit their programs to individuals with TBI, while the remaining 11 broaden the scope by allowing individuals with ABI to participate. Additionally, Florida and Mississippi include individuals with SCI in their waiver programs.

For individuals to qualify for a state's waiver program, they must meet that state's medical requirement or level of care. The federal requirement for "level of care" assessment calls for the state to determine "that but for the provision of such services the individuals would require the level of care provided in a hospital or a nursing facility or intermediate care facility for the mentally retarded, the cost of which could be reimbursed under the State Plan."

To qualify for federal matching funds under the authority of a 1915(c) waiver, a state must show cost neutrality, meaning that the cost of the waiver program will not exceed what it costs to serve a comparable population in the institution for which the individuals are eligible.

The level of care for which a state designs its waiver program has a significant effect on the cost neutrality calculation. According to the Center for Medicaid and Medicare (CMS), of the states that have a brain injury waiver, non-specialized nursing facilities are the least expensive of the institutional options available to an individual. States with higher cost facilities may provide more expensive service packages and still meet the federal cost neutrality requirement. Several states, including Iowa, Maryland, and Minnesota, include more than one level of care in their waivers. Fourteen states have nursing facility level of care, four states have hospital level of care, and two states have ICF/MR level of care.

Another criterion states use in their waivers is to define the age of the participant. Most states cover adults, but the definition of an adult varies slightly from state to state, starting at 16 in some states, up to 21 in others. Twelve of the responding states limit their programs to adults only, while five cover individuals from infancy. Two states require the brain injury to occur after the age of 21 and two states require the injury to occur before the age of 21. Thirteen states cap the age on their program, with ages ranging from 62 to 65. Mississippi has no age requirements.

The majority of states with age caps on their waivers report that individuals who age out of the program subsequently receive services through other waivers for the aged and/or disabled.

When a state designs a 1915(c) waiver, the state requests and defines the services it plans to provide (see Appendix D for a service comparison by responding states). The most frequently included services in other states' waivers are:

- case management;

- respite care;
- a structured day program;
- personal assistance services;
- residential;
- home and environmental modifications;
- psycho-behavioral programs; and
- therapies (including speech, physical therapy, and occupational therapy).

Medicaid in Texas

In addition to the 1915 (c) waiver services discussed in Current Services and Supports and the waivers discussed in the survey of other state waivers, there is another Medicaid alternative which might provide some of the services that have been identified as helpful to individuals with brain injuries – that is to provide services through the Medicaid state plan.

Medicaid State Plan

Children on Medicaid are eligible to receive any service that is medically necessary. Adults are limited to services specifically defined and offered in the state plan. If a service for adults is added to the state plan, it must be available to all adult Medicaid recipients who need the service. As a consequence, a service added to the state plan to benefit individuals with acquired brain injury could be used by anyone who needs the particular service. Two exceptions are targeted case management and services offered under the home and community-based services provision (§1915(i)) of the Social Security Act. Under targeted case management, the state can define the population eligible to receive the service. The state could offer targeted case management to individuals on Medicaid who have an ABI.

State Plan Home and Community-Based Services – § 1915(i)

The opportunity to offer home and community-based services through the Medicaid state plan was enacted in the Deficit Reduction Act of 2005. The health care reform legislation (the Patient Protection and Affordable Care Act [PPACA]) amended the 1915(i) provisions. Under 1915(i), the state can offer home and community-based services to target populations (such as individuals with ABI) and can set a higher income limit up to 300 percent of Supplemental Security Income Federal Benefit Rate (about \$2,000 per month for an individual). The services must be offered statewide and the state cannot limit the number of individuals served.

Differences Between the Medicaid State Plan Services and Waiver Services

The 1915(c) Medicaid waiver programs offer certain services that are not provided through the state plan: residential services other than those provided in institutional settings, respite, minor home modifications, dental, non-medical transportation, and habilitation. The waivers may also

provide services that exceed the scope of certain state plan services, such as extended therapy services, unlimited number of prescriptions, and durable medical equipment (adaptive aids) in addition to what Medicaid provides. Waivers can be targeted in the service array, the number of people to be served and other criteria such as age and disability.

Feasibility of Implementing Community Supports and Residential Services

(4) determine the feasibility and cost-effectiveness of implementing a system of community support and residential services through either a Medicaid state plan amendment or medical assistance waiver for persons with acquired brain injury

As discussed in a previous section, the most frequently identified services needed by individuals with acquired brain injury in the statewide survey include:

- Therapies (physical, occupational, speech/language)
- Behavioral Support Services (counseling and psychological services, or behavioral support)
- Residential Long-Term Care (residential long-term care, or group home)
- Structured Day Program (day habilitation, brain injury day program, adult day care)
- Cognitive Rehabilitation
- Case Management
- Employment Assistance
- Family Training and Support
- Personal Assistance Services (attendant care)
- Assistive Technology (communication aids, lifts, environmental controls, etc.)
- Assistance in moving from an institution to the community
- Transportation Services
- Skilled Nursing/Home Health Aide Services

In addition, the TBIAC identified respite care services as an essential component of a waiver, even though it was not among the highest prioritized services on the survey. With a severe or even a moderate brain injury, life changes in an instant. Not only is the survivor's life forever changed, but the family members' lives as well. Following hospitalization, family members find themselves in the position of personal attendant, nurse, transportation provider, and educator and may become fully responsible for the care of the individual with the injury. Respite services allow the primary caregiver to have brief periods of rest and renewal and to tend to once commonplace tasks and activities, often as simple as grocery shopping or dental appointment.

Medicaid Alternatives

Amend the Texas Medicaid State Plan

The Medicaid state plan could be amended by changing the definitions of services, adding other services, making changes to provider qualifications, and other changes. Some of the limits of offering services through the state plan are:

- qualifying income for disabled adults is limited to about \$674 per month (the SSI limit or about 74 percent of the federal poverty line), limiting the number of individuals with acquired brain injury who could benefit;
- all individuals on Medicaid, regardless of diagnosis, would be able to receive the service if needed; and

- services must be available statewide.

The two exceptions to these state plan limits are targeted case management and home and community-based services offered through 1915(i). Targeted case management programs can be limited to specific populations and can be offered in limited geographic areas. HCBS services offered through 1915(i) can be limited to specific populations (e.g. ABI) and can have a qualifying income of up to 300 percent SSI (220 percent FPL) – \$2,022 in 2010. Under 1915(i) services must be offered statewide.

Amend Existing Waivers

One option available to provide adequate community supports and residential services for individuals with acquired brain injury would be to amend one or more existing waivers to add services important for this population to the current array of services.

There are some advantages and some challenges to amending existing waivers, as demonstrated in Table 8. None of the existing waivers offers an array of services tailored to individuals with brain injuries. Any alternatives added to an existing waiver would then be available to all waiver participants who would need to access that service, not just individuals with ABI. Another challenge to amending the existing waivers is the length of the interest lists. From the time an individual's name is placed on an interest list until that individual is offered a waiver placement can take from 2 to 10 years. Individuals who become eligible for Medicaid by virtue of entering the waiver program would increase the state's costs because, by entering the waiver program, they would be able to receive all Medicaid state plan services for which they are eligible.

Table 3: Advantages and Challenges to Amending Existing Waivers*

Existing Waivers	Key Changes Needed	Advantages	Challenges
CBA, ICM, STAR+ PLUS (c)	<ul style="list-style-type: none"> • Add small group homes. • Add cognitive rehabilitation. • Include supervision and behavioral supports. 	<ul style="list-style-type: none"> • May be simpler than new waiver. • Serving individuals with ABI already. 	<ul style="list-style-type: none"> • Any alternatives added would be available to all waiver participants who need them, not just ABI. • May be cost prohibitive. • May need high end comparison population.
CLASS	<ul style="list-style-type: none"> • Add residential services (small group homes, adult foster care, etc.). • Add structured day program. • Add cognitive rehabilitation. 	<ul style="list-style-type: none"> • May be simpler than new waiver. • Some costs would be offset by reduction in habilitation hours. • Serving individuals with ABI already. 	<ul style="list-style-type: none"> • Any alternatives added would be available to all waiver participants who need them, not just those with ABI. • May be cost prohibitive. • Already long waiting lists (Legislature can add slots and make ABI a priority category.).
HCS	<ul style="list-style-type: none"> • Add ABI as eligibility criterion. • Include provider qualifications for serving ABI population. • Add cognitive rehabilitation. 	<ul style="list-style-type: none"> • May be simpler than new waiver. • Existing residential provider base. • Serving individuals with ABI already. 	<ul style="list-style-type: none"> • Any alternatives added would be available to all waiver participants who need them, not just ABI. • May be cost prohibitive. • Already long interest lists (Legislature can add slots and make ABI a priority category).

* Information about the waivers, including eligibility criteria, can be found in Appendix B.

Develop a New Waiver(s)

Another option to provide adequate community supports and services for individuals with ABI is to develop a new HCBS waiver. Creating a new waiver would allow the state to create eligibility requirements crafted to target the population most at need for certain services and create provider qualifications to best meet the needs of this population.

While the current waivers provide some of the services that are appropriate for those with brain injuries, none of Texas’ current waivers address a more complete array of services designed specifically for people with brain injuries. If the waiver is an alternative to a nursing facility, then the individual’s age at the time of the brain injury would not be a factor in who would be eligible

to participate in the waiver. Stakeholders indicated that the population most in need of such a waiver is those individuals between 21 and 64 who have an ABI.

An ABI community services waiver would allow people with brain injuries who are living in their own homes or in their families' homes to have the supports they would need to stay in those homes rather than move into more intensive, institutional settings.

An ABI residential waiver could emphasize transitioning nursing facility and state hospital residents with brain injury to community settings where tailored support services would cost the state less than the cost of institutional care. A new waiver could serve individuals who are not served by the CBA waiver because the latter does not offer certain services often needed by people with brain injury.

There are challenges to developing a new waiver. A new waiver could result in additional Medicaid state plan costs because any individual eligible for Medicaid as a result of waiver entry would have access to Medicaid State Plan services for which they are eligible. Also, to receive federal approval for a new waiver, Texas would have to show cost neutrality for the waiver population compared with a similar population served in nursing homes; that is, on an average per capita basis, the average annual per capita cost of providing home and community based services could not exceed the average annual per capita cost of care for the comparison population in nursing facilities.

When a state develops a new waiver there are several questions to consider that can impact the cost of the new waiver:

- What age range and how many persons will be included in the waiver?
- What services will be included and what costs may be expected? The Social Security Act lists seven specific services that may be provided under a home and community-based services waiver: case management, homemaker services, home health aid services, personal care services, adult day health, habilitation, and respite care. In addition, states may apply for permission to provide other optional services above and beyond the services provided in the Medicaid state plan. The state defines the services it plans to provide in its waiver.
- Will the cause of the brain injury (e.g. traumatic or acquired) be a determining factor in an individual's eligibility for the waiver?
- What institution will be used to determine the level of care? Will more than one be used?
- What providers will be enrolled and what will be their qualifications?
- How will case management be provided?

New state costs from an expansion of home and community-based services (HCBS) to the Texas ABI population could vary widely depending on the options policymakers select for the state. As discussed above, the state has several areas where it can exercise flexibility in the design of an HCBS expansion to optimize cost-effectiveness. These flexible design elements include the following:

- **Service array:** Service packages that include more expensive residential care options and a wider range of benefits in general tend to cost more on average than programs that provide a

limited set of benefits focused primarily on adaptive aids, home modifications, and personal care services. On the other hand, service arrays that do not address the specific needs of the target population could produce sub-optimal results for clients and lower value for taxpayers.

- ***Eligibility:*** States can reduce the number of individuals eligible for a waiver program by narrowing the list of qualifying diagnoses, restricting eligibility by age, limiting geographic area to be serviced, or defining qualifying income limits below the maximums allowed under federal law.
- ***Enrollment:*** States can directly control participation in waiver programs by capping enrollment and establishing an interest list. States can also design waivers that accept only clients transitioning to the community from nursing facilities and other higher cost care giving institutions.

Recommendations and Conclusions

The results of this study indicate that a separate waiver or waivers tailored for individuals with brain injury would most appropriately serve these individuals, rather than amending the current waivers. There are two possibilities for 1915(c) waivers that would be appropriate for serving individuals with brain injuries. In the design of these waivers:

- the waiver(s) would be an alternative to nursing facilities so that the individual's age at the time of the brain injury would not be a factor in who would be eligible to participate;
- the waiver(s) would serve individuals with brain injuries ages 21-64; and,
- entrance into this waiver would be limited to individuals ages 21-64. Individuals older than 64 could continue to be served in the waiver if they entered prior to age 65.

Based only on financial eligibility criteria and SSI determination, up to 8,000 adults could qualify for ABI waiver services:

- approximately half (4,000) of these individuals with an ABI diagnosis currently receive Medicaid; and
- a review of census and other data indicated that an additional 4,000 individuals with ABI could potentially qualify for services.

However, this estimate does not take into account the requirement that participants meet the medical necessity or level of care requirements. Applying these additional requirements would reduce the number of individuals eligible for these waiver programs.

Community Support Waiver

This waiver would provide supports in a pilot program for individuals living in the community with functional limitations resulting from ABI. The pilot would serve 200 people and would be capped at \$15,000 per person, per year. Case management would be provided by DADS. It would be a client-directed waiver and would allow individuals to choose from an array of services that best fit their individual needs within the annual limit. Services would include:

- therapies (physical, occupational, speech/language);
- behavioral support services (counseling and psychological services, or behavioral support);
- structured day program (day habilitation, brain injury day program, adult day care);
- cognitive rehabilitation;
- employment assistance;
- family training and support;
- personal assistance services (attendant care);
- assistive technology (communication aids, lifts, environmental controls, etc.);
- assistance in moving from an institution to the community;
- transportation services;
- skilled nursing/home health aide services; and
- respite care

Cost estimates for the 2012-13 biennium are approximately \$2.6 million all funds and \$1.2 million general revenue. The cost over five years is \$13.3 million all funds and \$5.8 million general revenue.

Residential Services Waiver

This waiver would be modeled on CBA waiver with some limited changes in services targeted to individuals with ABI. This waiver would serve 200 individuals and would include residential care options similar to those available through the CBA but would include small group homes. An HHSC survey of potential ABI clients and families indicated that about 20 percent of people who responded considered residential care as a high priority, which likely translates into a utilization rate for residential care that is moderately higher than CBA. Other services included on the survey would be available under this waiver but exact service arrays would require cost neutrality compared to nursing facilities. Services in the survey that differ from current CBA services include behavioral supports and cognitive rehabilitation.

Costs for the first biennium of an ABI residential services waiver would be \$4.4 million all funds and \$1.9 million general revenue. The cost over five years would be \$25.7 million all funds and \$10.7 million general revenue.

This feasibility study and previous reports have confirmed the need for community supports and residential services that specifically address the needs of people with brain injuries. The two pilots included would address the needs of those currently living at home and those who need residential services.

Conclusion

Extensive research and analysis of existing services in Texas, comparison of other states' ABI Medicaid waiver services, consultation with other enterprise agencies and evaluation of stakeholder input indicate that both Medicaid waiver options could provide the appropriate array of services and supports to people with brain injuries. Data was gathered, reviewed and updated throughout the process of the study to determine current services, gaps in those services, and the resultant most appropriate array of services for people with brain injuries.

Based upon comparative analysis of the ten waiver programs currently provided in this state and the feasibility of including ABI in those waivers, it was determined, as described elsewhere in this report, that a new waiver(s) would be more feasible and could be designed specifically to meet the needs of individuals with brain injury.

The majority of people who are hospitalized for a brain injury are discharged to their own homes or their families' homes. The Community Support Waiver would help these individuals to remain in their homes and receive some of the therapies and supports designed to increase the likelihood of ongoing independence for people with brain injuries.

The Residential Services Waiver would allow for more services and supports for individuals to live in their own or their families' homes and would allow people who cannot live in their own homes to live in an environment that addresses many of their needs and allows them to live as independently as possible. By providing the appropriate services for people with brain injuries in these settings, individuals are more likely to show improved functioning and are less likely to need more intensive institutional care.

While both models represent important and needed improvements for brain injury survivors, limited funds will be available in the upcoming biennium. Given this HHSC recommends piloting the Community Support Waiver in the upcoming biennium.

Next Steps

HHSC is requesting, as an exceptional item, funding to pilot the community support waiver in its 2012-13 Legislative Appropriations Request. The community support services in this waiver would allow those individuals with brain injury who live in the community to receive important supports to allow them to remain at home. Individuals who are currently in institutional settings might be able to return home with these crucial supports.

Appendix A
81st Legislative Session, Rider 66, S.B. 1
Effective September 1, 2009

Study Regarding the Need for Community Support and Residential Services for Individuals Suffering from Acquired Brain Injury.

- a. It is the intent of the legislature that, out of General Revenue funds appropriated above, the executive commissioner of the Health and Human Services Commission conduct a study, **not later than September 1, 2010**, regarding the need for a system of community support and residential services for individuals suffering from acquired brain injury. The study must, at a minimum:
 - (1) evaluate current services and supports **provided by the state** to persons suffering from acquired brain injury;
 - (2) assess the need in this state for community support and residential services to persons suffering from acquired brain injury;
 - (3) ascertain opportunities available to this state to draw down federal funds for individuals with acquired brain injury for whom the state currently provides services and supports through general revenue funds; and
 - (4) determine the feasibility and cost-effectiveness of implementing a system of community support and residential services through either a Medicaid state plan amendment or medical assistance waiver for persons with acquired brain injury.
- b. The executive commissioner of the Health and Human Services Commission shall submit the results of the study described above to the Governor, Lieutenant Governor, Speaker of the House of Representatives, and the chairs of the Senate Committee on Health and Human Services and the House Committee on Public Health.

Appendix B

Community Based Alternatives (CBA), Integrated Care Management (ICM), and STAR+PLUS HCBS Waiver Programs

The CBA and related waivers are alternatives to nursing facilities and serves adults age 21 or over. The STAR+PLUS 1915(c) waiver served 13,545 unduplicated individuals and 4,092 individuals are on the interest list. Currently, the CBA and related waivers do not offer cognitive rehabilitation and related services that are among those needed to adequately serve the population with ABI. While there are individuals with an ABI diagnosis being served in these waivers, the current HCBS waivers do not provide all of the supports and services an individual with a brain injury living in the community might need.

As of December 2009, the CBA and ICM waiver served 27,664 unduplicated individuals and there are 35,998 individuals were on the interest list.

Community Living Assistance and Support Services (CLASS)

The CLASS waiver is an alternative to an intermediate care facility for individuals with intellectual or developmental disabilities (ICF/IDD) and serves children and adults with developmental disabilities that occur before the age of 22. To be eligible for this program an individual's primary disability must be a related condition other than an intellectual disability and the individual must demonstrate the need for habilitation and case management. Currently, individuals in CLASS who have a brain injury may receive behavioral health services, which is included in the service array needed to serve individuals with acquired brain injury. People with a brain injury occurring after age 22 are not eligible for the CLASS program.

As of December 2009, the CLASS waiver served 4,056 unduplicated individuals, of whom 75 percent are children. CLASS had 28,793 individuals on the interest list.

Home and Community-based Services (HCS) Program

The HCS waiver is an alternative to an ICF/IDD and serves children and adults with a primary diagnosis of an intellectual disability (an IQ of less than 70 or a developmental disability with an IQ of less than 75). This waiver is statewide and contains a rich service array. People with a brain injury occurring after age 22 are not eligible for HCS services.

As of December 2009, the HCS waiver served 16,696 unduplicated individuals and 42,188 individuals were on the interest list.

Texas Home Living Waiver (TxHmL)

The TxHmL waiver is an alternative to an ICF/IDD and serves children and adults with a primary diagnosis of an intellectual disability (an IQ of less than 70 or a developmental disability with an IQ of less than 75). To be eligible for this program, recipients must live in their own

home or their family's home. They must also have a plan of care that does not exceed the specific program annual cost limit (\$15,000 in 2010).

Appendix C Survey Methodology and Map

To ensure statewide stakeholder input into the preparation of the Rider 66 report, the work group strategically planned for the distribution of a survey to determine the most services and supports required by Texans directly affected by brain injury. Exhaustive effort was expended to ensure that the respondents represented the cultural and ethnic diversity of the state and all geographic regions.

Approximately 1,500 surveys were electronically distributed by the HHSC Office of Strategic Decision Support. The survey was posted on the websites of HHSC, OABI, DADS, DARS, the HHSC Office of Border Affairs and the BIATx. Recipients were asked to forward the survey to family, friends, colleagues and all other stakeholders whom they felt would like to be included in the study. A partial list of recipients of the survey includes:

- known brain injury survivors;
- family members of brain injury survivors;
- brain injury support groups across the state;
- physicians and acute care providers;
- post-acute rehabilitation providers;
- neighborhood and community centers;
- advocacy groups; and,
- CRS client counselors.

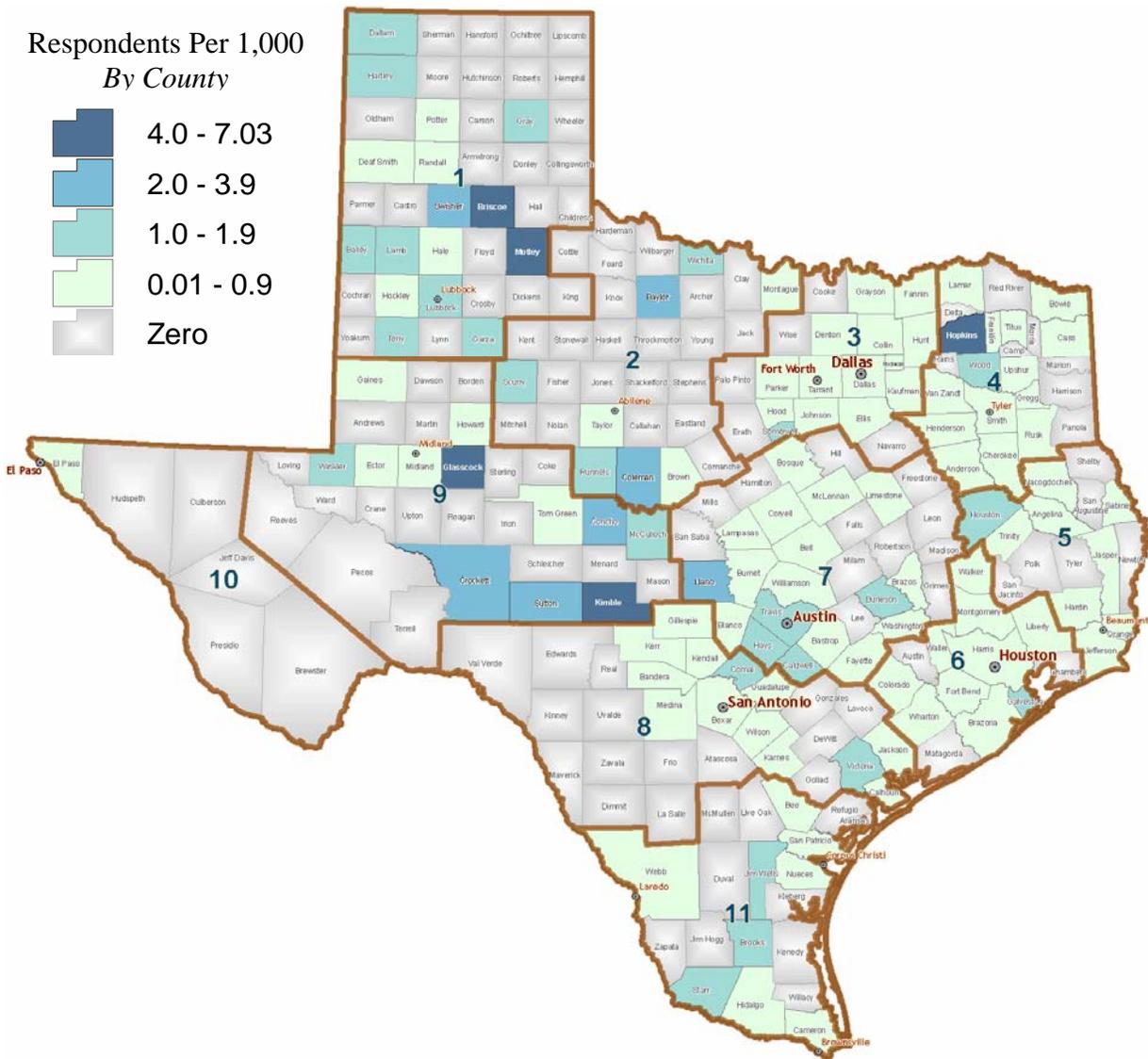
A total of 1,316 responses were received representing every region of the state and each group listed above. The results of the survey are included in this report and were used in the development of the two pilot waivers discussed elsewhere in this study.

Figure 10 presents selected demographic data about respondents of the brain injury survey.

Figure 10: Survey Results		
<i>Selected Demographic Data of Survey Respondents</i>		
Survey Respondent Type	<i>Service Provider</i>	48%
	<i>Family</i>	26%
	<i>Other (advocate, researcher, probate judge, etc.)</i>	16%
	<i>Brain Injury Survivor</i>	10%
Gender of the Person with the Brain Injury	<i>Male</i>	62%
	<i>Female</i>	38%
Ethnicity of the Person with the Brain Injury	<i>White</i>	87%
	<i>Hispanic</i>	7%
	<i>Black</i>	4%
	<i>Other</i>	2%

Given its wide geographic and demographic distribution — as well as the fact that over one-third of survey respondents were either brain injury survivors or family members thereof — the data from this survey will be useful in informing both this report and its enabling legislative intent.

RIDER 66 — Acquired Brain Injury Survey
*Respondents Per 1,000**



Statewide Total = 1,316 Respondents

Source: *Projections of the Population of Texas and Counties in Texas by Age, Sex and Race/Ethnicity for 2000-2040 (Based on 2000-2007 Migration Scenario), Population Estimates and Projections Program, Texas State Data Center, Office of the State Demographer, Institute for Demographic and Socioeconomic Research, The University of Texas at San Antonio, February 2009.*

Appendix D
Service Comparison of a Sample of Other States with ABI Waivers

State	CO	CT	FL	IA	IA	ID	IL	KS	KY
LOC	Hosp	N/A	NF	NF	ICF	NF	NF	Hosp	NF
Year	2009	N/A	2007	2009	2009	2006	2007	2008	2009
Unduplicated Clients Served	267	N/A	310	965	965	19	3619	282	870
Structured Day Program									
Adult Day Care*	X			X	X		X		
Day Habilitation	X					X	X		
Personal assistance services									
Chore Services/ Home Maintenance**							X		
Homemaker							X		
Companion Services									X
Attendant Care	X			X	X	X	X	X	
Residential									
Supported Community Living	X			X	X				X
Assisted Living									
Adult Foster Care									
Residential						X			X
Psycho - Behavioral									
Counseling/ Mental Health Services	X								
Behavior Mngmt						X	X	X	X
Substance Abuse Program	X							X	X
Other Services									
Case Management				X	X				
Support Coordination			X						X
Respite Care	X			X	X				X
Home Delivered Meals						X	X		
Independent Living Skills	X						X		
Transitional Living Skills								X	
Community Integration Counseling									
Home Modifications	X						X		
Vehicle Modificatoin				X	X				
Transportation	X			X	X				
Personal Emergency Response Systems				X	X	X	X	X	
Medical Equip./Supplies				X	X		X		X
Prevocational Services				X	X		X		
Supported Employment				X	X				X
Therapies (Speech, PT, OT)							S	S/O	S/O/P

*Adult Day Care services are services furnished 2 or more hours per day on a regularly scheduled basis in an outpatient setting and are designed to meet the social needs of the individual while day program services are directed at the development

** Chore Services/Home Maintenance are services consisting of general household activities while homemaker services may also include assisting with activities of daily living, arranging transportation, and providing companionship and social stimulation.

State	MA	MD	MD	MN	MN	MS	NE	ND	NJ	NY	UT	WI
LOC	NF	NF	Hosp	NF	Hosp	NF	NF	NF	NF	NF	NF	ICF
Year	2007	2007	2007	2008	2008	2007	2007	2008	2007	2007	2007	2007
Unduplicated Clients Served	96	27	27	1531	1531	603	23	361	331	2139	107	338
Structured Day Program												
Adult Day Care*				X	X							X
Day Habilitation	X	X	X						X	X	X	X
Personal assistance services												
Chore Services/ Home Maintenance**				X				X			X	
Homemaker				X	X			X			X	
Companion Services	X					X			X		X	
Attendant Care				X	X	X						X
Residential												
Supported Community Living										X	X	
Assisted Living							X					
Adult Foster Care				X	X			X				
Residential	X	X	X	X	X			X	X		X	X
Psycho - Behavioral												
Counseling/ Mental Health Services									X			X
Behavior Mngmt				X	X				X	X		X
Substance Abuse Program										X		
Other Services												
Case Management				X	X	X		X	X	X		X
Support Coordination											X	
Respite Care	X			X	X	X		X	X	X	X	X
Home Delivered Meals				X	X							X
Independent Living Skills				X	X					X		X
Transitional Living Skills								X				
Community Integration										X		X
Counseling												
Home Modifications				X	X	X			X	X		
Vehicle Modificatoin												
Transportation				X	X			X			X	
Personal Emergency Response Systems								X			X	X
Medical Equip./Supplies				X	X	X				X	X	X
Prevocational Services				X	X							X
Supported Employment				X	X			X			X	
Therapies (Speech, PT, OT)									X			

*Adult Day Care services are services furnished 2 or more hours per day on a regularly scheduled basis in an outpatient setting and are designed to meet the social needs of the individual while day program services are directed at the development.

** Chore Services/Home Maintenance are services consisting of general household activities while homemaker services may also include assisting with activities of daily living, arranging transportation, and providing companionship and social stimulation.

Appendix E
Frequently Cited Acronyms

Frequently Cited Acronyms	
Acquired Brain Injury	ABI
Brain Injury Association of Texas	BIATx
Centers for Disease Control	CDC
Centers for Medicare/Medicaid Services	CMS
Community Based Alternatives	CBA
Community Living Assistance and Support Services	CLASS
Comprehensive Rehabilitation Program	CRS
Consolidated Waiver Program	CWP
Deaf-Blind Multiple Disabilities	DBMD
Department of Assistive and Disability Services	DADS
Department of Assistive Rehabilitation Services	DARS
Department of Family Protective Services	DFPS
Department of State Health Services	DSHS
Federal Medicaid Assistance Percentage	FMAP
Health and Human Services Commission	HHSC
Home and Community-based Services	HCS
Home and Community-Based Services	HCBS
Integrated Care Management	ICM
Intermediate Care Facilities for the Mentally Retarded	ICF/MR
Medically Dependent Children Program	MDCP
Mild Traumatic Brain Injury	MTBI
Office of Acquired Brain Injury	OABI
Texas Home Living	TxHmL
Texas Traumatic Brain Injury Advisory Council	TBIAC
Traumatic Brain Injury	TBI
Youth Empowerment Services	YES