June | 2017

Nebraska's TBI Implementation Partnership Grant

Annual Evaluation Report JUNE 2016 – MAY 2017





Dear Reader:

Traumatic brain injury (TBI) is a serious public health problem in the United States. The Centers for Disease Control (CDC) reports approximately 2.5 million people sustain a TBI annually, and each year TBI contributes to a substantial number of deaths and cases of permanent disability. A TBI is caused by a bump, blow, or jolt to the head or a penetrating head injury that disrupts the normal function of the brain. Most TBIs are mild and their effects diminish over time, but even a mild TBI can result in permanent cognitive, physical, and behavioral changes. Individuals experiencing moderate to severe injuries may require life-long supports for housing, work, and community living.

Many Nebraskans impacted by TBI still struggle to access appropriate services to meet their needs. Nebraska Vocational Rehabilitation (VR) and the Brain Injury Advisory Council remain committed to building a comprehensive, multidisciplinary, easily accessible system of care for individuals experiencing brain injury and to ensuring awareness and training for partners in the system.

Nebraska VR serves as lead agency for a U.S. Department of Health and Human Services, Administration for Community Living TBI Implementation Partnership Grant which provides funding for states to build infrastructure and create systems change to better serve their citizens with brain injuries. The Brain Injury Advisory Council advises Nebraska VR, the Department of Education, Special Education, and the Department of Health and Human Services (DHHS) in implementing grant objectives and goals under the Nebraska State Plan for Systematic Services for Individuals with Brain Injuries.

State Plan goals for 2013-2018 are to:

- * Increase awareness and knowledge about brain injury
- * Increase access to community resources for individuals with brain injury
- * Increase funding for services
- * Promote individualized services for people with brain injury

For more information about the Nebraska State Plan for Systematic Services for Individuals with Brain Injuries, please visit the Brain Injury Advisory Council's website at www.braininjury.ne.gov.

This report summarizes grant-funded project outcomes for FY 2016-2017. Nebraska VR and the Brain Injury Advisory Council look forward to working with our partners and stakeholders to build better futures for Nebraskans with brain injury and their families.

Sincerely,

Kei Bennett

Keri Bennett, M.S.Ed, CBIS Nebraska VR Program Director for ABI TBI Grant Project Director

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Executive Summary

The purpose of Nebraska's TBI grant project (funded by the Administration for Community Living [ACL], U.S. Department of Health and Human Services) is to increase access to rehabilitation and other services for individuals with Traumatic Brain Injury (TBI) and their families by implementing activities related to each of the following components: 1) information and referral services; 2) professional workforce development trainings; 3) screening for TBI; and 4) resource facilitation. Activities from year 3 of the grant (June 2016-May 2017) are summarized below in two parts. Part 1 contains answers to questions provided by ACL and Part 2 contains a broader summary of all activities completed in year 3.

Executive Summary Part 1: Narrative Report for ACL

1. What did you accomplish during this reporting period and how did these accomplishments help you reach your stated project goal(s) and objective(s)? Please note any significant project partners and their role in project activities.

See Figure 1 (below) and Part 2 of this executive summary for a summary of major accomplishments. Each activity was directly aligned with the grant's objectives in the areas of information and referral services, training, screening for TBI, resource facilitation, and sustainability.

Significant partners this year and their role as it relates to TBI include:

- Nebraska Brain Injury Advisory Council provides insight and direction for TBIrelated activities and maintains a website with links to information and services.
- Nebraska Department of Health and Human Services assists with the delivery of letters to individuals on the brain injury registry and provides surveillance data pertaining to those on the registry.
- Brain Injury Alliance of Nebraska (BIA) as operator of the Resource Facilitation pilot, they serve as the main source for resources and case management style services for individuals with TBI in the state. The BIA also conducts the annual Brain Injury Conference and Brain Injury Regional School Support Teams (BIRSST) Symposium.
- Disability Rights Nebraska provides information and referral services.
- Hotline for Disabilities provides information and referral services.
- Aging and Disability Resource Center (ADRC) provides information and referral services.
- Children's Hospital and Medical Center maintains the concussion module trainings for healthcare professionals.
- Nebraska Department of Education oversees the screenings of children for brain injury.

2. What, if any, challenges did you face during this reporting period and what actions did you take to address these challenges? Please note in your response changes, if any, to your project goal(s), objective(s), or activities that were made as a result of challenges faced.

A challenge faced this year was collecting data on the resource facilitation pilot. A change was made in the database used to collect data on the pilot during this fiscal year. It took a considerable amount of time to make modifications to the database for Nebraska's Resource Facilitation pilot. There was also a substantial amount of staff training required. The challenge from this issue has been overcome with staff now being fully trained and caught up on a back log of data entry.

3. How have the activities conducted during this project period helped you to achieve the measurable outcomes identified in your project proposal?

| Figure 1 | Progress towards Proposed Outco | mes |
|-----------------------------|--|--|
| Are | Proposed Outcomes | Progress |
| Training | Increase in the number of professionals trained on TBI 75% of professionals trained confidence in assisting indivi with TBI (i.e., youth and the second second | duals being more able to assist individuals with |
| Resource Facilitation | Increase in the number of TE targeted individuals receiving resource assistance 75% of individuals receiving facilitation services report successfully accessing TBI services | 666 referrals to services were made by Resource Facilitation staff. Among those who completed a satisfaction survey, 100% indicated that |
| Disseminati Informatior | | Information continues to be disseminated through Brain Injury Registry letters, the Brain Injury Advisory Council website, the annual Brain Injury Conference, and Constant Contact. |
| Screening fo | or TBI $^{\oplus}$ Increase in the number of th population screened for TBI | e target 93 children from birth through 2nd grade were screened for TBI. |
| Sustainabili Partnership | | Sustainability of projects will be reliant upon strong partnerships. Results from this year's PARTNER Tool survey administration indicate an increase in the number of network ties across partners. |

Figure 1 below outlines the originally proposed outcomes and their progress.

4. What was produced during the reporting period and how have these products been disseminated? Products may include articles, issue briefs, fact sheets, newsletters, survey instruments, sponsored conferences and workshops, websites, audiovisuals, and other informational resources.

Numerous materials were distributed this year through the Brain Injury Letters, Advisory Council Website, Brain Injury Conference, and Constant Contact (see the "Dissemination of Information" section below). However, these materials were created in previous years.

Materials were newly created for a training project for member agencies of the Nebraska Association of Service Providers (NASP). Five agencies are currently receiving training and consultation on how to provide services related to TBI (training began June 2017). A training evaluation and final project assessment were created in year 3. Results gathered from these materials will be reported on next year's annual report.

Executive Summary Part 2: Highlighted Metrics and Outcomes

Dissemination of Information

- 8,324 letters were delivered to individuals on the TBI Registry.
- 872 website sessions occurred on the Nebraska Brain Injury Advisory Council Website.
- Numerous materials distributed at the Annual Brain Injury Conference.
- 6 information campaigns conducted through Constant Contact with 255 to 270 recipients for each campaign.

Information and Referral

• 372 individuals received information and referral services from four agencies (Brain Injury Alliance of Nebraska, Disability Rights Nebraska, Hotline for Disabilities, and Aging and Disability Resource Center).

Resource Facilitation Case Management

- The Resource Facilitation pilot managed by the BIA provided services to 248 individuals (39 received case management services, 96 received intake and referral services, and 113 received information and referral services).
- A total of 666 referrals were made by Resource Facilitation staff.
- Barriers are documented across numerous areas for Resource Facilitation clients. So far, 23.4% of barriers have been documented as having a successful outcome.

Resource Facilitation Community Outreach

• 222 outreach activities were conducted by Resource Facilitation staff, with an estimated reach of 6,241 individuals.

TBI Trainings

- A total of 352 individuals received training across the six TBI trainings that were offered.
- Training participants from all six trainings gave positive feedback, indicating an increase in knowledge in areas such as TBI prevention, causes, and/or recovery; ways to identify a TBI; and ways to serve individuals with a TBI; among other areas.

TBI Screenings

- A total of 93 children from birth through 2nd grade were screened for TBI by Early Childhood Planning Region Teams and school districts using the SAFE-Child Screening Tools.
- 10 children were screened as positive for a potential TBI and an additional 9 children were documented as having an incident but a negative screen.

PARTNER Tool

• The PARTNER Tool was repeated for a third time in 2016 to measure the collaboration of key stakeholders and partners around TBI in Nebraska.

• A notable improvement in 2016 was the increase in density and decrease in centralization scores from previous years, indicating a greater number of network ties and a greater degree of similarity between members in terms of their connections to each other.

Surveillance Data

- In October of 2010, medical coding switched to the ICD-10 coding system. The change in TBI definition criteria under ICD-10 may lead to fewer cases in Nebraska's TBI registry. At the same time, Nebraska's TBI registry may present a more accurate picture of TBI in the state with the switch to ICD-10. Data from October through December of 2015 show relatively fewer cases than collected under the previous ICD-9 coding system.
- Prior to 2015, the number of cases entering the TBI registry increased each year from 2011 to 2014. Age-adjusted TBI rates also increased from 2011 to 2014.
- TBI's are most prevalent among those 85 and over.
- Males under the age of 25 have notably higher rates of TBI than females of comparable age.
- The vast majority (89.5%) of TBI patients are discharged to home/self-care.
- The leading causes of unintentional TBI-related injuries is falls, accounting for nearly half (47%) of cases in the registry.

NEBRASKA'S TBI IMPLEMENTATION PARTNERSHIP GRANT YEAR 3 EVALUATION REPORT (June 1, 2016 through May 31, 2017)

Project Purpose

The purpose of Nebraska's TBI grant project (funded by the Administration for Community Living, U.S. Department of Health and Human Services) is to increase access to rehabilitation and other services for individuals with Traumatic Brain Injury (TBI) and their families by providing information and referral, professional training, TBI screening and resource facilitation services. The \$1,000,000 four-year grant was awarded to Nebraska VR (Vocational Rehabilitation) in June of 2014.

The target populations identified for the project's strategies are: children, youth (including student athletes at risk for concussion) and the elderly who experience TBI or are at risk for TBI. Keri Bennett, with Nebraska VR is the project director.

Grant Objectives

The TBI implementation grant project focuses on five core areas which provides the basis for the grant objectives:

- 1. Enhance and expand existing **information and referral services** to reach children, youth and elderly persons with TBI, their family members and the professionals, service providers, and agency staff who serve them, providing educational resources and referral to appropriate services and supports as requested.
- 2. **Provide training** to key professionals, service providers and agency staff serving children, youth, and the elderly on the potential long-term cognitive, physical, emotional, and behavioral effects of TBI (including concussion or mild TBI), and resulting implications for housing, work, and community living.
- 3. Teach professionals, service providers, and agency staff who serve children, youth, and the elderly to implement simple methods to **screen individuals for TBI** at the point of program eligibility and service needs planning.
- 4. Develop a sustainable model to **implement resource facilitation** for children, youth, and elderly persons with TBI and their family members who require assistance in navigating complex service systems to meet their needs and achieve their goals.
- 5. Develop a plan and identify potential long-term funding sources for **sustaining key TBI service infrastructure elements** beyond grant funding, with a focus on the targeted populations of children, youth, and the elderly with TBI.

Dissemination of Information

The dissemination of information conducted by the NE VR TBI program is organized under four main headings: Nebraska Brain Injury Registry Letters, Nebraska Brain Injury Advisory Council Website, materials distributed at the Brain Injury Conference, and Constant Contact. Figure 2 contains a summary of the information disseminated under each of these four areas.

| Figure 2 | Dissemination of Inform | nation Summary: June 1, 2016 – May 31, 2017 |
|---|---|--|
| Nebraska Brain Injury Registry Letters | | Registry letters mailed: 8,941 Letters returned undeliverable: 617 Total registry letters delivered: 8,324 |
| Nebraska I Council We | Brain Injury Advisory ebsite | 872 website sessions 578 new visitors 294 returning visitors (see full summary below) |
| | Distributed at Brain ference (March 22 and | Online TBI Training Course post cards - 50 Lash tip booklets - 150 BIRSST Map - 15 Cost of TBI Report - 15 Registry brochures - 200 TBI on Older Adults brochure - 50 |
| Constant C | Contact Statistics | Conducted 6 distinct information campaigns through Constant Contact during the grant year. There were between 255 and 270 recipients for each Constant Contact campaign that was sent out. |

Nebraska Brain Injury Advisory Council Website Analytics

Analytics for the Nebraska Brain Injury Advisory Council Website displayed below. There were 872 website sessions to the Council's website, with 578 new visitors and 294 returning visitors (Figure 3).

| Figure 3 | Analytics for the Nebraska Brain Injury Advisory Website | | | | | |
|----------------------|--|------------------|---------------------------|--|--|--|
| Figure 5 | (June 1, 2016 – May 31, 2017) | | | | | |
| | Website sessions: > 872 | | | | | |
| | New visitors > 578 (66.3%) | | | | | |
| | Returning visitors | \triangleright | 294 (33.7%) | | | |
| | Total page views | \triangleright | 1,874 | | | |
| | | \triangleright | New visitors: 1:08 | | | |
| | Average session duration: | \triangleright | Returning visitors: 4:22 | | | |
| | | \triangleright | Overall: 2:13 | | | |
| | | \triangleright | New visitors: 2.1 | | | |
| Average | number of pages per session: | \triangleright | Returning visitors: 2.2 | | | |
| | | \triangleright | Overall: 2.2 | | | |
| Bounce ra | te (percentage who navigate | \triangleright | New visitors: 43.4% | | | |
| | after viewing only one page): | \triangleright | Returning visitors: 31.6% | | | |
| away | arter viewing only one page). | \triangleright | Overall: 39.5% | | | |
| | | \triangleright | Direct: 46.4% | | | |
| Channels (h | ow visitors came to the site): | \triangleright | Organic search: 25.3% | | | |
| channels (h | ow visitors came to the site. | \triangleright | Referral: 22.5% | | | |
| | | \triangleright | Social media: 5.7% | | | |
| | | \triangleright | 18-24: 27.5% | | | |
| Age of website users | | \triangleright | 25-34: 33.5% | | | |
| | | \triangleright | 35-44: 15.5% | | | |
| | | \triangleright | 45-54: 12.5% | | | |
| | | | 55-64: 5.5% | | | |
| | | | 65+: 5.5% | | | |

Information and Referral

Information and referral services for survivors of TBI are conducted by four organizations: The Brain Injury Alliance of Nebraska (BIA), Disability Rights Nebraska, the Hotline for Disabilities, and the Aging and Disability Resource Center (ADRC). Between these four organizations, 372 individuals received information and referral services during this grant year (Figure 4).

| Figure 4 | Information and Referra | l Summary: June 1, 2016 – May 31, 2017 | |
|--|-----------------------------|--|--|
| Brain Injury Alliance of Nebraska (BIA) | | Provided 113 information and referral services 96 intake and referral services 39 case management services (Note: clients receiving intake and referral and case management services often start out at the informatio and referral level) | |
| Disability I | Rights Nebraska | Provided 41 information and referral services for individuals with a TBI (some duplication may occur). | |
| Hotline for Disabilities | | Provided information and referral services to 23 individuals with a TBI. | |
| Aging and Center (AD | Disability Resource DRC) | Provided information and referral services to 60 individuals with a TBI. | |
| Total | , | Provided information and referral services to <u>372</u> individuals with a TBI. | |

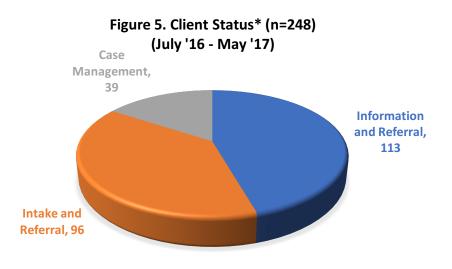
Resource Facilitation Case Management

The Resource Facilitation Case Management pilot program conducted by the Brain Injury Alliance of Nebraska (BIA) involves close, potentially long-term, one-on-one interaction between a brain injury survivor and a resource facilitator. The Resource Facilitator assists the survivor in navigating resources in their community, evaluating progress with the survivor and family/caregivers, and setting and achieving goals. One full-time and three part-time staff provide referral and case management services to the entire state of Nebraska, with casemanagement-style services focused primarily in the Lincoln and Omaha areas.

Data in this section of the report cover the time period of July 2016 through May 2017 (11 months). In July 2016, the Resource Facilitation pilot transferred to a more sophisticated data collection system designed specifically for TBI Resource Facilitation. **During this 11-month time period, the Resource Facilitation pilot served** <u>248</u> individuals. It is important to note that not all data variables are collected for these 248 individuals. There are some variables that are not collected for clients with a lower level of involvement in the pilot.

<u>Client Status</u>

Resource Facilitation services are categorized into three tiers beginning with a simple information and referral, to a more engaged relationship of intake and referral, and finally to the highest level of involvement of case management. Figure 5 below displays the status of the 248 clients served from July 2016 through May 2017.



*Includes all cases that were active during this time period. Some of these cases are now closed.

Figure 6 details the time between brain injury and intake by the Resource Facilitation pilot. A plurality (43.4%) of clients had their brain injury for seven or more years before becoming involved in Resource Facilitation.

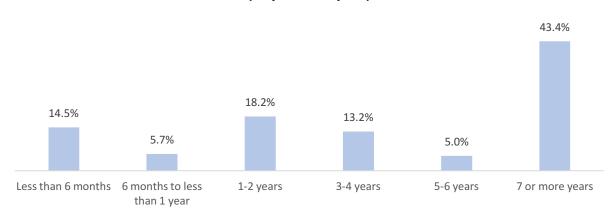


Figure 6. Time between Brain Injury and Intake by the Resource Faciliation Pilot (n=159) (July '16 - May '17)

Client Demographics

Figure 7 outlines client demographics.

| Figure 7 | Figure 7 Basic Demographics (July '16 - May '17) | | | | |
|----------------------------------|---|---------------------|-------|--|--|
| Gender (n=221) Male 60.69 | | | | | |
| Gen | uer (11–221) | Female | 39.4% | | |
| | | | | | |
| | | Under 20 | 11.5% | | |
| Anomt | time of intelle | 20-39 | 30.1% | | |
| Age at time of intake (n=156) | | 40-59 | 39.1% | | |
| | | 60 and over | 19.2% | | |
| | | Average Age | 43.3 | | |
| | | | | | |
| Pace /ot | hnisity (n-102) | White/Caucasian | 86.7% | | |
| Ruce/et | hnicity (n=183) | Non-White/Caucasian | 13.1% | | |
| | | | | | |
| | | Omaha Metro* | 46.0% | | |
| Homela | a_{n-120} | Lincoln Area° | 25.5% | | |
| поте ю | cation (n=120) | Greater Nebraska | 24.2% | | |
| | | Out-of-State | 4.3% | | |

*Omaha Metro includes Douglas and Sarpy Counties and Council Bluffs.

°Lincoln Area includes Lancaster and Seward Counties.

Source of Referral to Resource Facilitation

The top 10 sources for referrals to Resource Facilitation are detailed below in Figure 8.

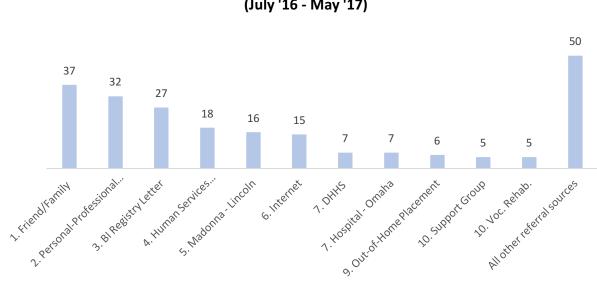
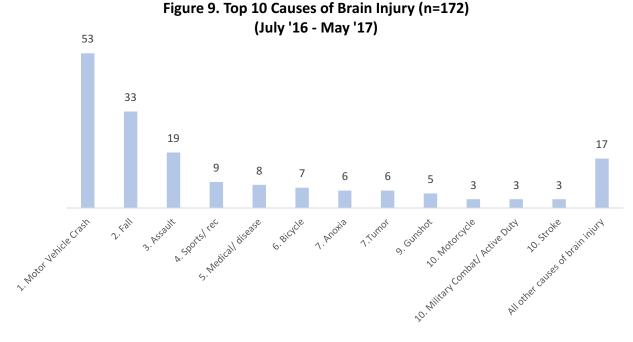


Figure 8. Top 10 Sources for Referrals to the Resource Facilitation Pilot (n=225) (July '16 - May '17)

Cause of Brain Injury

The top 10 causes of brain injury for Resource Facilitation clients are detailed below in Figure 9.



Barriers

A strong majority (72.7%) of Resource Facilitation clients have physical and mental health barriers at time of intake. Over half of clients have barriers in the areas of housing and finance (Figure 10). On average, clients have barriers in 5 of the 12 domains listed below in Figure 10 at time of intake.

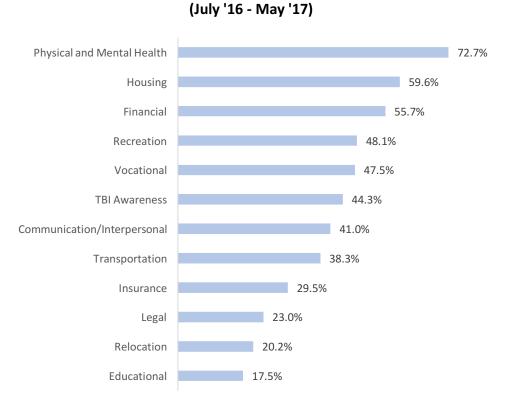


Figure 10. Percentage of Clients Experiencing Barriers in the Following Areas, at Intake (n=183) So far, nearly one-fourth (23.4%) of barriers have been documented as having a successful outcome (Figure 11). It is important to note that many clients are still active and barriers are still being worked on.

| Figure 11 | Successful Outcomes for Barriers (n=183) (July '16 - May '17) | | | | |
|--|--|---|--|--------------|--|
| At time of intake, experienced a barrier in the following areas: | | Number of clients experiencing a barrier | Number of clients with a successful outcome | Success rate | |
| Physical and | d Mental Health | 133 | 20 | 15.0% | |
| Housing | | 109 | 20 | 18.3% | |
| Financial | | 102 | 28 | 27.5% | |
| Recreation | | 88 | 11 | 12.5% | |
| Vocational | | 87 | 10 | 11.5% | |
| TBI Awaren | ess | 81 | 34 | 42.0% | |
| Communica | ation/Interpersonal | 75 | 12 | 16.0% | |
| Transportat | tion | 70 | 6 | 8.6% | |
| Insurance | | 54 | 42 | 77.8% | |
| Legal | | 42 | 7 | 16.7% | |
| Relocation | | 37 | 15 | 40.5% | |
| Educational | | 32 | 8 | 25.0% | |
| Total Barrie | ers | 910 | 213 | 23.4% | |

Note: many clients are still active, and therefore barriers are still being reduced.

Employment and Financial

Approximately two-in-five (41.2%) Resource Facilitation clients are unable to work due to their brain injury. About one-in-four (25.2%) are employed (Figure 12).

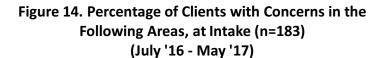
| Figure 12 | Employment Summary (as of most recent update) (n=119) (July '16 - May '17) | | | |
|---------------|---|-------------------|---------------------|--|
| | | Number of clients | Percentage of total | |
| Employed (| ed (part-time or full-time) 30 25.2% | | | |
| In job traini | ing or job search | job search 9 7.6% | | |
| Volunteer | | 6 | 5.0% | |
| Support to | Support to perform job (job coach)54.2% | | | |
| Unemploye | d | 13 | 10.9% | |
| Unable to v | vork | 49 | 41.2% | |
| Retired | | 7 | 5.9% | |

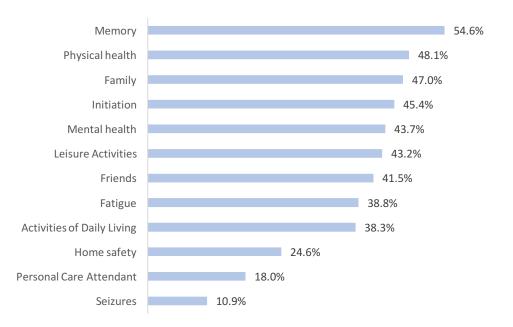
A selected set of financial outcomes are reported below in Figure 13.

| Figure 13 | Financial Summary (July '16 - May '17) | | | | |
|--------------|---|---|----|--|--|
| Fine | ncial Crisis | Clients experiencing financial crisis | 1 | | |
| FING | | Clients continuing to experience financial crisis | 0 | | |
| | | | | | |
| Λ. | o Income | Clients with no income | 27 | | |
| | o mcome | Clients continuing to have no income | 16 | | |
| | | | | | |
| No Insurance | | Clients with no insurance | 12 | | |
| | | Clients continuing to have no insurance | 9 | | |

Concerns Related to Health and Self-Direction/Care

Concerns at intake related to health and self-direction/care are displayed below in Figure 14. Memory is the top concern, documented for over half (54.6%) of clients.





So far, 16.4% of concerns in the domains related to health have been documented as showing improvement (Figure 15). Again, it is important to note that many clients are still active and these are still being worked on.

| Figure 15 | Concerns and Improvements in Health Areas (n=145) (July '16 - May '17) | | | | |
|------------------------|---|---|--|---------------------|--|
| | | Clients with a concern in this area at intake | Clients with an improvement in this area | Improvement rate | |
| Physical he | Physical health 88 16 18.29 | | 18.2% | | |
| Mental health 80 12 15 | | 15.0% | | | |
| Fatigue | | 71 | 13 | 18.3% | |
| Home safety | | 45 | 6 | 13.3% | |
| Seizures | | 20 | 3 | 15.0% | |
| Total | | 304 | 50 | 16.4% | |

Note: many clients are still active, and therefore areas of concern are still being improved.

So far, 14.6% of concerns in the domains related to self-direction/care have been documented as showing improvement (Figure 16)

| Figure 16 | Concerns and Improvements in Self-Direction/Care (n=144) (July '16 - May '17) | | | | |
|---------------|--|---|--|---------------------|--|
| | | Clients with a concern in this area at intake | Clients with an improvement in this area | Improvement rate | |
| Memory | | 100 | 10 | 10.0% | |
| Family | | 86 | 9 | 10.5% | |
| Initiation | | 83 | 14 | 16.9% | |
| Leisure Acti | vities | 79 | 15 | 19.0% | |
| Friends | | 76 | 9 | 11.8% | |
| Activities of | Daily Living | 70 | 14 | 20.0% | |
| Personal Ca | re Attendant | 33 | 6 | 18.2% | |
| Total | | 527 | 77 | 14.6% | |

Note: many clients are still active, and therefore areas of concern are still being improved.

Mayo-Portland

The Mayo-Portland Adaptability Inventory ("short version") is a tool used to ascertain needs of individuals who have suffered a brain injury. The tool measures self-care, residence, transportation, employment, and other basic needs. The "short-version" of the Mayo-Portland includes eight inventory items with a minimum score of 0 and maximum of 30. The lower the score on the Mayo-Portland, the greater the independence, and the lesser interference from injuries, for an individual with a TBI. The average, healthy adult, would likely have a score of zero or near zero.

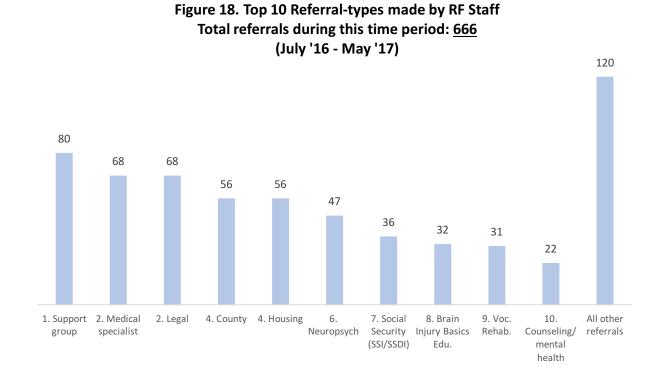
While numerous Mayo-Portland assessments have been completed, a total of nine clients have a pre and a post Mayo-Portland. The average Mayo-Portland score for these nine clients has decreased by 34.5% from pre to post (Figure 17).

| Figure 17 | Mayo-Portland Pre and Post Summary (n=9) (July '16 - May '17) | | | |
|---|--|-------------------------|--------------------------|------------------------|
| Number of clients with a Pre and Post Mayo-Portland | | Average Score at Pre | Average Score at Post | Percent Improvement |
| 9 | | 16.5 | 10.8 | 34.5% |

Note: decrease in score indicates improvement.

Referrals Made by Resource Facilitators

The top 10 referral-types made by Resource Facilitation staff are displayed below in Figure 18. A total of 666 referrals have been made by staff during this time period. This makes for an average of 2.7 referrals per client. Clients with a more intensive involvement (intake and referral or case management) will receive a greater number of referrals than information and referral clients.



Client Satisfaction

A total of 10 Client Satisfaction Surveys have been received, all with positive results (Figure 19).

| Figure 19 | Client Satisfaction Survey Summary* (n=10) (July '16 - May '17) | | | | | |
|--------------|---|--|--|--|--|--|
| Satisfied wi | Satisfied with the Resource Facilitation services they received. 100% | | | | | |
| Resource Fa | Resource Facilitation services helped address personal goals. 100% | | | | | |
| Resource Fa | 100% | | | | | |
| Resource Fa | 100% | | | | | |
| Resource Fa | 100% | | | | | |

*The percentage agreeing or strongly agreeing with each statement is reported. Survey items are on a four-point scale: strongly disagree, disagree, agree, strongly agree.

Resource Facilitation Community Outreach

Community Outreach

Figures 20 through 22 document the community outreach activities of Resource Facilitation staff from June 2016 through May 2017 (a full twelve months). During this time period, Resource Facilitation staff conducted 222 outreach activities to an estimated 6,241 individuals.

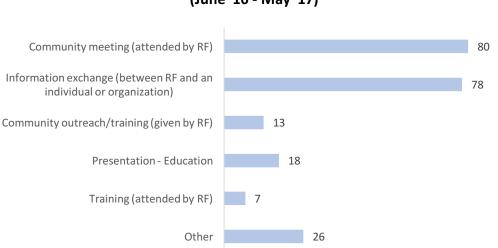


Figure 20. Community Outreach Activity Total outreach activities during this time period: <u>222</u> (June '16 - May '17)

Figure 21. Estimated Number in Attendance at RF Community Outreach Activities (June '16 - May '17)

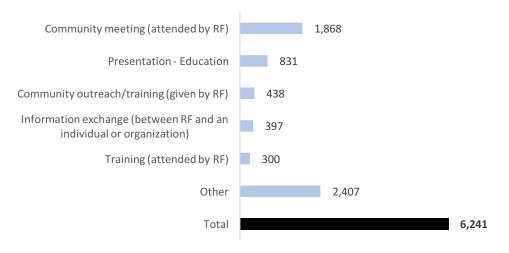
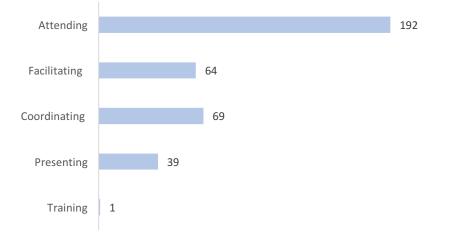


Figure 22. BIA-NE Staff Role in Community Outreach Activities (duplication occurs) (n=221) (June '16 - May '17)



TBI Trainings

A total of seven TBI trainings were offered in the 3rd grant year to a broad array of professionals, individuals, and family members. These trainings focused on various topics related to TBI such as TBI prevention, causes and recovery; services for survivors of a TBI; and how to assist TBI survivors; among numerous other topics. The dates and participants of these seven trainings are detailed below in Figure 23.

| Figure 23 TBI Trainings: Dates and Participants | | | | | | |
|---|------------------|--|--|--|--|--|
| | Date | Participant Description | Number of Participants | | | |
| Community Options Training | July 2016 | Primarily direct support specialists | 5 | | | |
| Brain Injury Regional School Support Teams (BIRSST) Symposium | November 2016 | Primarily school-based professionals | 56 | | | |
| Ollie Webb Center Training | January 2016 | Direct support staff (educators, social workers, etc.) and management | 15 | | | |
| Brain Injury conference | March 2017 | Various professionals and family members serving individuals with TBI | 225 | | | |
| Online TBI Modules | Ongoing | Various professionals and family members serving individuals with TBI | 20 (unique) Intro training: 16 Pediatric training: 7 Adult training: 6 Substance training: 5 | | | |
| Concussion Modules | Ongoing | Healthcare professionals including doctors, nurses, and EMS technicians | 31 (estimated unique) Module 4: 31 Module 5: 22 Module 6: 21 | | | |
| Total | - | - | 352 | | | |

Post-Training Evaluation Survey Results

Post-training evaluation survey results are displayed in Figures 24 through 30 below for all six trainings conducted in this grant year. In general, grant-funded trainings use a standard post-training evaluation survey. However, due to the nature and objectives of some trainings, certain items on the standardized survey are not used with every training. The figures below show the results from each survey item on the standardized survey by training. If a training is left off from a figure, this is because the survey item was not applicable to that training. See the appendix for a version of the standard post-training evaluation survey.

The post-training evaluation surveys had very positive results. Examples of some of the many positive highlights from the combined total of all trainings include: 99.1% of training participants reporting that their knowledge of TBI prevention, causes, and/or recovery increased as a result of the training (Figure 24); 100% reporting that their knowledge of ways they can identify individuals that have a TBI and meet their needs increased as a result of the training (Figure 27); and 100% reported being satisfied or very satisfied with the training (Figure 29).

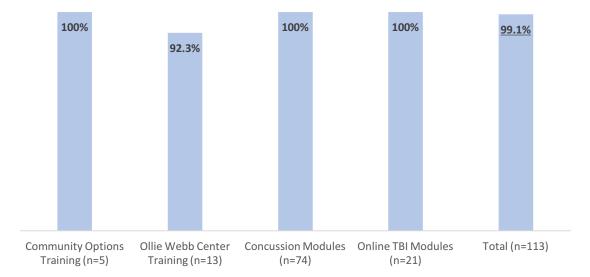
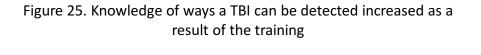


Figure 24. Knowledge of TBI prevention, causes, and/or recovery increased as a result of training



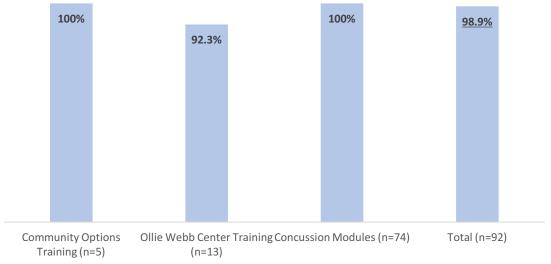
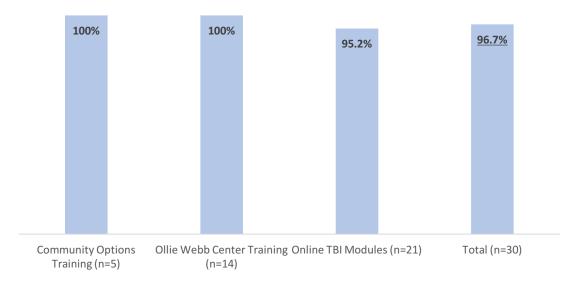


Figure 26. Knowledge of services and/or providers that may be able to help with recovery after TBI increased as a reult of the training



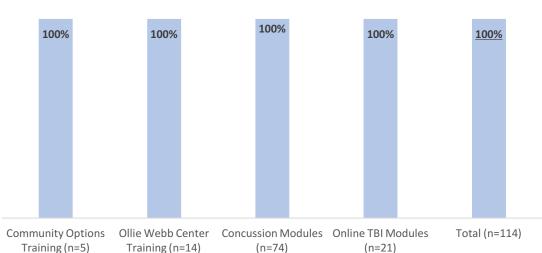
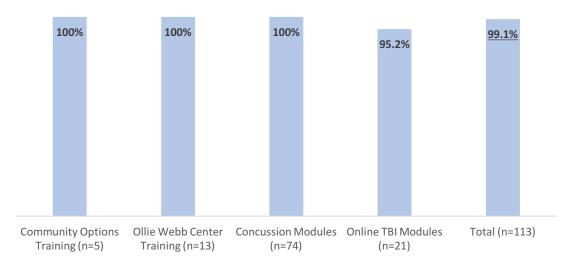


Figure 27. Knowledge of ways participants can identify indiviuals that have a TBI and meet their needs relative to their practice, and/or refer elsewhere increased as a result of the training

Figure 28. As a result of this training, they anticpate being more able to assist indivudals with TBI and their families in accessing the services they need



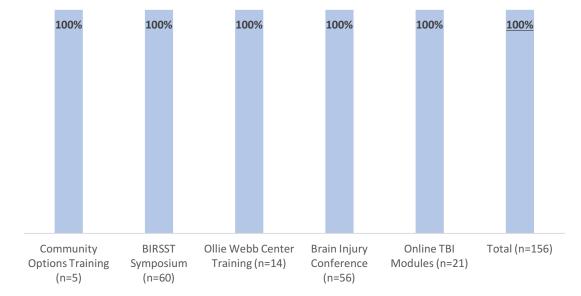


Figure 29. Satisfied or very satisfied with the training*

| Figure 30 | Among those anticipating that they will be more able to assist individuals with TBI, etc. (see Figure 28 above), reported ways in which they will be better able to serve them | | | | |
|--|---|---|--|--------------|--|
| | | Community Options Training (n=5) | Ollie Webb Center Training (n=13) | Total (n=18) | |
| | nation to provide Is/families about | 100% | 61.5% | 72.2% | |
| I have information to provide to individuals/families about local resources/services | | 100% | 69.2% | 77.8% | |
| I can more easily recognize symptoms of TBI | | 100% | 92.3% | 94.4% | |
| I can better interact with individuals with TBI in the course of my work | | 100% | 84.6% | 88.9% | |
| I know what to do when I encounter an individual with TBI in my work | | 100% | 69.2% | 77.8% | |

TBI Screenings

Using the SAFE-Child Screening Tools, three separate brain injury screenings were conducted for children age 0 to 3, age 3 through Kindergarten, and 1st and 2nd graders. Each group has a slightly different version of the screening tool. The screenings were conducted by Early Childhood Planning Region Teams (for children age 0 to 3) and school districts (for those age 3 and up).

Across all age groups, a total of 93 screenings were conducted, ten of which registered as positive screens for a potential brain injury. In addition, nine screens captured an incident that could have possibly caused a brain injury, but no symptoms were reported on the screens.

In the process of the screening, parents/guardians were given information about the purpose of the screening. Parents/guardians of children with positive screens were urged to consult with the child's healthcare provider. Thus, for families and children, the brain injury screening created awareness of brain injury.

| Figure 31 | Brain Injury Screenings for Children Results (SAFE-Child Screening Tool) | | | | | | | |
|---|--|-----------------------------|---|---|---|--|--|--|
| Child's Age | Screening conducted by | Total number screened | Positive screens (incident and symptom) | Negative screens (incident, no symptom) | Negative screens (no incident, no symptom) | | | |
| 0 to 3 | Two Early Childhood Planning Region Teams | 13 | 2 | 1 | 13 | | | |
| 3 through Kindergarten | Two school districts | 43 | 4 | 4 | 35 | | | |
| 1 st and 2 nd grades | One school district | 37 | 4 | 4 | 29 | | | |
| | Totals: | 93 | 10 | 9 | 77 | | | |

A full summary of the screening results is included below in Figure 31.

PARTNER Tool

One of the aims of the TBI project is to increase the collaboration among the key stakeholders or partners. Partnerships are an important element for reaching the outcomes of the project. As a measure of the level of collaboration and effectiveness of the partnerships, the PARTNER tool was selected to be administered to key partners every year as part of the grant evaluation.

Fourteen organizations that participate in collaborative work around traumatic brain injury (TBI) in Nebraska completed the PARTNER survey in 2016. The same organizations have participated in all three years, with the exception of a new partner in 2016. There has been some change in the individuals who participated in the survey due to staff turnover. Following are some key highlights from all three years of the survey (Figures 32 and 33). Noteworthy are the increase in density and decrease in centralization in 2016 (highlighted below in Figure 32).

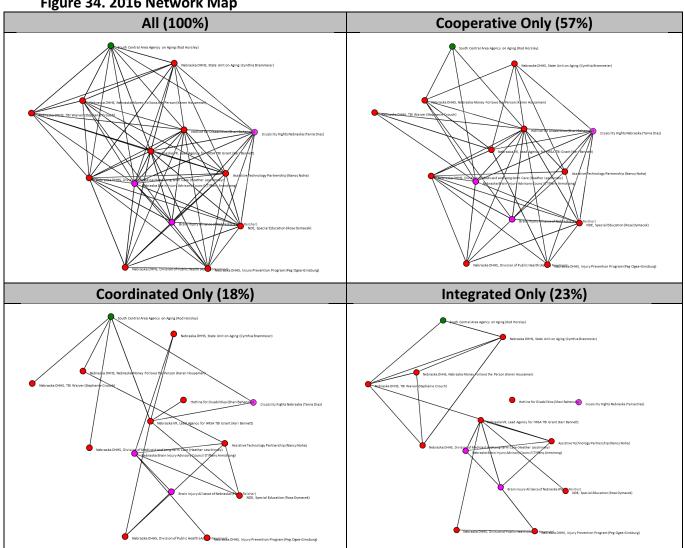
| Figure 32 PARTNER Tool Summary: Collaboration | | | | | | | | |
|--|---|---------------------------------|---|----------------|---|----------------|---|--|
| | | | 2014 | 2015 | | | 2016 | |
| Collaborating has been successful or very successful at reaching its goals | | 7 out of 10 (3 no responses) | | | 10 out of 13 | | 9 out of 14 | |
| Top three aspects contributing to the success of the collaboration | | 1. 1. 3. | Having a shared mission, goals (tied) Exchanging info/knowledge Bring together diverse stakeholders | 1. 2. 2. | Exchanging info/knowledge Bringing together diverse stakeholders (tied) Informal relationships created | 1. 2. 3. | Having a shared mission, goals Sharing resources Bringing together diverse stakeholders | |
| Top three member contributions to the collaboration | | 1. 1. 3. | Info/feedback (tied) Community connections Paid staff | 1. 2. 2. | Info/feedback Community connections (tied) Advocacy | 1. 2. 2. | Info/feedback Data resources (tied) Community connections | |
| Top three outcomes of the collaborative work | | 1. 2. 2. | Public awareness Improved communication (tied) Increased professional TBI knowledge | 1. 1. 1. | Improved communication (tied) Public awareness (tied) Improved resource sharing | 1. 2. 2. | Improved services for individuals with TBI Public awareness (tied) Increased professional TBI knowledge | |
| , , | percentage of ties in relation to the total sible ties) | | 65% | | 63% | 78% | | |
| lower the score members are in | ization score (the e the more similar the n terms of their others – i.e., more | | 41% | 44% 2 | | 26% | | |
| • | 0% occurs when all others at the highest | | 85% | 83% | | | 78% | |

| Figure | igure 33 PARTNER Tool Summary: Value and Trust Scores | | | | | |
|---------------------------|---|--------|------|------|--|--|
| | | 2014 | 2015 | 2016 | | |
| _ | Overall Value Score | 3.28 | 3.33 | 3.18 | | |
| ale: 1-4) | Power/influence value measure | 3.14 | 3.34 | 3.06 | | |
| Value (Scale: | Level of involvement value measure | 3.45 | 3.30 | 3.23 | | |
| Val | Resource contribution valu measure | e 3.24 | 3.35 | 3.26 | | |
| - | Overall Trust Score | 3.57 | 3.55 | 3.43 | | |
| : 1-4 | Reliability trust measure | 3.70 | 3.66 | 3.41 | | |
| Trust (Scale: 1-4) | In support of mission trust measure | 3.43 | 3.42 | 3.48 | | |
| Trus | Open to discussion trust measure | 3.58 | 3.58 | 3.41 | | |

Network Maps from the PARTNER Tool

Figure 34 shows the network maps from the 2016 PARTNER Tool administrations. Each line represents a network between two different organizations collaborating around the issue of TBI. More lines indicate more collaboration. There are three levels of collaboration:

- **Cooperative Activities**: involves exchanging information, attending meetings together, and offering resources to partners. Example: Informs other programs of RFA release.
- **Coordinated Activities**: includes cooperative activities in addition to intentional efforts to enhance each other's capacity for the mutual benefit of programs. Example: Separate granting programs utilizing shared administrative processes and forms for application review and selection.
- Integrated Activities: in addition to cooperative and coordinated activities, this is the act of using commonalities to create a unified center of knowledge and programming that supports work in related content areas. Example: Developing and utilizing shared priorities for funding effective prevention strategies. Funding pools may be combined.



TBI Registry Data

This section presents TBI Registry Data from 2011 through 2015. Beginning in October 2015, medical coding switched from ICD-9 to ICD-10 coding systems. It remains to be seen how the ICD-10 coding system will affect the number of cases in the TBI registry. The change in TBI definition criteria may lead to fewer cases in Nebraska's TBI registry. At the same time, Nebraska's TBI registry may present a more accurate picture of TBI in the state with the switch to ICD-10.

The number of individuals entering the TBI Registry increased slightly each year from 2011 through 2014. If the two time periods for 2015 are combined, there were 12,617 individuals entering the registry in 2015, marking a five-year low. This is due to the low number of cases collected from October through December of 2015 after the switch to ICD-10 (Figure 35).

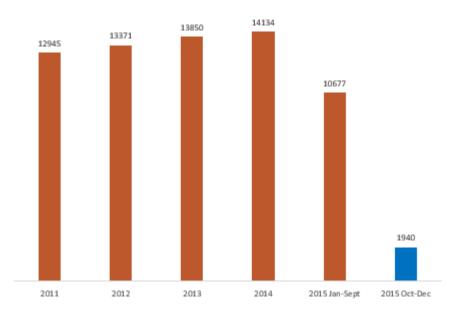


Figure 35. Number of Individuals Entering the TBI Registry (2011-2015)

(Source: Nebraska Traumatic Brain Injury Registry)

Figures 36 and 37 present data on TBI rates per 100,000 population. TBI's are most prevalent among those 85 and over. Males under the age of 25 have notably higher rates of TBI than females of comparable age.

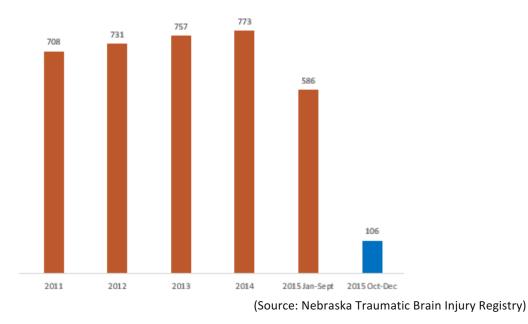
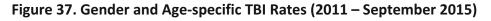
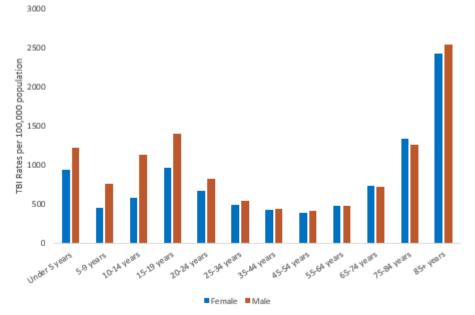


Figure 36. Age-adjusted TBI Rates per 100,000 by Year (2011-2015)





(Source: Nebraska Traumatic Brain Injury Registry)

The vast majority (89.5%) of TBI patients are discharged to home/self-care (Figure 38).

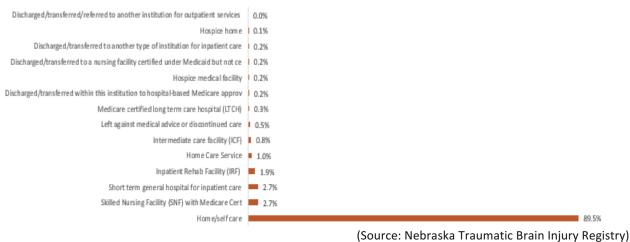
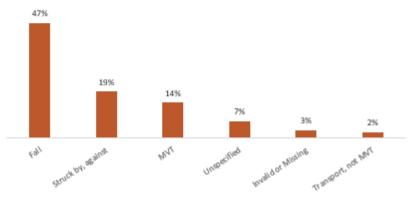


Figure 38. Discharge Status (2011 – September 2015)

The leading causes of unintentional TBI-related injuries is falls, accounting for nearly half (47%) of cases in the registry (Figure 39). Note: MVT stands for "motor vehicle transport".

Figure 39. Unintentional Causes of TBI-Related Injuries (2011 – September 2015)



(Source: Nebraska Traumatic Brain Injury Registry)

Figure 40 presents a summary of the primary diagnosis codes for TBI cases. It is notable that 27% of the primary diagnoses for patients in the TBI registry are "not TBI". The TBI for these patients would be indicated in a sub-level diagnosis field.

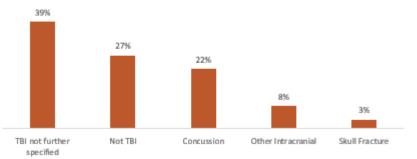


Figure 40. Primary Diagnosis for TBI Cases (2011 – September 2015)

(Source: Nebraska Traumatic Brain Injury Registry)

Administrative Advocacy

Under a contracted capacity building project in FY 2015-2016, the Nebraska Association for Service Providers (NASP) coordinated several brain injury stakeholder meetings, soliciting input for the Nebraska DHHS Medicaid Redesign project. NASP produced stakeholder letters that were submitted to Nebraska DHHS, Division of Medicaid and Long-Term Care in FY 2016-2017, advocating for changes to Nebraska's Medicaid waivers and the long-term care service system that would positively impact individuals with brain injury and their families.

| Date: | | Profe | ssion: | | | | | | |
|--|---|--|--|-----------------------------------|------------------------|------------|--|--|--|
| Did your knowledge in the following areas increase as a result of this training event? | | | | | | | | | |
| 1. | TBI prevention, causes and/or recovery | | | | | □ No | | | |
| 2. | Ways a TBI can b prompt a referral | signs that should | □ Yes | □ No | | | | | |
| | Services and/or pr Ways that I, in my | uals that may have | □ Yes | □ No | | | | | |
| | TBI, meet their needelsewhere for needelsewhere | eeds relative to my pr ded services | actice, and/or refe | r these students | □ Yes | □ No | | | |
| 5. | | y's training, do you a ccessing the services □ Yes | | ore able to assist indivi □ No | duals with TH | 3I and | | | |
| 6. | 6. If you answered "Yes" to question #5, in what ways do you think you will be better able to serve this population? Please check all that apply. I have information to provide to individuals/families about TBI I have information to provide to individuals/families about local resources/services I can more easily recognize symptoms of TBI I can better interact with individuals with TBI in the course of my work I know what to do when I encounter an individual with TBI in my work | | | | | | | | |
| | How satisfied are □ Very satisfied | you with today's trai □ Satisfied | ining? □ Neither satisfied nor dissatisfied | □ Dissatisfied | □ Very dissatisfied | | | | |
| OP | OPTIONAL: | | | | | | | | |
| 8. | . How confident do you feel in using the materials and methods provided at today's training to train someone else? | | | | | | | | |
| | □ Very confident | □ Confident | □ Neutral | □ Not confident | □ Not conf at all | ident | | | |
| | | - | - | ting individuals with T | | * 1 | | | |
| | □ Very confident | ⊔ Confident | □ Neutral | □ Not confident | □ Not conf at all | ident | | | |