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ADDRESSING CHALLENGES RELATED TO COMMUNITY REINTEGRATION FOLLOWING A TRAUMATIC BRAIN INJURY

by

Alexia Rose Gallagher, OTDS Occupational Therapy Doctorate, University of North Dakota, 2022

A Scholarly Project

Submitted to the Graduate Faculty

of the

University of North Dakota

in partial fulfillment of the requirements

for the degree of

Occupational Therapy Doctorate

Casper, Wyoming

May

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APPROVAL

This scholarly project, submitted by Alexia Gallagher in partial fulfillment of the requirement for the Degree of Occupational Therapy Doctorate from the University of North Dakota, has been read by the Faculty Advisor under whom the work has been done and is hereby approved.

My M. J

Faculty Advisor

_____April 13, 2022____ Date

PERMISSION

Title: Addressing Challenges Related to Community Reintegration Following a Brain Injury

Department: Occupational Therapy

Degree: Occupational Therapy Doctorate

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Alexia Gallagher

April 13, 2022

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Abstract

Title: Addressing Challenges Related to Community Reintegration Following a Traumatic Brain Injury

Introduction: The purpose of this scholarly project was to create a guide of resources and tools available in and around Bismarck, North Dakota that individuals after a traumatic brain injury (TBI) can utilize to assist in their successful return to their community. The Rancho Los Amigos Scale was utilized to effectively guide which resources and supports were needed based on the functional level the individual is currently presenting at. The Person Environment Occupational (PEO) Model theoretical framework was utilized to guide the creation and implementation of this community reintegration guide for individuals who have experienced a brain injury. **Methodology:** A literature review and needs assessment were completed to understand the common challenges that individuals face after a TBI when returning to their community in the Bismarck region. The product was developed based on this information utilizing the PEO model. This project was completed over a 14-week span in Bismarck, North Dakota in association with a private mobile outpatient therapy service. The procedures for completing the project included searching several electronic databases, utilizing the CDC guidelines on TBIs, recommendations from a few professional organizations, and finally, utilizing an expert in the field.

Results: The literature review revealed that there is a significant gap in accessibility to resources that exists within the state of North Dakota for individuals who have experienced a TBI. Therefore, *Addressing Challenges Related to Community Reintegration Following a Traumatic*

Brain Injury was created to provide a resource guide for individuals within the Bismarck, North Dakota region.

Conclusion: Overall, it was identified that the state of North Dakota is currently in need of resources and supports for individuals that have experienced a TBI. This community reintegration guide lists resources and tools within the Bismarck, North Dakota region that providers can utilize to help this population successfully reintegrate into their community. By helping these individuals with community reintegration, improvements to their overall quality of life may be attainable.

Chapter I

Introduction

Problem Statement

According to the Centers for Disease Control and Prevention (CDC), a traumatic brain injury (TBI) is caused by a bump, blow, or jolt to the head or a penetrating head injury that disrupts the normal functioning of the brain (CDC, 2021). It was approximated that there were 223,050 TBI-related hospitalizations in 2018 and 60,611 TBI-related deaths in 2019. This equates to more than 610 TBI-related hospitalizations and 166 TBI-related deaths per day in the United States (CDC, 2021). However, these numbers do not include TBIs that were only treated in an emergency department, primary care, urgent care, or those that go untreated. After experiencing an acute TBI requiring hospitalization, individuals often have difficulties with persistent symptoms including cognitive, emotional, and behavioral disturbances, and may face challenges with adapting to fully engage in their meaningful occupations (Gordon, Persaud, Beitscher, Brickfield, & Greenwald, 2021). A community reintegration guide can help successfully engage individuals in their most meaningful occupations including work, education, and volunteering while remaining client-centered. Additionally, the implementation of a community reintegration guide can improve an individual's psychosocial functioning (Gordon et al., 2021). This supports the need for strategic community reintegration to be a key factor for individuals returning to their daily lives after experiencing a TBI. Unfortunately, a literature review of community reintegration after experiencing a TBI in North Dakota indicated a noticeable lack of resources and tools for individuals to utilize to help them successfully return to their community.

Purpose Statement

The purpose of *Addressing Challenges Related to Community Reintegration Following a Traumatic Brain Injury* is to combine many resources and tools within the state that individuals post-TBI can utilize to successfully return to their community. The guide utilizes the Rancho Los Amigos Scale (Lin & Wroten, 2017). to assist in effectively navigating what resources and supports are needed based on what functional level the individual is currently presenting at. According to the most recent North Dakota Brain Injury Needs Assessment, it was identified that the state has limited services and supports for individuals that have experienced a TBI (Askvig, Mathwich, & Peterson, 2016). This guide will address this need by providing a register of services and resources that can be utilized.

Project Objectives

To complete and develop the guide, projective objectives were developed by the author. This helped ensured that all steps needed for the development of this project were followed. Progress related to these objectives were tracked on a weekly basis. While some objectives were completed relatively quickly, other objectives were not addressed until later on during the development and completion of the project.

The first objective was that the author will demonstrate advanced knowledge and skills about traumatic brain injuries to help increase occupational performance throughout the occupational therapy (OT) process. This objective was to increase knowledge and skills in what the OT process looks like specifically for individuals with TBIs. This will be addressed through shadowing and observing OTs when working with these individuals.

The second objective was that the author will increase knowledge of common challenges, barriers, and effective supports for the identified population within Bismarck, ND by completing

informal interviews and observations. This objective is to familiarize and educate the author with the common challenges, barriers, and effective supports for these individuals within their community. The author completed these interviews and observations during OT sessions with the individual and attending different support groups.

The third objective was that the author will update the literature review based on the findings of the site to determine the most effective programs for the population to meet the needs of the facility. This objective is to utilize the research to identify the most effective programs and supports that can be included within the guide.

The fourth objective was that the author will complete the development of the guide based on the needs of the facility and the literature review results. This objective is to develop the product utilizing the research and identified needs to be the most effective for the population. This is a binder that includes all resources, programs, and supports that the site can regularly utilize when working with individuals post-TBI.

The fifth and final objective was that the author will implement the guide to the facility. This objective is to educate the facility on how to utilize the product most effectively. After finishing this product, the goal is that it will be a successful tool that the facility uses.

Theoretical Framework

The Person Environment Occupational [PEO] (Law et al., 1996) Model was utilized for the creation and implementation of this community reintegration guide for individuals who have experienced a TBI. In this model, the three domains of person, environment, and occupation overlap. When there is a good fit between the three domains, the occupational performance is the most optimal. Within the guide, the person domain is broken down utilizing the Rancho Los Amigos Scale, the environment domain identifies the components of what each individual's

community contains, and the occupation domain identifies supports and resources for the most common community occupations such as work, education, and volunteering.

Significance of Project

Overall, it has been identified that the state of North Dakota is currently in need of resources and supports for individuals that have experienced a TBI (Askvig, Mathwich, & Peterson, 2016). A community reintegration guide provides resources and tools that providers can utilize to help this population successfully reintegrate into their community. By helping these individuals, improvements in their overall quality of life have been found by implementing a community reintegration guide for this population (CDC, 2015).

Chapter II

Literature Review

Individuals who have experienced a TBI often have difficulty successfully returning to their community. Individuals can experience difficulties with cognitive, motor, sensory, and behavioral functioning (American Occupational Therapy Association [AOTA], 2015). The most common occupations related to returning to their community are work, education, and volunteering. Without engagement in these meaningful occupations, an individual's overall quality of life is likely to decrease (Williams, Rapport, Millis, & Hanks, 2014).

AOTA (2015) explains that OTs serve a critical role in the community reintegration for individuals that have experienced a TBI. Community reintegration means providing individuals with supports and resources to be able to successfully engage in their meaningful occupations. An OT can identify an individual's performance abilities related to an occupation. This allows an OT to remain client-centered and help these individuals reintegrate into their community in a meaningful way. When working with these individuals, OTs can help them to relearn how to do the activity or identify new ways to be able to engage in the occupation. An OT can go with the individual to their environment and help them regain their confidence in the occupation in a reallife scenario (American Occupational Therapy Association, 2015). Additionally, Kim and Colantonio (2010) identified that a multidisciplinary home-based service including an OT was found to maintain community integration scores over time. Some specific interventions that an OT can utilize to help individuals reintegrate into their community may include direct attention training, Attention Process Training (APT), and dual-task training; executive function training; and memory interventions that involved encoding techniques, compensatory strategy training, and Cognitive Assistive Technology (CAT) (Radomski, Anheluk, Bartzen, & Zola, 2016).

Overall, increasing occupational performance is the goal for individuals who have a TBI, and OTs can help remediate or minimize the impairment to help optimize the task and role performance using evidence-based cognitive interventions.

A community reintegration guide is important for individuals that have experienced a TBI to be able to return to the occupations that are most meaningful to them. It has been identified that specific aspects to include are socialization, engaging the caregiver, and creating a successful multidisciplinary team (Gordon, Persaud, Beitscher, Brickfield, & Greenwald, 2021). The multidisciplinary team needs to include neuropsychologists, speech/language pathologists, OTs, physical therapists, cognitive/functional life skills therapists, substance use therapists, vocational therapists, residential counselors, case managers, consulting physiatrists, and other outside providers (Gordon et al., 2021). Gordon et al. (2021) explains the key components that should be included in this programming are appropriate staff, individualization, well-coordinated communications, emphasis on socialization, and focus on the importance of caregivers and family.

For the current project, the Person Environment Occupational [PEO] Model (Law et al., 1996) will assist in the creation and implementation of a community reintegration guide for individuals who have experienced a TBI. In this model, the three domains of person, environment, and occupation overlap. When there is a good fit between the three domains, the occupational performance is the most optimal. This will be a good theory for the development as it will help support individuals that have experienced a TBI to be able to successfully engage in their valued occupations within their environment.

A community reintegration guide will assist individuals after experiencing a TBI in getting back to their meaningful occupations. Utilizing the PEO model will ensure there is a

good fit between the three domains and allow their occupational performance to increase. This will also allow the guide to remain individualized. Additionally, helping individuals to be able to engage in their meaningful occupations also helps to increase life satisfaction and overall perception of their quality of life (Williams, Rapport, Millis, & Hanks, 2014).

Impacts of a TBI

One of the main occupations that is impacted after an individual experiences a TBI is work (Graham & West, 2014). This is due to the difficulties the individual is experiencing post-TBI. It is important to address the individual factors that make returning to work difficult and utilize those to develop the interventions for the individual. There is a common relationship between job stability and communication deficits; for example, there is more job stability when there are fewer communication deficits. (Meulenbroek & Turkstra, 2016). Meulenbroek and Turkstra (2016) identified that spoken language comprehension, verbal reasoning, social inference, reading, and politeness in spoken conversation discriminated between achieving stable employment and unstable employment. By identifying interventions that specifically address communication deficits, an OT can help individuals be able to engage in their meaningful occupation of work.

Additionally, social participation is another occupation that individuals have difficulties with after experiencing a TBI. Powell, Rich, and Wise, (2016) identified the effectiveness of interventions related to social participation and everyday activities for individuals that have experienced a TBI. There was moderate evidence found identifying that a variety of multidisciplinary and interdisciplinary rehabilitation approaches and community-based rehabilitation programs could be effective in improving occupational performance and participation outcomes after moderate to severe TBI. Related to this, strong evidence was

identified that not one specific approach or setting is more effective than another. Moderate evidence was also found indicating that activity-based interventions focused on client-centered goals and delivered in a relevant environmental context by an OT could improve occupational performance after TBI (Powell, Rich, & Wise, 2016).

Individual independence within meaningful occupations is an important area that needs to be included within a community reintegration guide for individuals that have experienced a TBI (Kent, Wright-St Clair, & Kersten, 2014). Social isolation can be related to the inability to return to their prior independence after the TBI. This means that independence with the valued occupations should be addressed and understanding that the idea of independence may mean many different things for different individuals. This will include remaining client-centered within this guide so that individuals' needs, and perspectives are addressed. Ultimately, social participation can be addressed within the other valued occupations such as work, volunteering, and education.

Outcome Measures

An important aspect of implementing a community reintegration guide is determining the degree to which the individual has reintegrated into their community. Several assessments look at this but one of the most common is the Community Reintegration Questionnaire (CIQ). The CIQ has three domains which include home integration, social integration, and productivity. Most recently the CIQ has been revised to include an electronic social networking component to assess how technology has been incorporated into today's community. This version is known as the CIQ-R and includes an additional three questions specific to the use of technology and social media (Callaway et al., 2016).

Kersey, Terhorst, Wu, and Skidmore (2019) completed a scoping review to identify predictors of community integration for adults following a TBI. This scoping review identifies the importance of identifying these factors ultimately to better facilitate recovery for these individuals. The most important predictors of community integration outcomes identified include mood, disability, social support, and social obstacles. Additionally, it was noted that it is important to identify interventions addressing emotional, social, and physical functioning to increase the community integrations outcomes. However, there were inconsistencies within their findings due to the range of individuals and their level of TBIs. This is important to consider as a community reintegration guide needs to remain individualized.

The overall well-being of an individual after a TBI has also been identified as a significant outcome measure to be assessed (Payne et al., 2020). In a randomized two-arm controlled trial with a waitlist control condition, it was assessed if an individual's well-being after a TBI can be influenced with the facilitation of a volunteer intervention. This study utilized several different outcome measures for assessing the well-being of individuals that have experienced a TBI. Payne et al. (2020) identified that both the Satisfaction With Life Scale (SWLS) and Self-Perceived Success were noted to have significantly greater improvements in the intervention group than in the control group. This means that utilizing the volunteer intervention for individuals that have experienced a TBI helps to increase their overall well-being.

Caregiver Role

Caregivers have a very important role in helping the individual be successful in reintegrating into their community after experiencing a TBI. They have commonly been identified as a key aspect of the community reintegration of an individual with a TBI (Gordon,

Persaud, Beitscher, Brickfield, & Greenwald, 2021). Caregiver capacity is important to consider for the extent the caregiver can possess the knowledge and skills to care for the individual that has experienced the TBI. Additionally, caregiver needs over the long term are important so that caregiver burden and burnout can be prevented. Gordon, Persaud, Beitscher, Brickfield, and Greenwald (2021) identified that incorporating the caregiver in group interventions can help alleviate the chance of caregiver burden or burnout occurring. Specifically, Backhaus, Ibarra, Klyce, Trexler, and Malec (2010) identified that caregivers are an important part of the coping skills group to teach and train both the caregiver and survivor on effective coping skills. The caregivers can learn how to best support their injured loved ones by participating in the group intervention.

Askvig, Mathwich, and Peterson (2016) identified that approximately 47% of caregivers received no training related to brain injuries and caring needs. The most common identified training method received was informal self-study which 31% of caregivers noted. This means that most of the caregivers from this study (78%) received no formal caregiver training. Additionally, it was identified that the majority of the care was provided in the caregivers'/patient's shared home or in the home of the individual that experienced the TBI with no healthcare provider supports.

Barriers to Community Reintegration

When developing a guide that helps individuals successfully reintegrate into their community after experiencing a TBI, it is important to identify the factors. Winkler, Unsworth, and Sloan (2006) identified some of these factors that have an impact include discharge destination, age at the time of injury, personality, coping style, habits, and upbringing. By identifying these factors in individuals, it may be useful to help identify the individuals at risk of

poorer outcomes related to community reintegration. This may include providing younger individuals and those with longer periods of PTA/unconsciousness with more resources and supports so they are better equipped to succeed. Additionally, Evans et al. (2021) looked at what attributes were most pivotal in individuals successfully discharging from skilled nursing facilities (SNF) back into their communities. The two characteristics identified that were most closely related to a successful discharge included sociodemographic and functional status. These elements are important to address prior to discharge to help individuals return to their community after experiencing a TBI. It can be noted that the state of North Dakota specifically exhibits difficulties getting individuals out of SNFs and back to their communities (Askvig, Mathwich, & Peterson, 2016).

Another barrier to individuals successfully reintegrating into their community includes older adults who are retired (Ritchie, Wright-St Clair, Keogh, & Gray, 2014). However, it is still important to address interventions and supports that will help this population engage within their community. Some things within a guide to include for this population may be related more specifically to volunteering and social participation. Additionally, this may look like helping the individual explore new or different occupations for this stage in their life. Regardless of the individual's age, it is important to assist them in being able to engage in meaningful occupations within their life.

Interventions

There have been several studies that identified group interventions as an important aspect of a community reintegration guide. Backhaus, Ibarra, Klyce, Trexler, and Malec (2010) found that implementing a Brain Injury Coping Skills Group for survivors of brain injuries and their caregivers significantly improved their perceived self-efficacy. This group was 12-sessions that

incorporated cognitive behavioral treatment (CBT) by providing psychoeducation, support, and coping skills training. Donnelly, Goldberg, and Fournier (2020) implemented a group-based yoga program to facilitate community integration for individuals that have experienced a TBI by understanding their experiences. This group included a psychoeducational intervention aspect. After the group yoga, semi-structured interviews were completed to help understand their feelings related to community integration. There were seven main themes identified including ease of participation, belonging, sustaining community connection, physical health, selfregulation, self-efficacy, and resilience. Some improvements that were noted from participants included increased strength, balance, flexibility, attention control, a greater sense of belonging, community connection, and the ability to move forward with their lives. Most importantly, it was noted that about half of the participants were able to maintain the relationships that were built during the program and were able to use the strategies taught related to negative emotions and stress (Donnelly, Goldberg, & Fournier, 2020). Overall, this program was identified as a successful tool to help increase community integration for individuals after they have experienced a TBI.

Casey Pfister (2021) is the Community Reintegration Specialist at Craig Hospital in Denver, CO. Craig Hospital specializes in treating individuals after they have experienced a TBI or spinal cord injury. Casey's emphasis is on returning individuals to productive activities in the community including work, college, and volunteering. Some of the interventions for returning to work (RTW) include evaluating work readiness, RTW benefit and planning, employer communication, establishing a re-entry plan, connecting to resources, ongoing job support/coaching, executive functioning, oculomotor control, and divided attention. The interventions she mentioned for return to school include school exploration, determining school

resources, available assistive technologies, collaborating with Disability Services, and school accommodation letters. Interventions for volunteering include addressing individual goals, abilities, barriers, and accommodations. Additionally, she introduced the importance of addressing equipment needs including ramps, automatic door openers, height-adjustable desks, reconfiguring the workplace layout, and voice-activated software systems and devices (Dragon Dictation and Smart Pens). Transportation is another aspect she broaches including funding for returning to driving and non-drivers' public transportation and disability transportation services.

Implementation in North Dakota

As the current project will be implemented in Bismarck, North Dakota, the North Dakota Brain Injury Needs Assessment is an important resource. This will provide information related to the individuals within North Dakota that have experienced a TBI. It is important to note from this that the main finding from this needs assessment was that services and supports are very limited for these individuals. The continuum of care resources are specifically lacking, meaning when an individual leaves the hospital there are limited services and supports. Additionally, it was noted that within communities, families, and individuals there is insufficient education and training (Askvig, Mathwich, & Peterson, 2016). Overall, this resource will help ensure the product is meeting the needs of those that it is intended for.

Additionally, utilizing the Ranchos Los Amigos Scale (RLAS) can be useful to serve as a universal tool for all healthcare professionals when treating individuals with TBIs. Within the product, the RLAS will direct individuals who are assisting in the care of individuals that have experienced a TBI. For example, if an individual is identified as a level 5, they can review the product at RLAS level 5 and identify what supports or barriers this individual may be facing (Lin

& Wroten, 2017). If an individual may improve or decline on the scale, it will be noted what supports the individual may or may not need.

Hudspeth and Peltier (2020) developed a product to serve as a reference guide for an inservice training to address comorbid cognitive diagnoses. This product utilizes the Person-Environment-Occupation (PEO) Model and Allen's Cognitive Disabilities Model (ACDM) as a guide. The in-service presentation is a PowerPoint that includes information on the different levels as well as case studies. The areas that the quick reference guide addresses are feeding, oral hygiene, grooming, dressing, bathing, toileting, transferring, and therapeutic exercises. The professions that this guide addresses include nursing, physical therapy, speech language pathology, and OT (Hudspeth & Peltier, 2020). Overall, the goal of this product is so that all healthcare professionals working with individuals have a guide when working with individuals at different Allen's Cognitive Levels (ACL). This product would be helpful for the development of the community reintegration guide to connect ACLs to different tasks and occupations. Understanding what ACL a person is at is important to help identify the supports and resources that will be the most beneficial within their community.

Summary

In summary, this literature review indicates the value of a community reintegration guide for individuals after a TBI. Since services and supports have been noted to be limited within the state, this guide will begin to help fill this need. Important aspects identified to include within a community reintegration guide are work, volunteer, education, technology, transportation, medical devices, and caregiver supports. By implementing a community reintegration guide within Bismarck, North Dakota, the overall well-being of individuals with a TBI can be improved. This is due to allowing these individuals to participate and engage in meaningful

activities within their community again. Overall, it is important that this program remains individualized to allow the focus to be on the meaningful occupations.

Chapter III

Methodology

Project Design

The goal of developing *Addressing Challenges Related to Community Reintegration Following a Traumatic Brain Injury* was to identify and fulfill a need for this population. Initially, a thorough literature review and needs assessment were completed to understand the common challenges and gaps that individuals face after a TBI when returning to their community in North Dakota. The project was then developed to be specific to the needs in and around Bismarck, North Dakota based on the identified information while utilizing the PEO model. This specific model was found to be most helpful to identify what is categorized within the person, environment, and occupation domains and how the overlap of these influences an individual's occupational performance within their community. This model helped to develop the guide by allowing it to be client-centered and identify the differences in individuals' domains after a TBI.

Timeline of Project Procedure

The timeline of this project was completed over a 14-week span in Bismarck, North Dakota with Megan Dooley at Innovative Therapy Solutions & Consulting. Prior to starting the 14 weeks at the site, the literature review and needs assessment were completed. Upon starting, the literature review and needs assessment were updated based on the findings specific to the site. Starting week 4, the initial guide development began, and resources were identified. An assessment was also developed to measure program effectiveness. Starting week 7, the draft of the guide was reviewed by the site mentor for feedback. In the weeks following, changes were made based on feedback and it was identified how the site would be able to regularly utilize the

guide. From weeks 11-13, the guide was disseminated to the facility for future use; an education session was developed and then presented to the facility.

Procedures

The procedures for completing the project included searching several electronic databases, utilizing the CDC guidelines on TBIs, recommendations from a few professional organizations, and finally, utilizing one expert in the field; specifically, Casey Pfister, a Community Reintegration Specialist at Craig Hospital, shared information about their successful community reintegration program including evaluations, interventions, and helpful resources. This helped in creating a similar product but one that is more specific to the needs and resources within Bismarck, North Dakota. While developing the product, there was a constant collaboration with the site mentor to ensure that this product would meet the needs of the site and state and was something that could regularly be utilized.

Ethical Considerations

The ethical considerations regarding the project were mostly identified as being client confidentiality. Informal interviews were completed in the development of the guide and the information from the interviews was utilized in the product. It was important that no client information was included in the product. Additionally, when completing the informal interviews, it was stated that this product was in the process of being developed and the author was looking to identify additional resources that could be utilized in the guide. This was an important part of the development to gain a "survivor's perspective" while maintaining confidentiality and respect for their privacy.

Inclusion and Exclusion Criteria

While completing the literature review, there were keywords and phrases utilized as well as inclusion and exclusion criteria. The keywords and phrases included: community reintegration program, traumatic brain injury, "reintegration AND traumatic brain injury", "traumatic brain injury AND return AND work", "community integration", "Ranchos Los Amigos", and "Allen's Cognitive Level*" OR "ACL". These keywords and phrases helped to identify a large number of research articles to use in the development of the project. However, to narrow these articles down to the most applicable ones the inclusion and exclusion criteria were included. The inclusion criteria included: work*, education AND school, volunteer*, occupational therapy, intervention*, and adult*. The exclusion criteria included child*.

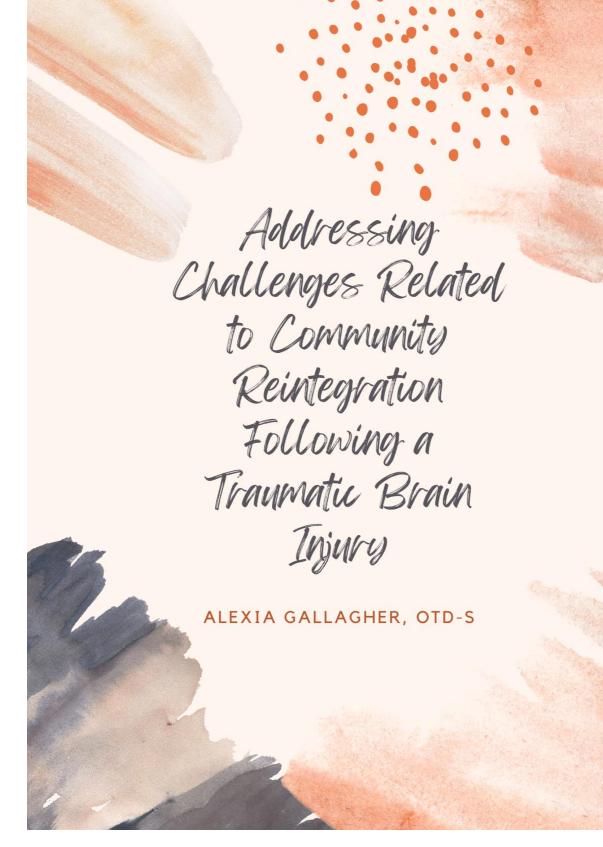
Overall, the literature review helped to initially identify and signify the importance and benefits of the implementation of a community reintegration guide. In addition, completing observations and informal interviews helped to update the needs assessment. This information that was obtained through these procedures helped to begin the development of the guide. Throughout its development, there was a collaboration with the site it was being developed for to ensure it would be meeting the needs. After the product was completed, it was then presented to the site with education on how to effectively use the guide.

Chapter IV

Product

The purpose of the guide, *Addressing Challenges Related to Community Reintegration Following a Traumatic Brain Injury*, is to serve as a register of the services and supports within in Bismarck, North Dakota to assist individuals in reintegrating to their community following a TBI. The intended use is for providers that are a part of the multidisciplinary team of an individual that has experienced a TBI and has identified difficulties in reintegrating to their community. This team will likely include OTs, physical therapists, and speech therapists. The main goal of this guide is to allow individuals the ability to reintegrate into their community to ultimately increase their overall well-being.

There are several sections included within the guide that can be utilized based on the individual's needs and barriers for community reintegration. These sections include: transportation, work and volunteer supports, education supports, caregiver supports, and technology and medical devices. In this process, it is important to consider the individual's current Rancho Los Amigos Level to determine the appropriate supports that may be needed. Additionally, a client's interests and goals must be considered as certain resources and supports may work well for one individual and not as well for another. Therefore, it is important that the guide must be individualized. There are also several handouts listed within the guide that can assist with volunteering and education.



Disclaimer: While this guide was developed and intended for the care of individuals with a traumatic brain injury (TBI), it can be utilized as well for individuals with any type of acquired brain injury (ABI). Examples of ABIs can include stroke, tumor removal, anoxic brain injury, and many others. The deficits that these individuals experience are often very similar, making this guide relevant for these diagnoses.

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Introduction

The main purpose of the guide for *Addressing Challenges Related to Community Reintegration Following a Traumatic Brain Injury* is to assist in the community reintegration of individuals who have experienced a brain injury. It is intended for use by providers that are a part of the multidisciplinary team for an individual that has experienced a brain injury. Providers are likely to include but are not limited to neuropsychologists, speech/language pathologists, occupational therapists, physical therapists, cognitive/functional life skills therapists, substance use therapists, vocational therapists, residential counselors, case managers, consulting physiatrists, and other outside providers. The main goal of community reintegration for individuals after a brain injury is their return to productive activities within the community with an emphasis on work, volunteering, and education. This guide presents supports and resources that can be utilized with individuals after a brain injury to assist in their reintegration into their community in and around Bismarck, North Dakota.

When utilizing this guide, it is important to understand that the process needs to be individualized; while one resource or support may be successful for one individual, it may not be successful for a different individual. Additionally, this product is based on the needs of an individual and at which current Rancho Los Amigos Level they are presenting (Lin & Wroten, 2017). Within the introduction of each section, it is explained at what level the services and supports are appropriate. However, for Rancho Los Amigos Levels it is important to understand that while they may be at a Level VII, there is a difference between the individual functioning at a Level VII independently or a Level VII with additional supports.

This guide was developed following the occupational therapy (OT) theoretical model known as the Person Environment Occupation (PEO) model (Law et al.,1996). Initially, the chart on page 8 was developed to identify the aspects impacting community reintegration for an individual after a brain injury. For the person domain, there were affective, physical, and cognitive aspects identified. For the environment domain, cultural, social, institutional, and physical aspects were identified. Finally, for the occupation domain, work, volunteer, and education aspects were recognized. These aspects formed the different sections of the guide by providing supports and resources addressing these areas. By utilizing these supports and resources for the aspects that are impacting the individual's community reintegration, the overall occupational performance will be improved.

This guide must be regularly updated with new resources and supports as they become available. The state of North Dakota currently has a limited number of resources for individuals after a brain injury. However, this is something that has been identified and the state is currently working to make more resources available to these individuals.

How to Use the Guide

This guide consists of 5 main sections: <u>transportation</u>, <u>work & volunteer</u> <u>supports</u>, <u>education supports</u>, <u>caregiver supports</u>, and <u>technology & medical</u> <u>devices</u>.

- The "Community Reintegration Initial Intake Form" (page 10) is meant to be utilized during an initial evaluation or when initially addressing community reintegration with an individual after a brain injury.
- After completing this form with the individual there will be specific areas of more concern to help guide the intervention plan. This guide is meant to be very individualized based on these areas of concern identified.
- The <u>transportation</u> section includes resources and contact information for public transportation systems within the largest counties of North Dakota. However, some individuals may have the ability to eventually return to driving and that would be an area of focus for intervention planning.
- The work & volunteer supports section includes websites, training programs, sites that are specific to assisting individuals' return to work or volunteering, and resources that can be utilized by both the site and the individual working or volunteering at the site.
- The <u>education supports</u> section includes resources and supports that an individual could utilize to help them be more successful within the classroom setting. It is important to know the individual's education level prior to the injury to set them up to be the most successful for starting or returning to schooling.
- The <u>caregiver supports</u> section includes resources and websites that a caregiver for an individual with a brain injury can utilize. This includes

educational materials, respite information, and other medical help information.

- The <u>technology and medical devices</u> section includes sites and resources where an individual with a brain injury can get technology and medical devices that will ultimately help them to be the most successful within their community.
- Based on the results identified from the initial intake form, a provider from the multidisciplinary team should assist the individual is utilizing and contacting resources within the different sections to get the support needed to help with reintegrating into the community.

| Aspects Impacting Community Reintegration | | | | |
|---|--|--|--|--|
| Person | Affective: Mood changes, difficulty regulating emotions, motivation/initiation, emotions related to leading to new disability, satisfaction with life, self-awareness <u>Physical:</u> Ability to transport self within the community, vision changes, headaches/migraines, mobility difficulties, flaccidity/rigidity, spasticity, <u>Cognitive:</u> Memory, attention span, problem solving difficulties, communication difficulties, substance use effects, pre-injury history, goal setting, self-monitoring, generalization, mental flexibility, planning, lack of awareness of deficits, impulse control | | | |
| Occupation | <u>Work:</u> Returning to previous work may not be feasible due physical and cognitive deficits, difficulty identifying what new jobs to pursue, education level, prior employment status <u>Volunteer:</u> May not have volunteered in the past, supports at the site may not be provided, site may not be familiar with what it is like the provide volunteer opportunity to individuals that have experienced a brain injury <u>Education:</u> Prior to brain injury the education level may be low, educating the client on supports that they can seek to assist, | | | |
| Environment | Cultural: Resistant to help from others as they used to be able to do all things independently, marital status/family satisfactionSocial: Reduced social roles and increased social isolation, support groups, group therapy, need for increased reliance on othersInstitutional: Limiting the number of individuals that are institutionalized (nursing facilities) and assisting them to reintegrate to their community, transitioning between different living facilitiesPhysical: Rural, weather difficulties, limited housing options, difficulty accessing post-acute services | | | |

| Rancho Los Amigos Scale | | | | |
|-------------------------|---|--|--|--|
| Level I | Total Assist & NO Response | | | |
| Level II | Total Assist & Generalized Response | | | |
| Level III | Total Assist & Localized Response | | | |
| Level IV | Confused-Agitated Response & Max. Assist | | | |
| Level V | Confused-Inappropriate Response & Max. Assist | | | |
| Level VI | Confused-Appropriate Response & Mod. Assist | | | |
| Level VII | Automatic-Appropriate Response & Min. Assist | | | |
| Level VIII | Purposeful-Appropriate Response & Stand-By-Assist | | | |

Lin, K., & Wroten, M. (2017). Ranchos los amigos.

The Rancho Los Amigos Scale will be utilized throughout this guide to assist practioners with providing clients with appropriate resources based on the level the client is currently presenting at. This scale goes up to Level X, but most individuals are no longer needing therapy or additional assistance past Level VIII.

If more information is needed on each level refer to this website: <u>http://file.lacounty.gov/SDSInter/dhs/218115_RLOCFOriginalFamilyGuide-English.pdf</u>

Community Reintegration Initial Intake Form

| Name: | DOB: | CCM: | Psych: |
|---------------|------------------|------|--------|
| DOI: | Discharge IP/OP: | OT: | |
| MD/NP: | | | |
| Injury/Level: | | PT: | SLP: |

| Pain: | | | |
|---------------------------------------|----------------|-------------------------------|--|
| Education/Training/School: | Work History: | Benefits/Income/Insurance/SS: | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Home and Community/Discharge Plan: | Patient goals: | Barriers/Concerns: | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | Resources/Education: | |
| | | | |
| | | Plan/To Do: | |
| | | | |
| | | | |

Adapted from "Community Reintegration Initial Intake Form," by C. Pfister, 2022. In the public domain. Reprinted with permission.



Transportation

This section of the guide is specific to transportation within North Dakota's major counties. This guide is specific to the population within Bismarck which is located within Burleigh County. However, due to North Dakota being rural and some medical services only being offered in certain cities it will be useful to have the information for transportation to/within other cities if an individual is traveling within the state. These services are accessible to all individuals. Some of the most common reasons individuals use transit within North Dakota is for medical, shopping, employment, and education/training. By utilizing the transit services, it will help the individual with reintegrating into their community. Contact or visit the services' websites for more information regarding cost and scheduling. These services and supports are considered appropriate for an individual that is independently at least at a **Level VII** on the Rancho Los Amigos Scale. However, an individual at a Level VI is also able to utilize these services with the additional supports needed specific to them.

Burleigh County

- Capital Area Transit (fixed route service) and Bis-Man Transport (door-todoor paratransit service)
 - o https://bismantransit.com/home
 - o (701) 258-6817
- Standing Rock Public Transit
 - Serves communities is Sioux, Morton, and Burleigh Counties.
 Provides connecting services to major bus lines to be able to travel anywhere. For college students attending Sitting Bull College, the cost of transit is covered.
 - o <u>https://sittingbull.edu/sitting-bull-college/community/transport/</u>
 - o **(701) 854-8090**
- West River Transit
 - o https://www.westrivertransit.com/
 - o (701) 224-1876

Cass County

- Fargo Metro Area Transit
 - o https://matbus.com/
 - o (701) 232-7500
- Handi-Wheels Transportation
 - o https://www.handi-wheels.org/
 - o (701) 232-3231
- Valley Senior Services
 - <u>https://www.valleyseniorservices.org/index.php/cass-</u> <u>county/transportation/</u>
 - o **(701)** 356-7433

Grand Forks County

- City of Grand Forks CAT
 - <u>https://www.grandforksgov.com/government/city-</u> <u>departments/cities-area-transit-cat</u>
 - o **(701) 746-2600**

Stark County

- Dickinson Public Transportation
 - o https://publictransit.multiscreensite.com/
 - o (701) 456-1818

Stutsman County

- James River Senior Citizens Center, Inc.
 - o https://jamesriverseniors.com/transit/
 - o (701) 252-7888

Ward County

- City of Minot
 - o https://www.minotnd.org/294/City-Transit
 - o (701) 857-4148
- Souris Basin Transportation Board Inc.
 - o https://www.sourisbasintransit.com/
 - o (701) 839-7433
- Wildrose Public Transportation
 - o https://wildrosend.org/wildrosepublictransportation
 - o (701) 539-2364
 - o (701) 570-5362

Williams County

- Williston Council for the Aging Inc.
 - o https://www.willistonseniors.org/nw-public-transit
 - o (701) 577-6753

<u>Uber/Lyft</u>

- https://www.uber.com/global/en/cities/bismarck/
- <u>https://www.lyft.com/rider/cities/bismarck-nd</u>

Jefferson Lines

- <u>https://www.jeffersonlines.com/</u>
- (858) 800-8898



Work & Volunteer Supports

This section of the guide is specific to both work and volunteer supports and resources that individuals can utilize after a brain injury. These resources include helping the individual develop the skills needed for specific jobs, exploring new jobs or volunteer opportunities, accommodations that can be available to an individual, and many others assists. Within the occupations of work and volunteer, the task demands are often very similar which means the resources overlap too. Additionally, individuals after a brain injury will need to adapt the way they used to complete their tasks at work or volunteering and the resources can help to identify which supports are most beneficial to the individual. These supports are considered appropriate for an individual that is independently at least at a **Level VII** on the Rancho Los Amigos Scale. However, an individual at a Level VI is also able to utilize these services with the additional supports needed specific to them.

Work Supports

CareerOneStop

- Career, training, and job search website for the U.S. Department of Labor with a variety of free online tools, information, and resources.
- https://www.careeronestop.org/

Community Options, Inc.

Assists individuals to live and work in the communities of their choice. This
site offers job building supports to improve social skills, communication,
and confidence. Job coaching provides the person with the supports
necessary to return to work. There are two specific programs to assist
individuals after a brain injury with returning to work. The first is Skill Smart
and the goal of this program is to build and develop one's skills through
volunteer opportunities in their community. The other program is Work

Start which provides the next step, it is a return to work supported employment program.

- Brain Injury Referral Form: <u>https://www.communityoptionsnd.com/wp-</u> <u>content/uploads/2016/06/TBI-Program-Referral-6.2016.pdf</u>
- <u>https://www.communityoptionsnd.com/</u>
- (701) 223-2417

Explore Work

- Free online training to explore what jobs options you have after school.
- <u>https://explore-work.com/</u>

Job Accommodation Network

- Answers to questions about workplace accommodations or the Americans with Disabilities Act.
- <u>https://askjan.org/</u>

<u>Launch my Life – North Dakota</u>

- This site includes helpful websites related to work, videos related to mastering soft skills for work, and educate of services to help with the employment process.
- <u>https://www.launchmylifend.com/work/</u>

O*NET Online

- A tool for career exploration and job analysis for individuals with a disability.
- <u>https://www.onetonline.org/</u>
- Interest Profiler helps to identify career interests and how they relate to the world of work.
 - o https://www.mynextmove.org/explore/ip

Rocky Mountain ADA Center

- Provides information on the Americans with Disabilities Act.
- <u>https://rockymountainada.org/</u>
- 1 (800) 949-4232

Vocational Rehabilitation

- Helps North Dakotans with disabilities find and keep jobs.
- https://www.nd.gov/dhs/dvr/
- (701) 328-8800

Volunteer Supports

HOPE Handbooks – See Appendix A

• These HOPE manuals were developed by individuals at Craig Hospital in Denver, CO through grant funds from the National Institute on Disability, Independent Living, and Rehabilitation Research. There is a handbook to provide to the site related to supervising volunteers with a brain injury and there is another handbook for individuals with a brain injury to help them be successful in their volunteering. Permission to use these documents was granted.

Missouri Slope Areawide United Way

- Connects people and resources to build a better community through volunteering opportunities within Bismarck, ND.
- <u>https://www.msaunitedway.org/</u>
- (701) 255-3601

Volunteer Match Test

- This test helps to match individuals interests with volunteering categories to identify what volunteering work they may enjoy most.
- <u>https://www.yourfreecareertest.com/career-tests/volunteer-match-test/</u>



Education Supports

This section is specific to education supports and resources that an individual can utilize after a brain injury. These education supports can be for individuals that are just entering college, returning to college, or getting some additional training for their place of work or volunteering. When it comes to tasks related to school, individuals after a brain injury may need to adapt the way that they take notes, study, and complete assignments. These resources can help individuals with adapting these school tasks. These supports are considered appropriate for an individual that is independently at least at a **Level VII** on the Rancho Los Amigos Scale. However, an individual at a Level VI is also able to utilize these services with the additional supports needed specific to them. In addition to these listed resources, in Appendix B of this guide there is a "TIPS FOR COLLEGE" handout that can be given to individuals to help navigate college. Permission to use this document was granted.

Adult Student Transition Education Program (A-STEP)

- Transition and postsecondary education program that makes college a reality for young adults.
- <u>https://ndcpd.org/astep/</u>

Bank of North Dakota Student Services

- Find money for college.
- <u>https://bnd.nd.gov/studentloans/</u>

Financial Aid Scholarship How To's

- Application tips for filling out the FASFA and finding other financial aid.
- <u>https://finaid.org/</u>

Free Application for Federal Student Aid (FASFA)

- Where you can fill out the FASFA.
- <u>https://finaid.org/</u>

<u>Launch my Life – North Dakota</u>

- This site provides helpful websites for college prep resources, information of North Dakota Education and Training Programs, what to expect in college, and both the students' and colleges' rights and responsibilities.
- https://www.launchmylifend.com/learn/

North Dakota Career Resource Network

- <u>ndcrn@nd.gov</u>
- (701) 328-9733

North Dakota Colleges & Universities Disability Services Council

- Helps provide full participation for students with disabilities in higher education in North Dakota. This resource has a list of all North Dakota colleges' disability support services contact information.
- <u>https://www.nd.gov/dpi/disability-services-council</u>

<u>RU Ready ND</u>

- An education and career planning website that includes resources related to career planning, high school planning, college planning, and financial aid planning.
- <u>https://secure.ruready.nd.gov/</u>
- 1 (800) 468-6927

Students with Disabilities Preparing for Postsecondary Education

- Helps to understand each individuals' rights and responsibilities from the Office for Civil Rights, U.S. Department of Education.
- <u>https://www2.ed.gov/about/offices/list/ocr/transition.html</u>

Quentin Burdick Job Corps

- A no-tuition education and career technical training program for individuals 16-24 years old.
- <u>https://quentinnburdick.jobcorps.gov/</u>

CAREGIVER SUPPORTS

Caregiver Supports

This section of the guide is specific to the supports that caregivers of an individual with a brain injury can utilize. It is important for the caregivers to be educated about brain injuries to be able to provide the best care, support, and decisionmaking for the individual they are caring for. However, it is also important for the caregiver to have supports that allow them to have to option to take a break from being a caregiver and be able to appropriately cope with the stress that can come with being a caregiver. Additionally, caregivers play a very important role in the success of community reintegration after a brain injury. These supports will help both the caregiver and the individual with the brain injury to be the most successful they can be.

AARP: Caregiver Resource Center

- Helps with navigating the role as a family caregiver. AARP has a large library of resources to support family caregivers.
- <u>https://www.aarp.org/caregiving/?intcmp=GLBNAV-PL-CAR</u>

BrainLine

- Provides resources and information for caregivers regarding caring for an individual with a brain injury, legal and financial guidance, workplace rights for caregivers, support group information, and advice about caregiver burnout.
- <u>https://www.brainline.org/caregivers</u>

Dakota Center for Independent Living Support Group

- This support group is intended for survivors and their family members to provide support and share information in a compassionate and understanding environment.
- <u>http://dakotacil.org</u>
- (701) 222-3636
- Fourth Thursday of the Month from 4 p.m. to 5 p.m.

Family Caregiver Support Program

- This federal program is operated by the North Dakota State Aging Services division. There are Support Family Caregivers that provide 24-hour care for their loved one. Support includes paid respite, reimbursement for incontinent supplies or assistive devices, training from OT/PT, paid counseling for stress related to caregiving and assistance to access other services to help with caregiver role.
- <u>https://www.nd.gov/dhs/services/adultsaging/caregiver.html</u>
- 1 (855) 462-5465

Family Voices of North Dakota

- This service helps to provide families tools to make informed decisions, advocates for improved public and private policies, builds partnerships among professionals and families, and serves as a trusted resource on health care.
- http://fvnd.org/
- (701) 493-2634

HIT, Inc. – Day Services

- Day Services include a Senior Program, Sunset Vocational, Creative Learning, Rec/Leisure, 18th Street Vocational – Small Environment, and Employment Services – Individual Employment. These services are designed to help individuals connect with their community through employment, work opportunities, volunteer activities, activities of daily living and recreational and leisure activities. This allows the caregiver time separate from the individual to complete their own tasks.
- <u>https://www.hitinc.org/services/DayServices/</u>
- (701) 663-0379

North Dakota Brain Injury Network

- Online Brain Injury Training
 - This online training consists of five courses to help professionals, survivors, and family members learn more about brain injuries. These courses include Introduction to Brain Injury, Cognitive & Behavioral Consequences of TBI, Primary Care & TBI, Pediatric Care & TBI, Substance Use & TBI.
 - o <u>https://www.ndbin.org/training/brain-injury</u>
 - o **1 (855) 866-1884**
- Powerful Tools for Caregivers
 - This is a six-week class series helps caregivers take better care of themselves while caring for a friend or relative. This class helps give caregivers the tools to help reduce stress, improve self-confidence, manage time, set goals, and solve problems, better communicate feelings, make tough decisions, and locate helpful resources.
 - <u>https://www.ndbin.org/assets/3074-20515/powerful-tools-for-</u> <u>caregivers.pdf</u>

North Dakota Aging and Disability Resource Link

- Provides supports and links for caregivers within North Dakota. This site also helps caregivers to search through a list of providers within the state to help provide home health.
- <u>https://carechoice.nd.assistguide.net/adult-caregivers</u>
- 1 (855) 462-5465



Technology & Medical Devices

There are many different categories of assistive technology and medical devices which include: Augmentative and Alternative Communication, Call System Resources, Computer Access Resources, Electronic Aids for Daily Living (EADL), Gaming Resources, Mounts, Holders and Stands, Phone Access Resources, School and Work Resources, and Switches. It is important to collaborate with the affected individual to determine their needs, discuss available options, and then assist with providing the necessary training. Additionally, sometimes the first option may not work for the individual but there are often others that they can try out to find the best fit. The assistive technology device needs to have a good fit between the person, occupation, and environment to increase overall occupational performance. These resources are considered appropriate for an individual that is at least at a **Level V** on the Rancho Los Amigos Scale. An individual at a Level V may not know the date and have difficulty starting and completing everyday activities. These are a couple of things that assistive technology and medical devices can assist the individual with.

<u>Amazon</u>

 <u>https://www.amazon.com/Medical-Supplies-Equipment-Health-</u> <u>Care/b?ie=UTF8&node=3775161</u>

Craig Hospital – Rugg Assistive Technology Lab Resources

- This resource breaks down many areas of assistive technology and within each category there are specific devices that can be utilized.
- <u>https://craighospital.org/services/assistive-technology/assistive-tech-lab-resources</u>

<u>CVS</u>

https://www.cvs.com/shop/home-health-care

<u>GoUniversal</u>

- Provider of Universal Design, Environmental Modifications, Mobility Equipment and Technology to enhance independence and allowing the client to live in their home across the lifespan.
- <u>https://www.gouniversal.org/</u>
- (701) 222-0783
- info@gouniversal.org

Great Plains Rehabilitation Services

- Provides home medical product services to the public, health care professionals, and medical facilities through CHI St. Alexius Health. The equipment and supplies available help individuals to live as active and independent lives as possible. The services include home medical equipment, orthotics and prosthetics, respiratory care, seating and mobility services, home and vehicle accessibility, and women's specialty products.
- <u>https://www.chistalexiushealth.org/bismarck/facilities/great-plains-</u> rehabilitation-services
- (701) 530-4000
- gprs@primecare.org

North Dakota Assistive

- Non-profit organization to bring assistive technology devices and services to clients that need assistance.
- <u>https://ndassistive.org/</u>
- Bismarck (701) 258-4728
- Fargo (701) 365-4728

Sanford Health HealthCare Accessories

• https://www.sanfordhealthequip.com/

References

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Appendix A

HOPE

Helping Others Through Purpose & Engagement

A Handbook for Volunteers Living with BI

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|--|----|
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Written by Lenore Hawley, LCSW, CBIST and Lisa Payne, Ph.D



HOPE

Notes



Your Role as a Volunteer

WELL-BEING - When a person has a sense of purpose, copes with stress, works productively, and makes a contribution to the community (World Health Organization).

Meaningful productive activity is key to developing a feeling of satisfaction and contribution to society. Volunteer work has been shown to have a positive effect on a person's sense of well-being.

Helping others has been associated with improved health, happiness, self-esteem, reduced stress and decreased depression. These are areas that people often have difficulty with after BI.

"I get back more than I give" is a common response from those who volunteer. As one individual with BI has said, "Volunteering has given me a sense of value and purpose again."

So, what are the benefits of volunteering for you?

They could include:

- Connecting to others
- Improving your health and sense of well-being
- Evaluating your future work options
- Finding enjoyment
- Being an agent of change in your community



Notes

VOLUNTEERING is defined as an altruistic activity, which means being helpful to other people without expecting to be paid for it. Volunteering can help you to develop new skills, meet new people and have fun. It can also help you feel good about yourself.

Volunteering may be a one-time experience. For example, you may help serve meals at a soup kitchen over the holidays. Or it may be an on-going experience, such as answering the phones one day a week for a local charity.



Successful Volunteering After Bl

Many life experiences contribute to your ability to be a successful volunteer. For example, you may have experience as an employee, parent, military veteran or community leader. Through these roles you've developed work habits, knowledge, experience, and skills that can be valuable to a number of agencies or organizations. However, you have also experienced a brain injury.



Due to the injury, you might not be able to work full-time or to do the type of work you used to do.

THINK ABOUT YOUR PREVIOUS WORK EXPERIENCES.

What positive work habits and skills did you gain from those experiences?

- 1.
- 2.

4

- 3.
- 4.
- 5

WHAT ARE SOME OF YOUR UNIQUE CHALLENGES?

- · Staying focused especially when there are distractions
- Remembering particularly new detailed information
- Reading social cues or signals from other people
- · Doing and saying things "before thinking"
- Controlling emotions
- Cognitive fatigue feeling "brain tired"
- Expressing yourself finding the words and getting them out clearly
- Understanding other people needing instructions to be said slowly or to be repeated several times
- Figuring out transportation
- Variability in skill level you may be very skilled in one area, but have difficulty in other areas

These are some of the challenges you may face. However, there are strategies you can use to make volunteering successful. A successful volunteer experience involves a team effort between you and the agency where you volunteer.

You can help by letting the agency know your unique set of skills and challenges, and letting them know the strategies that work best for you.

Notes

Strategies for Successful Volunteering After BI

Here are some general strategies that may be helpful to you in your volunteer placement.

1. BE ORGANIZED AND PREPARED

- Being organized and prepared for the job is one of the most important skills you can have.
 - Ask yourself this question: "What would help me be more organized?"

Here are some possible answers, based on your unique set of skills and challenges:

- Carry a small notebook where I can write things down, just for work
- · Write down my work schedule and tasks in my phone
- Have a daily checklist, including:
 - Transportation details
 - What I need to take to work
 - What I am going to wear
 - Questions I have for my supervisor
- Keep all of my work materials in one place
- Ask my supervisor for a drawer or workspace where I can keep my things
- Ask my supervisor to write down my tasks and instructions the same way every day

2. COMPENSATE FOR MEMORY PROBLEMS

You probably have some strategies that you already use to help you compensate for any memory problems. It's important to use these in your volunteer work as well. Let your supervisor know what strategies work for you. Let him/her know what you need to be successful.



Which strategies will help you be better prepared and more organized?

3. PRACTICE GOOD SOCIAL SKILLS

6

Research tells us that the biggest barrier to successful employment after BI is difficulty with social skills. Interacting in a confident and comfortable manner can help you communicate with others and build relationships. Poor social skills (i.e., talking on and on, not getting to the point, poor eye contact, saying something "inappropriate") can lead to misunderstandings, and make it uncomfortable for people to interact with you. Here is a list of some of the social skills to help you in your volunteer work (Hawley and Newman, 2010, 2012).

- Use comfortable eye contact
- Ask questions
- Stay on topic
- Respect social boundaries
- Take turns talking and listening
- Be friendly and relaxed
- Get to the point
- Smile

You can practice good social skills with your family, friends or a treatment provider.

Strategy:

 Show this list of social skills to your family/friend/treatment provider and ask for feedback – that is, ask them to tell you what you do well and what you could work on.

Ask them to let you know when you are having problems with your social skills. For example, ask them to remind you to take turns during a conversation, rather than talking on and on.

Notes

Which social skills do you do well at? Which need work?

4. FEEL COMFORTABLE IN YOUR WORK ENVIRONMENT

Sometimes the environment around you can be overstimulating. The lights may be too bright, there may be too many noises in the room, or several people may be talking at the same time. When this happens you may find it hard to concentrate and may get easily frustrated.

Strategy:

- 1. Be aware of your environment.
 - Is something distracting you or making you irritable?
 - Is it something that can be changed?
- It's important to let your supervisor know that this can be a problem for you. Be proactive! Let the supervisor know before it becomes a problem.

5. ADVOCATE FOR YOURSELF

ADVOCATE: SELF-ADVOCACY INVOLVES HAVING THE BELIEFS, KNOWLEDGE AND SKILLS TO SPEAK UP AND ADDRESS YOUR NEEDS (HAWLEY, 2008)

You may find that you need to advocate for yourself in the volunteer workplace. There may be times when you need to let your needs be known, or to let someone know that there is a problem. Here are a few strategies that may help you with this:

Be assertive in explaining what you need.

ASSERTIVE: BEING ASSERTIVE MEANS LETTING YOUR NEEDS BE KNOWN WITHOUT STEPPING ON THE RIGHT OF OTHERS, AND ATTACKING THE PROBLEM RATHER THAN THE PERSON

- Start with the word "I" when describing your needs ("I need some help", or "I am getting frustrated because...").
- Take notes if you need to so that you can remember what you have said to your supervisor.
- Follow-up with your supervisor to let him/her know when the problem is resolved. ("That problem has been taken care of – thank you for helping with that!"



Notes

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Notes

WHICH STRATEGIES WILL YOU USE TO CONTROL EMOTIONS?

6. CONTROL YOUR EMOTIONS WHILE VOLUNTEERING

As you know, sometimes after a brain injury it can be harder to control your emotions. You may find that you become more easily anxious, frustrated, tearful or agitated. Sometimes in a work environment, these emotions can get in the way of what you are trying to accomplish. You may have some strategies that you already use to help you control your emotions. Using some of the strategies we have already talked about can also help you be successful.

For example, when the environment is calm and there are not a lot of distractions, you may feel less irritable.

Here are a few other strategies you may want to use as well:

Strategy:

 Recognize your "triggers" – what are the things that set you off or cause you to feel anxious, stressed or irritable? Become aware of these triggers so you can be prepared to respond.

Use Calming Techniques – develop a set of skills that help you calm down.

For example:

- Breathing focus on your breath and relax
- Self-talk say something nice and calm to yourself such as "let it go" or "relax"
- Time-out give yourself a time-out, like a team would do in a football game. Let the other person know that you need a moment, leave the room, relax, think about how to resolve your issue, and return when you are feeling better.



7. PACE YOURSELF

Sometimes after a brain injury people have difficulty trying to do too much too quickly. A person may get overwhelmed or fatigued. As you return to a work schedule, start slowly. See how it goes, and gradually add more time and responsibilities. Let your supervisor know that pacing yourself is important and will allow you to be more successful in the long run.

Problem Solving in Your Volunteer Agency

You may run into an occasional problem in your volunteer placement. Sometimes your supervisor may tell you how to resolve the problem. Other times you may have to solve the problem yourself. There are some simple steps to keep in mind when solving a problem:

Understand the Problem

- What do you want to have happen?
- How do you want the situation to end up?
- What is getting in your way?
- What information is missing that might help you decide how to solve the problem?

Devise a Plan

- Think back to other problems you have solved – could you follow the same plan?
- Are there several solutions to consider?
- Is there one solution that seems like it would be successful?

Evaluate the Plan

- Once you have decided on a plan, are there any reasons this plan might not work?
- What could go wrong?
- Are there risks?

Try it out

- Give your solution a try and see how it works.
- Ask the people around you for feedback ("How is that working?" or "Does this seem like a good solution to you?")
- If you don't like the results, go back and try a different solution.

Notes

REMEMBER THESE PROBLEM SOLVING STEPS!



1. Understand the problem

- 2. Devise the plan
- 3. Evaluate the plan
- 4. Try it out

Notes

YOUR RIGHTS AS A VOLUNTEER

As a volunteer, you have certain rights and responsibilities. It's important for both you and your supervisor to know these rights and responsibilities.

You Have the Right:

- To receive the orientation, training, and supervision needed to do your job effectively
- To be given meaningful work
- To share your concerns, feedback, and suggestions in an appropriate manner
- To be treated with respect and to feel valued and appreciated
- To receive feedback on your work and suggestions for improvement
- To be given as much notice as possible about changes that affect your assignment
- To expect that your time will be used effectively
- To ask questions

You Have the Responsibility:

- To fulfill your commitments
- To foster good communication
- To act in a professional and respectful manner
- To represent the organization positively in the community
- To follow organizational policies and procedures
- To maintain appropriate confidentiality
- To make others aware of changes in your schedule and/or ability to complete your work
- To follow all safety instructions and any other specific guidelines outlined for you
- To be honest about your skills, knowledge, motivation, and limitations



SUMMARY

We hope that this handbook will be a resource to you as you follow your own path toward successful volunteering. The benefits of volunteering await you. Volunteering requires effort, time and persistence. However, it can offer you social interaction, an increased sense of well-being, reduced stress, and a sense of purpose in your life. We encourage you to keep this handbook with you when you are volunteering to provide you with information, support and a method of organization so that you can be a successful volunteer.

REFERENCES

Hawley, L. (1990, 2008). Self Advocacy after Brain Injury, in Self Advocacy for Independent Life: An Advocacy Workbook for People with Brain Injuries and their Families, L. Hawley, (Ed.), Brain Injury Association of Colorado, Denver, CO.

Hawley, L, and Newman, J. (2006, 2008, 2012). Group Interactive Structured Treatment – Gist: for Social Competence. Denver, CO.



MY VOLUNTEER PLAN

Name of Agency: _____

Agency Address: _____

Name of Supervisor:

Agency Phone Number: _____

Other Important People Involved with my Volunteer Plan:

My Role and Duties: _____

Schedule:

Notes



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HOPE

Helping Others Through Purpose & Engagement

A Handbook for Supervising Volunteers with Brain Injury (BI)

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Written by Lenore Hawley, LCSW, CBIST and Lisa Payne, Ph.D



Each year, **3.5 million people sustain an acquired brain injury** (ABI), according to the Brain Injury Association of America.

More than 12 million Americans live with the impact of ABI.

You may know someone – a family member, co-worker or neighbor – who has experienced a brain injury (BI). Or you may have seen a news article or television show about BI. Because of this, you may already have some idea of what it means to have a BI.

This handbook offers an introduction and overview to the common characteristics of life after BI, and offers general strategies and suggestions for successfully engaging individuals with BI as volunteers.

However, it is important to remember that each individual with BI is unique:

- Each had a different personality and life experiences prior to the injury
- Each had a unique brain injury, each had a different course of rehabilitation
- Each individual has his own set of social supports.

We hope that the information in this handbook will help you to successfully work with volunteers who have BI, while remembering that each person is a unique individual volunteer.



Why Consider a Volunteer with BI?

Most individuals with BI developed a work history and set of skills prior to the injury. Many completed schooling, began a career, and held a job before the injury occurred. They may have advanced degrees, military experience, and a vast array of life experiences. An individual with BI may have worked as the CEO of a company, a physician, or a manager. People with BI bring a wealth of knowledge and experience to volunteering, even though they may no longer be able to fulfill the cognitive or physical demands of a full time job.

UNDERSTANDING BRAIN INJURY (BI)

A brain injury is an injury that affects the way the brain works and can be caused by an external force or internal factor³. This can be due to:

- a blow to the head (i.e., boxing injury);
- something penetrating the skull (i.e., gunshot wound);
- acceleration/deceleration (i.e., auto accident);
- the force from a blast or explosion; or
- internal factors like lack of oxygen, disease or stroke.

BI has been called the "signature injury" of the recent conflicts in the Middle East due to the high number of brain injuries caused by blast explosions and subsequent injuries.

Brain injuries can be classified as mild, moderate or severe and can affect every aspect of an individual's life including physical, cognitive, emotional, social and vocational functioning. Although symptoms often improve over time, the Brain Injury Association of America reports that 12 million Americans live with some long-term BI disabilities. BI results in an estimated \$76.5 billion in direct/indirect costs per year, including the cost of lost productivity³. Anyone is at risk for brain injury. However, most individuals who experience BI are children ages 0 to 4, adolescents ages 15 to 19, and adults age 65 and older¹.

TYPES OF BI

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MILD TRAUMATIC BRAIN INJURY (TBI):

The majority of TBIs are classified as mild. TBI is often treated in the emergency room and initial symptoms may include:

- dizziness
- vertigo
- headache
- disorientation
- irritability
- sensitivity to light and
- fatigue

Individuals with mild TBI have a loss of consciousness of less than 30 minutes. For many people, symptoms resolve over time. However, at least 15% of these individuals may have persistent symptoms related to the TBI.

MODERATE TO SEVERE TBI:

Individuals with moderate to severe TBI have a loss of consciousness of more than 30 minutes, and may be unconscious for several weeks or months. These individuals usually are treated in a rehabilitation hospital and receive extensive therapy to help them regain functioning in physical, sensory, cognitive, speech, and emotional skills. They may have difficulty returning to their home, work and school environments.

Symptoms improve quickly at first, but later improvement may be slow and may last a lifetime.

ACQUIRED BRAIN INJURY

Individuals with a non-traumatic or acquired brain injury have experienced damage to their brain due to internal factors, such as a stroke, infection or lack of oxygen.

COMMON CHALLENGES FOLLOWING MODERATE/SEVERE BI

An individual with BI may face a variety of challenges. Some may be related to how the person moves and controls his body. The individual may have difficulty planning movements, using one side of the body, or may move very slowly. Some individuals with BI have difficulty speaking. The person may speak slowly or may be difficult to understand. In addition, the individual may have difficulty with communication, not being able to find the right words, or going "on and on" and not getting to the point. Individuals may also experience changes in sensory areas such as hearing, smell, vision, and touch. These problems may include a lowered sense of sensation, or a heightened sense of sensation, so that loud noises, bright lights, or a touch on the arm may be over-stimulating. Sometimes a person with BI may not have disabilities that can be easily seen, but may have other challenges that are not immediately obvious to others. For example, the person may experience difficulty with cognitive skills. Many people with moderate to severe BI find it challenging to stay attentive to a task, and may be easily distracted.

The person may also find it difficult to learn and remember new information, or to recall information from day to day. In addition, an individual with cognitive deficits may have difficulty solving problems or making decisions. The person may also struggle to understand what someone else is saying. Many individuals with BI fatigue easily. This fatigue can be both physical and cognitive: the person may not be physically tired but rather may feel cognitively "spent" and need a break from cognitive activities and stimulation.

Some of the challenges facing individuals with BI include social, emotional and psychological functioning. Some people after BI find it more difficult to pick up on social cues or social boundaries with other people⁴. They may continue to talk about a subject even though the other person is trying to signal that he is ready to move on. Individuals with BI may find that they give too much information in conversations or ask questions that are too personal or are not in line with the situation. Other individuals with BI may find that they have lost some of their social confidence and may isolate themselves from others. An individual may be more easily frustrated after a BI and may express emotions more easily, including anger, frustration, sadness or excitement.

COMMON SOCIAL, EMOTIONAL, AND PSYCHOLOGICAL CHALLENGES

- Misreading social cues and boundaries
- Talking "on and on" about a subject or not initiating conversation
- Giving too much information
- Loss of confidence in social situations
- Expressing emotions more intensely and quickly

HOPE

LONG-TERM CHALLENGES WHICH MAY BE PROBLEMATIC IN A WORK/VOLUNTEER SETTING

Several of the challenges that individuals with BI face may be particularly problematic in a work/volunteer environment. These include challenges with:

- STAYING FOCUSED especially when
 EXPRESSING ONESELF finding the there are distractions
- REMEMBERING particularly new detailed information
- READING SOCIAL CUES

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- DISINHIBITION doing and saying things "before thinking"
- CONTROLLING EMOTIONS
- ENERGY/ENDURANCE

- words and getting them out clearly
- UNDERSTANDING OTHER PEOPLE needing instructions to be slow or repetitious
- TRANSPORTATION
- VARIABILITY IN SKILL LEVEL may be very skilled in one area, but have great difficulty in other areas

A Special Note about Military Veterans with TBI

TBI has been called the signature injury of the recent conflicts in the Middle East. Many of these injuries are caused by blast concussion or multiple blast injuries. These soldiers and veterans are frequently young men with limited experience in the civilian workforce. Such blast related injuries often result in a combination of mild TBI, chronic pain, and post-traumatic stress disorder (PTSD).

Many of these individuals face a specific cluster of symptoms, including:

- Chronic pain
- Irritability
- Memory problems
- Anxiety and depression
- Feelings of social isolation
- Emotional numbress

SETTING THE STAGE FOR SUCCESSFUL ENGAGEMENT OF VOLUNTEERS WITH BI

DO I ASK ABOUT THE INJURY?

It's important to get a good understanding of the volunteer's skills and abilities, as well as an limitations. Each person is unique - one volunteer with BI is very different from the next volunteer with BI. You cannot assume that the challenges, strategies and supports needed will be the same.

Therefore, it is important to address the topic of the BI. You may do this by saying something like, "I know you had an injury. What would you like to tell me about it that would help this be a successful volunteer experience? For example, what are your skills and strengths and are there any challenges you think I should be aware of?" Some people may be hesitant to tell you very much about the injury and its consequences. Other people may want to tell you too much.

Take a moment with the volunteer to discuss his unique skill set so that you can optimize the positive and strategize the challenges. Ask the person how he wants to handle questions from others (co-workers, clients, etc.) about the injury. If the person seems to want to give too much information about the injury, or continue and go "on and on" discussing it, you may need to set some boundaries as to what is okay to discuss in the workplace.

Make these boundaries clear as soon as possible.

HOW SHOULD I INTERACT WITH SOMEONE WITH A BI?

Even though an individual with a BI may at times have difficulty expressing himself it's important to talk with the individual just as you would talk with anyone else of that age. What a person understands may be very different from what the person can express. The individual may need a little more time to find the right words, or may need you to repeat what you have said more than once. Showing patience may take an extra moment, but will be rewarded in the end with better communication.

Here are several examples of common communication problems related to BI which may require consideration:

 Going on and on – Sometimes after a brain injury, a person may become very tangential. That is, the person may go on and on, when a simple answer might be enough. This may occur for a variety of reasons: the person may be distracted by a thought during conversation and switch topics; the person may forget what he was talking about and start discussing something else; or the person may not pick up non-verbal feedback as you try to let him know that the conversation needs to move on.

👆 STRATEGY

You may want to establish a set "cue" or signal that you will give the person to get back on track, (i.e., holding up your hand, making a "timeout" signal with your hands, etc.) It is helpful to let all of the staff working with the person know to use the same cue.

SETTING THE STAGE FOR SUCCESSFUL ENGAGEMENT OF VOLUNTEERS WITH BI

UNABLE TO EXPRESS HIM/HERSELF -

Sometimes a person has difficulty finding the right words to get a message across. Or, a
person may have difficulty forming the words in a way that is easy for others to understand.

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Be prepared for the conversation to take a little longer. You may ask the person if he would like you to help by filling in the words for them. Asking shows respect and can help eliminate frustration.

CROSSING SOCIAL BOUNDARIES -

Sometimes a person may say or do things that are too personal or uncomfortable. He may
ask personal questions, disclose personal information, stand too close, or touch someone
in a way that is too familiar. He may not pick up on social boundaries.

If you notice that this is a problem for a volunteer, talk to him privately about it right away. Let the volunteer know that you want their experience to be successful and that this behavior will get in the way. Point out kindly what the boundaries are, and let them know that you will give them a subtle cue when a boundary is crossed. Praise the person for adhering to social boundaries.

BECOMING EMOTIONAL -

 A volunteer with BI may become frustrated or anxious when faced with a new or difficult situation. This may also occur when the person is tired or overwhelmed.

STRATEGY

One important strategy for helping an individual with BI stay in control of his emotions is to be aware of the "signs" that show he is about to become upset, and to intervene before there is a problem. These "signs" of impending emotions may include looking tense or tearful, stopping work tasks or "shutting down", or becoming "hyperactive" – moving or talking quickly. It is also important to follow the general strategies listed on the following pages.

WHAT ARE SOME GENERAL STRATEGIES I CAN USE TO HELP THE VOLUNTEER BE SUCCESSFUL⁵?

😽 STRATEGY

PROVIDE CONSISTENCY, REPETITION AND STRUCTURE -

The more you can keep the job environment and duties consistent, repetitious and structured, the more successful the volunteer will be. There are several strategies for doing this:

 As much as possible, have the volunteer work in the same setting and with the same co-workers.

2. Keep tools and materials in the same location.

Write down a list of job duties and instructions for the volunteer, and consider posting these (on a whiteboard, etc.)

Give the volunteer a consistent message regarding duties and expectations, so that he is getting the same message from everyone and does not get confused.

Break tasks into smaller steps if they are difficult for the person to understand.

6. Allow the volunteer to take regular breaks, to "recharge"

K STRATEGY

PERSONAL ORGANIZATION SYSTEM -

Find out what kind of system the volunteer uses for keeping track of his schedule and responsibilities. Most people after a BI learn to use some type of personal organizer. It may be a phone, a day-planner, etc. Encourage the volunteer to add their volunteer schedule and responsibilities to that system. Realize that this system serves as an extension of the volunteer's brain and allows him to recall and organize information more successfully. If the person does not have such a system, we have provided a sample one in the HOPE Handbook (see Resources below). There are several tools that may be useful to help with organization – for example, clipboards, whiteboard, name-tags. Whatever is used needs to work for that particular individual.

STRATEGY

We all learn through feedback and reinforcement, allowing us to know when we have done something well. After a BI, a person may not pick up on subtle feedback and may need to get more direct feedback and reinforcement. Giving direct and clear feedback can help the individual understand what is needed.

Individuals with BI may have lost self -confidence and self-esteem after the injury. The person may be hyper-aware of every tiny mistake or error, even if it is not their fault or not noticed by others. The person may not always realize when he has done something well. Positive feedback can help the person regain confidence in himself as a worker. Let the person know what you DO want him to do, rather than what you DON'T want done. (i.e., "Could you please put those in the storage room", rather than "Don't forget to put those away.")

STRATEGY

REDUCE STIMULATION -

The volunteer may be easily distracted by noises, bright lights, or activities in the environment. The person may have difficulty "filtering out" these distractions and may be most productive in a quieter environment. It's best to ask the volunteer about such distractions and, if they are problematic, to figure out a solution together.

FPROVIDE BREAKS -

As mentioned above, many volunteers with BI will be most successful if they are allowed to take scheduled breaks. When fatigued the volunteer with BI may have difficulty focusing, remembering, and controlling emotions. Be aware that the person may not realize he needs a break until he is completely fatigued. It is best to have the breaks scheduled, and encourage the volunteer to take them before he is too fatigued.

SUMMARY OF STRATEGIES FOR A SUCCESSFUL ENVIRONMENT

PROVIDE BREAKS

cognitive fatigue

MUTUAL RESPECT

May need breaks in quiet area for

Keep in mind the individual's age,

background and experience

CONSISTENCY, REPETITION AND STRUCTURE

 Consistent routines, written instructions, to-do lists, break tasks into small steps as needed

FEEDBACK AND REINFORCEMENT

 Subtle feedback may be missed, be direct and straight-forward, point out successes

REDUCED STIMULATION

 Excess noise, bright lights, etc. – as needed

HELPFUL RESOURCES

If you would like more information regarding BI, here are several resources:

- The Brain Injury Association of America: biausa.org
- · The Center for Disease Control and Prevention: cdc.gov/traumaticbraininjury
- Craig Hospital: craighospital.org
- The Defense and Veterans Brain Injury Center: dvbic.org

REFERENCES

 Faul M, Xu L, Wald MM, Coronado VG. Traumatic brain injury in the United States: emergency department visits, hospitalizations, and deaths. Atlanta (GA): Centers for Disease Control and Prevention, National Center for Injury Prevention and Control;2010.

 Centers for Disease Control and Prevention (CDC), National Center for Injury Prevention and Control. Report to Congress on mild traumatic brain injury in the United States: steps to prevent a serious public health problem. Atlanta (GA): Centers for Disease Control and Prevention; 2003. Coronado, McGuire, Faul, Sugerman, Pearson. The Epidemiology and Prevention of TBI (in press) 2012.

 Hawley, L, and Newman, J. (2006, 2008, 2012). Group Interactive Structured Treatment – Gist: for Social Competence. Denver, CO.

 Hawley, L. (1984) The Family Guide to the Rehabilitation of the Severely Head Injured Patient. Healthcare Rehabilitation, Austin, TX.

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MY VOLUNTEER PLAN

Name of Agency:

Agency Address: _____

Name of Supervisor:

Agency Phone Number: ______

Other Important People Involved with my Volunteer Plan:

My Role and Duties: _____

Schedule:

Notes

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Appendix B

TIPS FOR COLLEGE*

Admission

• Visit the school, apply early.

Registration

- Plan ahead read the schedule of classes, obtain class descriptions of classes that interest you.
- <u>Get advising from a school counselor about courses and program</u> <u>BEFORE registration.</u>
- Be sure you have prerequisites for the courses you want to register for.
- Sign up for free assessment testing if your injury has been in the last year or it has been more than two years since you've had a class in Math or English.
- Plan your schedule carefully to give yourself study time and breaks between classes (but not huge gaps).
- If this is your first semester back after your injury, don't sign up for a full load. Take 1 or 2 classes only. Take classes you feel will be fairly easy for you, or repeats.
- Be aware of deadlines for registering, dropping, adding or withdrawing classes. Write those dates in your schedule book. Remember, you can get your money back if you drop-in time.
- Drop your class if you stop attending or get too far behind. It's <u>much</u> <u>easier to drop</u> than to deal with an "F". Be realistic about your ability to catch up.

- Failing to pay does not cancel your class or your financial obligation. You must go through the "drop" procedure by the first deadline to do that. Classes you don't drop turn to "F's". After the drop date you will have to pay for the class in full whether you drop or not.
- Register as soon as possible for the next term.
- If you take more than 1 class, make sure you have variety in your classes (no 2 classes alike). For example, don't take Chemistry and Biology at the same time.
- Register as soon as possible for the next term. Start planning as soon as the catalogue of classes comes out.

Financial Aid

- Apply early 1 year ahead is not too soon.
- Go to your school's financial aid office and ask them what you are eligible for.
- You do not have to be a full-time student to qualify for financial aid. For the Pell Grant, for example 6 credit hours are the minimum.
- Notify them immediately of any changes in financial status or address.
- Always bring your student ID when you go to the financial aid office.
- You risk your future financial aid when you drop classes. If you have a Grant, don't risk it taking classes you may end up dropping.

While Attending

• Write down each instructor's name, phone, and office hours.

- Meet with your instructor at least twice a semester. If you have questions, make an appointment or go to his/her office during office hours. Let your instructor know early of special needs that you have.
- Keep copies of term papers and other work you submit for a grade. Keep quizzes and exams when they are returned. Ask the instructor if you don't understand your mistakes. If you still don't understand your error, make an appointment to discuss it.
- Keep copies of your admissions statements, registration forms, course change forms and any other materials or receipts from school.
- Become familiar with student services available to you including disability services, special financial aid for students with disabilities, health services, library services, transportation services, and hightech computer centers.
- Keep notes you take in class in a single folder, or notebook that you can access easily. Keep a separate schedule book or day timer. Record all assignments and registration dates in that book.
- If you miss class, see the instructor as soon as possible to find out what you missed.
- Study groups can be helpful for some students. Become acquainted with other students in your class. Exchange phone numbers. Plan to study together.
- Don't <u>cut</u> classes. Make yourself go. Being there assures you won't miss important material. If you are late, go anyway.

Disabled Student Services (these services vary from school to school)

 If you have documentation of a disability, you are entitled to disability services. They will accept a letter from your doctor or medical records. They appreciate recommendations from the doctor as well.

- Sign up for disability services at registration, <u>before classes start</u>. Have the services in place in case you need them: you do not have to continue with a service that you do not need. It is much harder to arrange for services after classes start, although it can be done.
- Special accommodations through disability services include: note takers, tutors, proofreaders, recorded materials, readers, enlarged materials, and test accommodations. These test accommodations include: oral tests, untimed tests, writer for you test and distraction-free testing environment.

Final Tips

- Don't sign up for classes based on your pre-injury abilities alone. Try repeating a class that you took before; sign up for a refresher class, if available. This is not a good time to "challenge" yourself with difficult classes or to catch up. This should be a time of transition and success, where you gradually work your way back into school routines. Take the academic assessment tests before you decide which classes to take. Remember that you are probably going to get tired much easier than before. Plan to do your most challenging work in the morning, when you are rested.
- If you didn't have structured study skills before, you'll probably need them now. Consider taking a study skills class or seminar. Allow time each day for studying and establish a study area. Don't study for more than 1-2 hours without a break. Don't "cram", it won't work.
- This is not a good time to start a job.
- If you use a tutor, make sure they understand your special needs. It is likely that your needs are different from most of their tutoring clients. Often, students only need help with one particular problem area and the tutoring stops. Tell your tutor that you might need more review than that – often students post brain-injury complain that they "get it" during the tutoring session but can't remember it in

class the next day. More repetition and more frequent short study sessions is a good approach.

- Review your choice of classes with someone who understands your brain injury and who can make suggestions for strategies unique to your needs.
- Consider using other modalities (visual, auditory, hands-on) to learn: Books on tape have been very useful to some; re-writing notes or summarizing a lecture or a chapter can help you learn the material better. Short cuts for note taking can be very useful, especially for students who experience difficulty in taking notes and following the lecture simultaneously. Ask the people at Disability Services for suggestions. Explore cooperative education options (credit for hands-on work experiences set up by the college).
- Help is available for writing papers but don't wait until the day before it is due. Start your assignments early so you can go for help if you encounter difficulty.

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* Permission to include this handout was given by Casey Pfister.

Chapter V

Summary

Product Discussion

The guide for *Addressing Challenges Related to Community Reintegration Following a Traumatic Brain Injury* was developed to provide an assemblage of the resources and supports in and around Bismarck, North Dakota. The PEO Model was utilized to develop the structure of the guide. Aspects impacting community reintegration for individuals after a brain injury were identified within the three domains of the person, occupation, and environment. These provided a strong foundation for the sections and resources that needed to be included within the guide. It was also requested per the site employed that the Rancho Los Amigos Scale be utilized to identify at what level an individual needed to be for the resource or support to be considered appropriate. The three main occupations of focus for the guide were work, volunteer, and education. For each of the occupations, resources and supports were identified to assist the individual.

This guide is to be used by providers that are a part of the multidisciplinary team for an individual that has experienced a TBI. It is meant that each time this guide is utilized, the usage is individualized to the aspects impacting community reintegration specific to the individual. This could include an aspect from the affective, physical, or cognitive categories or a few from each category. From there, it should be identified which occupation or occupations are most pertinent to the individual and why the person factors are impacting the occupation. Additionally, the environments that are relevant for the individual (cultural, social, institutional, or physical) must be recognized. By addressing each of these domains and their interactions

within the PEO model, the individual's occupational performance becomes more optimal showing a good fit to their life.

The literature review and needs assessment identified that there are very limited services and supports for individuals after a TBI within the state of North Dakota. With North Dakota being heavily rural and accessibility to certain resources can be a challenge, it was identified that this guide needed to be specific to the resources and supports in one specific city which was identified as Bismarck, North Dakota. From the literature review, it was identified how individuals have difficulty reintegrating into their community and feeling purposeful. A community reintegration guide can help by serving as a register of services and resources that are relevant to this population. The main categories within this guide were related to work, education, and volunteering.

In addition to the major categories, additional groupings were identified as relevant to the main occupations; they included transportation, caregiver supports, and technology and medical devices. The transportation category became important because it was identified as a challenge for an individual to get to work, volunteer, or school. Caregiver supports were also an important section to include as the success of community reintegration for the individual with a TBI is highly influenced by their caregivers' roles. Additionally, technology and medical devices were included as this provides an individual with a TBI more independence within their community.

Implications for Practice

The implications specific to the practice of OT when utilizing this guide are to allow for treatment to individualized, occupation-based, and efficient. It can be utilized to assist with intervention planning for individuals newly released into their community from their care facility. It is important that the individual's abilities and barriers to the specific occupations be

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addressed. This can be done through activity analysis to identify abilities such as tolerance, attention, memory, time management, and physical abilities. Additionally, important barriers must be addressed; these include transportation, environment/accessibility, physical and cognitive participation limitations, lack of insight related to deficits, and lack of support at the site. By noting the individual's interests, abilities, and barriers, this is where the practioner can help the individual return to engaging in meaningful and productive activities within their community.

Future Recommendations

After completion of the guide, *Addressing Challenges Related to Community Reintegration Following a Traumatic Brain Injury*, a couple of recommendations for project sustainability have been identified. This guide must be regularly updated as resources and supports in and around Bismarck, North Dakota become more available; it is currently up to date through March 2022. The services and supports for individuals with a TBI in North Dakota are constantly growing and the guide should reflect that. Unfortunately, some resources may close or end and, in these cases, they should then be removed from the guide. Another recommendation is that the implementation of the guide begins soon. This is important because the resources and services listed are all current and up to date, however, if 6 months pass by and the guide is not being utilized, the status of the resources may change. Additionally, it will be important to begin utilizing and implementing the guide to determine the effectiveness of the resources and services listed in the guide for assisting with community reintegration for individuals after a TBI.

Strengths and Limitations

There were both strengths and limitations identified while completing the guide. One of the main strengths identified for this guide was that currently, there is not a resource specific to

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community reintegration for individuals with a TBI in and around Bismarck, North Dakota. Most services are specific to just one occupation and are limited in how holistic they are for individuals. As a limitation, most of the services and supports listed in the guide were specific to Bismarck, North Dakota rather than the entire state. However, a strength identified was that many of the resources within the different sections have an online service option that makes it accessible to more geographically widespread to individuals in the state. Another limitation identified was the limited number of resources that were able to be included in the guide. This was due to not having many resources that currently exist in and around Bismarck, North Dakota. However, this guide helps to serve as a starting resource for this population; hopefully as the services and supports continue to develop this guide will also continue to grow. Additionally, the guide has not yet been utilized and implemented which is another identified limitation. This means that the program's effectiveness has not yet been determined. Finally, it is important to note that a strength of this guide is considered "area-specific" to Bismarck, North Dakota. This can be considered a potential future idea to initially expand the community reintegration guide to other cities within the state. This may result in a guide down the road that is expanded to the entire state of North Dakota.

References

American Occupational Therapy Association. (2015). Occupational Therapy and Community Reintegration of Persons with Brain Injury. Retrieved 25 March 2021, from https://www.aota.org/~/media/Corporate/Files/AboutOT/Professionals/WhatIsOT/RDP/F acts/Community%20Reintegration%20fact%20sheet.ashx

Askvig, B.A., Mathwich, K., & Peterson, S. (2016). North Dakota Brain Injury Needs Assessment: Final Report. Minot, ND. ND Center for Persons with Disabilities.

- Backhaus, S. L., Ibarra, S. L., Klyce, D., Trexler, L. E., & Malec, J. F. (2010). Brain injury coping skills group: a preventative intervention for patients with brain injury and their caregivers. *Archives of physical medicine and rehabilitation*, 91(6), 840-848.
- Callaway, L., Winkler, D., Tippett, A., Herd, N., Migliorini, C., & Willer, B. (2016). The Community Integration Questionnaire–Revised: Australian normative data and measurement of electronic social networking. *Australian occupational therapy journal*, 63(3), 143-153.
- Centers for Disease Control and Prevention. (2015). Report to Congress on Traumatic Brain Injury in the United States: Epidemiology and Rehabilitation. National Center for Injury Prevention and Control; Division of Unintentional Injury Prevention. Atlanta, GA.
- Centers for Disease Control and Prevention. (2021). Surveillance report of traumatic brain injury-related hospitalizations and deaths by age group, sex, and mechanism of injury—United States, 2016 and 2017. Centers for Disease Control and Prevention, U.S.
 Department of Health and Human Services. Accessed on 20 January 2022.
- Adapted from "Community Reintegration Initial Intake Form," by C. Pfister, 2022. In the public domain. Reprinted with permission.

- Donnelly, K. Z., Goldberg, S., & Fournier, D. (2020). A qualitative study of LoveYourBrain
 Yoga: a group-based yoga with psychoeducation intervention to facilitate community
 integration for people with traumatic brain injury and their caregivers. *Disability & Rehabilitation*, 42(17), 2482–2491. https://doi org.ezproxy.library.und.edu/10.1080/09638288.2018.1563638
- Evans, E., Gutman, R., Resnik, L., Zonfrillo, M. R., Lueckel, S. N., Kumar, R. G., ... & Thomas, K. S. (2021). Successful Community Discharge Among Older Adults With Traumatic Brain Injury in Skilled Nursing Facilities. *The Journal of Head Trauma Rehabilitation*, 36(3), E186-E198.
- Gordon, D. J., Persaud, U. D., Beitscher, I., Brickfield, L., & Greenwald, B. D. (2021).
 Comprehensive community reintegration programming for persons with acquired brain injury. Professional Psychology: Research and Practice. <u>https://doi-org.ezproxy.library.und.edu/10.1037/pro000037</u>
- Graham, C. W., & West, M. D. (2014). Protocol for a Systematic Review: Employment
 Interventions for Return to Work in Working Aged Adults Following Traumatic Brain
 Injury. Campbell Systematic Review, 10(1), 1–56. <u>https://doi.org/10.1002/CL2.134</u>
- From "Helping Others Through Purpose & Engagement A Handbook for Supervising Volunteers Living with a Brain Injury (BI)," by L. Hawley & L. Payne, 2022. In the public domain. Reprinted with permission.
- From "Helping Others Through Purpose & Engagement A Handbook for Volunteers Living with a BI," by L. Hawley & L. Payne, 2022. In the public domain. Reprinted with permission.

- Hudspeth, A. & Peltier, C. (2020). "An Allen's Cognitive Levels Training Program for More Comprehensive Interprofessional Care" Occupational Therapy Capstones. 441. https://commons.und.edu/ot-grad/441
- Kent, J., Wright-St Clair, V. A., & Kersten, P. (2014). Older adults' experiences of community integration following traumatic brain injury. *New Zealand Journal of Physiotherapy*, 42(3), 148–153.
- Kersey, J., Terhorst, L., Wu, C. Y., & Skidmore, E. (2019). A scoping review of predictors of community integration following traumatic brain injury: A search for meaningful associations. *The Journal of head trauma rehabilitation*, 34(4), E32-E41.
- Kim, H., & Colantonio, A. (2010). Effectiveness of Rehabilitation in Enhancing Community Integration After Acute Traumatic Brain Injury: A Systematic Review. *American Journal* of Occupational Therapy, 64(5), 709–719. <u>https://doi-</u>

org.ezproxy.library.und.edu/10.5014/ajot.2010.09188

- Law, M., Cooper, B., Strong, S., Stewart, D., Rigby, P., & Letts, L. (1996). The Person-Environment-Occupation Model: A transactive approach to occupational performance. *Palliative Medicine*, 63(1), 79–87. doi:10.1177/0269216309346596
- Lin, K., & Wroten, M. (2017). Ranchos los amigos.
- Meulenbroek, P., & Turkstra, L. S. (2016). Job stability in skilled work and communication ability after moderate–severe traumatic brain injury. *Disability and rehabilitation*, 38(5), 452-461.
- Payne, L., Hawley, L., Morey, C., Ketchum, J. M., Philippus, A., Sevigny, M., ... & Diener, E. (2020). Improving well-being after traumatic brain injury through volunteering: a randomized controlled trial. *Brain injury*, 34(6), 697-707.

Pfister, C. (2022, 02). Personal Communication [Virtual Meeting].

- Pfister, C. (2021, January). Community reintegration specialist. *PTE Student OT Conference*. Talk presented at 2021 PTE conference, Zoom.
- Powell, J. M., Rich, T. J., & Wise, E. K. (2016). Effectiveness of occupation- and activity-based interventions to improve everyday activities and social participation for people with traumatic brain injury: A systematic review. *American Journal of Occupational Therapy*, 70, 7003180040. http://dx.doi.org/10.5014/ajot.2016.020909
- Radomski, M. V., Anheluk, M., Bartzen, M. P., & Zola, J. (2016). Effectiveness of interventions to address cognitive impairments and improve occupational performance after traumatic brain injury: A systematic review. *American Journal of Occupational Therapy*, 70, 7003180050. http://dx.doi.org/10.5014/ajot.2016.020776
- Ritchie, L., Wright-St Clair, V. A., Keogh, J., & Gray, M. (2014). Community Integration After Traumatic Brain Injury: A Systematic Review of the Clinical Implications of Measurement and Service Provision for Older Adults. *Archives of Physical Medicine and Rehabilitation*, 95(1), 163–174. https://doi.org/10.1016/j.apmr.2013.08.237
- From "TIPS FOR COLLEGE," by C. Pfister, 2022. In the public domain. Reprinted with permission.
- Williams, M. W., Rapport, L. J., Millis, S. R., & Hanks, R. A. (2014). Psychosocial outcomes after traumatic brain injury: Life satisfaction, community integration, and distress. *Rehabilitation psychology*, 59(3), 298.
- Winkler, D., Unsworth, C., & Sloan, S. (2006). Factors that lead to successful community integration following severe traumatic brain injury. *The Journal of head trauma rehabilitation*, 21(1), 8-21.