



Considerations for Working with Individuals with Brain Injury: A Guide for Employment Service Providers

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Overview

Employment is more than what we do; for many, it is our identity. Additionally, the employment of people with disabilities is seen not only as a civil rights issue, but also as a practical factor for business. However, in 2020, the US Bureau of Labor Statistics reported that 17.9 percent of individuals with a disability were employed, down from 19.3 percent in 2019. For those without a disability, 61.8 percent were employed in 2020, down from 66.3 percent in 2019. Unemployment rates for persons with and without a disability both increased from 2019 to 2020, to 12.6 percent and 7.9 percent, respectively. Data on both groups for 2020 reflect the impact of the coronavirus (COVID-19) pandemic and efforts to contain it. But the numbers are vastly different between the two groups, and there is a critical need to shrink that gap.¹

Individuals with brain injury comprise a significant portion of the disability community. Nearly 2.9 million people sustain a new traumatic brain injury (TBI) each year, and an estimated 13.5 million individuals live with challenges due to TBI in the United States alone.² These numbers do not include other types of brain injuries, such as acquired brain injuries.

Recent research is lacking, but historically the number of people with TBI who do not return to work is relatively significant, either immediately post-injury or further down the road to recovery. State vocational rehabilitation (VR) services and other employment programs help enrolled individuals, but the fact that retention of employment is a serious problem for people with TBI is well-established.³

Research reviews indicate positive outcomes related to these elements:⁴

- Providing VR services early in the rehabilitation process
- Creating a supportive work environment
- Providing cognitive skills training
- Supplying assistive technology and training in its use
- Utilizing supported employment



And within the context of state VR agencies, these elements can also be of great benefit:⁵

- On-the-job training
- Counseling and guidance
- Job placement services
- Working alliance with the VR counselor or other employment service provider

Innovative employment approaches can and do help people with significant disabilities enter and remain in the workforce, including those with brain injuries. This document will share what that can look like, and how to increase employment success, regardless of some of the disability systems and service challenges that might be present.

Brain Injury - What to Know

A traumatic brain injury (TBI) is an injury to the head from a blunt or penetrating trauma such as falls or gunshot wounds, or an injury from rapid movement of the brain within the skull such as motor vehicle crashes or being shaken.⁶ Brain injury affects who individuals are, including the way they think, learn, remember, act, and feel. Changes can occur in physical functioning, thinking (attention, processing speed, communication, learning and memory, planning/organizational abilities), and/or emotional/behavioral control.

While there are common physical, thinking, and emotional challenges with a brain injury, it is important to remember that no two are identical. TBI can be complex and diverse within any one individual and will vary greatly from one injured person to the next. Some individuals who have experienced a TBI are aware of these effects; others may be surprisingly unaware, despite feedback from others. Lastly, for any specific person, the severity of the initial injury and the resulting direct effects may in no way predict the amount of disruption in his/her life. The specific challenges for each person are based on the cause, severity, and location of damage within the brain itself and the existence of prior brain injuries are a factor as well.

For many people brain injury is a hidden disability with changes in function remaining “invisible” to observers. Because of this, people tend to underestimate or forget that the individual may have lifelong issues.

People with TBI may rely upon the public state VR system, Employment Networks, and community-based vendors to help them become employed. Considerations for effective service delivery include:

- Services are likely to be needed over lengthy periods; individuals with TBI do not always quickly enter and exit services. Also, the course of rehabilitation is not singular, nonstop progression; it might be more characterized as starts and stops along a continuum.
- Pre-injury lifestyle, interests, abilities, and goals need to be addressed, but are not necessarily indicators of post-injury skills, interests, and abilities, even though they can be.
- The timeframe for achieving specific milestones during rehabilitation needs to be kept loose; rigid deadlines are not likely to work to the advantage of the individual with TBI.



- The need of everyone to be empowered to make choices that will become his or her customized rehabilitation plan is multiplied in importance for the person with TBI. Person-centered practices are critical.⁷

Additional best practices include coordinated referral processes, the delivery of tailored services, training for professional staff, and the use of strategies to address the brain injury throughout the employment planning process. Addressing brain injury begins with effective identification and assessment of the brain injury and related challenges, described next.

Screening and Evaluation of Brain Injury

Screening

Employment programs such as publicly funded VR, Employment Networks, and community-based vendors for job development serve many people with known, or diagnosed, brain injuries. These are often people who have sustained a brain injury, were hospitalized, and may have participated in post-acute, inpatient rehabilitation.

However, many individuals seeking employment support in publicly funded programs have undisclosed brain injuries. There are many reasons why a brain injury may not be known by a person seeking employment support.

Consider these examples:

- A person may have been injured as a child
- A person may have been injured and did not or was not able to seek medical or emergency care
- A person may have been injured because of violence, such as gang activity, assaults within a correctional setting, or an abusive relationship
- A person presents with a significant condition such as blindness due to post-traumatic visual loss for which brain injury diagnosis is often delayed

Research indicates that brain injury prevalence among people with conditions such as substance use disorders, mental health conditions, as well as those who have experienced trauma are significant. Employment service providers should always consider brain injury screening to assess for the lifetime history or brain injury when supporting individuals who have been in the criminal or juvenile justice system, received services through child welfare programming (including those who have been in foster care), have behavioral health conditions, have been in intimate partner violence relationships, or have experienced homelessness. Some states are implementing universal screens based on the prevalence data becoming widely available.

For more information about behavioral health and brain injury, check out [this tip card](#) developed through a partnership with the Addiction Technology Transfer Centers of Region 7 (Mid-America) and Region 8 (Mountain Plains) and National Association of State Head Injury Administrators (NASHIA). For more information about screening tools, visit [NASHIA's screening web resource](#) or [visit NASHIA's directory](#) to connect with your state's lead agency on brain injury. Your lead agency may be able to provide or guide you to training on valid and reliable screening tools.



So why take the time to screen? Recognizing hidden brain injury, particularly with a person who may be unaware of their condition, can lead to insight about past struggles and setbacks. Some of the practices of successful job seekers may be some of the same behaviors that represent a struggle for people with brain injuries. Screening and supporting individuals with information about brain injury can help them become better job seekers, achieve successful outcomes, and realize economic independence. In addition, employment service providers can adjust their own practices to better support people with brain injuries which are detailed in the chart below.

Evaluation

Historically, a known or suspected brain injury by an employment service provider, particularly within the publicly funded VR system, often resulted in a referral for a comprehensive, typically quite expensive, neuropsychological evaluation lengthening the time for eligibility determination and access to supports. Today, states are recognizing that evaluations need not be one-size-fits-all. Over time, publicly funded VR programs are accommodating their approaches so that further assessment can be conducted while a case moves along, when and if the need is present.

Recognizing the lifetime history of brain injury, through the use of a screening tool, does not always indicate that a neuropsychological evaluation needs to be conducted. It may mean that the brain injury history, particularly when there was never any medical intervention at the time of the injury, can simply be factored into the vocational planning and service delivery process. When and if it appears that the needs are complex, neuropsychological services may be warranted. However, there may be different approaches to securing helpful assessment.

The following are possible approaches for evaluating brain injury-related needs:

- Evaluation by speech language pathologist to gauge work impediments to aid in vocational planning
- Partial neuropsychological screen or a functional neurocognitive test (tailored, brief-oriented approach to testing specific functions for the purpose of treatment or rehabilitation planning)
- Use of medical records along with a neuropsychological screen or functional neurocognitive test
- Vocational assessments or evaluations
- Comprehensive neuropsychological evaluation

Assessing evaluation needs on a case-by-case basis, while following program policies and procedures, can help assure suitable interventions that fit the need. Comprehensive, neuropsychological evaluations may be needed only by those for whom vocational planning is complicated and/or stalled, and where brain injury symptoms need to be further, and objectively, assessed or evaluated. For all evaluation approaches, consideration of culture is essential when working with, for example, those within diverse racial/ethnic communities.



Modifications and Accommodations – Employment Planning and Job Search

Several supports can be utilized to ensure employment success for someone with a TBI, from minimal interventions to supported employment and low- and high-tech assistive technology. Support needs to be applied throughout the entire employment process; from the time someone considers employment into and throughout work retention.

General Strategies for addressing cognitive, emotional, and physical challenges are certainly helpful to apply, and some of these are provided here, from the *Full Participation Guidelines: Recommendations for ensuring meaningful engagement for individuals and family members in program activities*:⁸

Individual Experience	Barrier	Possible Accommodations
Too much information- feel confused, overwhelmed.	Memory impairment; attention issues; fatigue	Break into steps (chunking), provide handouts, use summaries. Pair with another employee to assist initially during meetings.
Information is too complicated	Difficulty attending to more than one topic or with concepts, vague areas, or complex topics	Simplify, break into steps, provide written summary, as well as detailed handout; consider audio format. Pair with another employee to assist during meeting if possible. Review information before meeting when possible. Get closure on one topic before starting another topic.
Information presented too quickly	Difficulty tracking; memory; processing speed	Slow down/pause in between points to give time to process and make notes; encourage note writing; ask when to move on; encourage employee to ask clarifying questions; “clarify and verify” communication strategy. Ask for visual checks during virtual meetings.
Cannot remember points	Memory impairment	Provide written handouts, details, and summaries. Provide materials in advance. Summarize, go over points, assignments, at end of session. Provide meeting notes, summary in follow up and in a timely manner.
Personal mode is auditory	Processing issue	Provide audio of presented material; allow recording with permission of others
Personal mode is visual	Processing issue	Provide copies of Power Points, forms, reports, lists of contact names and numbers, and provide in advance.
Lighting is too harsh	Fluorescent light is stressful, can trigger seizures in some individuals	Use natural light, bring in incandescent lighting, and turn off fluorescents.
Too much background noise	Difficulty filtering out background noises	Provide or suggest bringing ear protectors to give people “noise breaks” to relieve stress. Provide quiet rooms; avoid side conversations; do not place close to busy roads, kitchens, service areas. Do not use typical room dividers (not noise-proof enough).
Cannot see the big picture	Difficulty with concepts	Provide summary statements in the form of “This is why XYZ information matters to me,” or similar. Start with “here is where we want to end up; here is where we need to start to get there”.
Distracted by crowds	Over stimulation	Plan/schedule coming and going times during sessions. Hold smaller gatherings when possible.



Individual Experience	Barrier	Possible Accommodations
Fatigue	Exhaustion: inability to focus and concentrate	Provide sufficient breaks. Host shorter meetings, presentations. Consider all factors that may contribute to fatigue & remedy. Ask for visual checks during meetings.
Over-stimulating environment	Carpet pattern, “busy” wallpaper, lighting, etc.	Consider different space and/or facility. Consider alternative meeting format – i.e., virtual or teleconference. Ask for visual checks during meetings.
Virtual meetings are exhausting, hard to follow and too long	Fatigue; processing; attention; distractions; busy screen	Encourage hardware and software preparation, practice and early log in before meetings. Minimize other distractions. Change computer settings regarding light and color. Use a chat or question feature to ask questions. Offer a recording or transcript of meeting.

Additionally, the Job Accommodations Network can provide information that helps with planning, application, interviewing, and retention: <https://askjan.org/>

Vocational assistance through a counselor or provider who has training and experience in issues related to brain injury and has applied this experience in helping foster successful outcomes during intake, planning, counseling and guidance, academic or skills-based training, a job search, and employment maintenance.

Supported employment services delivered by someone who also has TBI experience is an invaluable approach to returning to work following a TBI and is appropriate for a variety of levels of skill and need for support. Employment in an integrated setting with job support being provided by a job coach can be the difference in being successfully employed. The job coach provides structure, cueing, and other supports necessary for the job task acquisition, and understands the individual’s neurocognitive profile and need for specific accommodations tailored to fit the specific job task. The coach can then fade support provision and minimal support can be provided indefinitely. The job coach can assist with supervisors and coworker change to relay the individual’s need for accommodation, and also step back in to provide training if job tasks are altered. Several factors are key in supported employment:

- extensive knowledge of the individual and their strengths and accommodation needs
- knowledge of the job tasks and work environment
- knowledge of key support people and their role in the individual’s life
- a reality-based vocational goal that fits the person’s preferences and abilities (with or without accommodations)
- a good job match with an employer prepared to reasonably accommodate the brain injury, if applicable
- counseling & guidance throughout the entire process



Some general tips for employment specialists and job coaches when someone is referred for services:

- Participate in any training related to learning more about brain injury causes, symptoms, and challenges. Become knowledgeable about the unique needs of individuals with brain injury.
- Review any case/referral information provided thoroughly to ensure understanding of skills, challenges, and recommendations.
- Pay special attention to screening, neuropsychological or other assessments (an essential tool for understanding the subtle memory, learning, attention, and behavioral issues present described above) and vocational evaluation reports (provides critical information on skill identification and supports). These will help with targeting specific work environments, minimizing the chances for a poor job match, and developing accommodation strategies that will meet the person's needs. These types of reports are frequently used by the VR counselor to, along with the job seeker, select a vocational goal and necessary services.
- Contact the referring counselor with any questions or concerns and keep all involved aware of any challenges encountered.

Assistive Technology (AT) includes any device, strategy, knowledge, piece of equipment, software, product system, whether acquired off the shelf, modified, or customized, that increases, maintains, or improves the functional abilities of a person with a TBI. AT can often be provided through a State VR office or other community provider, and sometimes by a rehabilitation engineer who specializes in making recommendations on adaptations and/or equipment that will help someone with a TBI in a specific work environment. Ideally, AT should be in place prior to starting a new job, but sometimes comes into play when evaluating whether an individual can return to the same work environment after injury. For those with TBI, AT might often help with organizing and reminders for tasks as well as assisting with the task themselves due to executive function challenges.⁹

Benefits Counseling

Individuals with brain injury, particularly those with moderate or severe conditions, may be on Social Security Disability Insurance (SSDI) or Supplemental Security Income (SSI). The importance of benefits counseling to understand the impact of work on these or other public benefits cannot be overstated. There are a wide variety of employment supports, often called work incentives, which may help an individual ease back into employment. The result of incorporating benefits counseling into the vocational planning process may be that an individual finds satisfaction with part-time work to supplement benefits or, in many cases, an ability to transition off Social Security Administration (SSA) benefits altogether. This type of transition following a brain injury takes detailed planning, and the targeted services of Work Incentives Planning and Assistance (WIPA) and other benefits counseling programs are available to deliver individualized analysis and support.

Does your state have a Medicaid Buy-In program for working adults with disabilities?¹⁰ Medicaid Buy-In for workers with disabilities is an optional eligibility group for people with disabilities who are employed and have income above traditional Medicaid limits. Almost every state has a



Medicaid Buy-In for workers with disabilities. A person with a brain injury may need services and supports only offered by a Medicaid-like personal attendant and home and community based-services. Some may also have ongoing therapeutic needs or may be taking medications that, without public health insurance, are cost prohibitive. A Medicaid Buy-In program for workers with disabilities helps workers gain and maintain access to Medicaid even if cash benefits cease. The program is a consideration for SSA beneficiaries as well as people with disabilities who would otherwise qualify for SSA.

Or, alternatively, a person on SSI might be able to take advantage of a [1619\(b\) work incentive](#) allowing for earnings in excess of cash benefit eligibility. With support from a [Community or Community Partner Work Incentives Coordinators](#) (CWIC or CPWIC), an individual might put an [Impairment-Related Work Expense](#) (IRWE) in place for an ongoing, disability-related need to engage in work, such as a specialized transportation service. These are just a few examples of ways SSA beneficiaries with brain injury can be encouraged to consider work even if healthcare needs are significant.

Thinking Outside the Box

Two in five states operate brain injury waivers as part of their Home and Community-Based Services options. However, there is a gap of available supported employment services to address the ongoing needs of individuals with significant impairments due to brain injury. Even in the absence of paid, extended supports through Medicaid-funded, supported employment services, creative options exist to meet the ongoing needs. As mentioned earlier, work incentives might play a role and could potentially be accessed for an extended period of time, such as an Impairment-Related Work Expense. This could be advantageous for an individual who needs some level of ongoing job coaching support, but no other paid options are available.

Natural supports can be cultivated among coworkers or others in an individual's network. A type of natural support available in a growing number of states are brain injury resource facilitators or neuro resource facilitators (RF or NRF). Where available, an individual who has received job placement and has been closed from public VR may have access to support for issues or concerns that arise from the brain injury. This could result in real-time problem solving and, as appropriate, a RF or NRF might assist the individual with a reconnection to VR for post-employment or other services.

Example – Susan has been in her position as a paraprofessional/teacher's aide for a year and recently experienced a change in supervisor. She does not feel her supervisor understands her disability and has recently received write-ups for overlooking key daily tasks. Susan consults with her RF and examines ways to talk to her supervisor about her brain injury and the management approaches that assist her. The RF refers Susan back to her local VR to consider if an AT solution might be recommended to help with her performance challenges in the area of executive functioning.

Employment service providers might also consider the delivery of customized employment services for people with complex needs related to brain injury. This can allow for early on “discovery” services to understand the person's talents and skills which may meet an employer's unique business needs. Through customized job development, an individual with a brain injury can



benefit from a tailored job match and then use workplace supports, sometimes called systematic instruction, to effectively learn job tasks and decrease the need for intensive support overtime.

Some people with brain injuries have stamina fluctuations and productivity patterns that don't always correspond to typical workplace expectations. With marketable skills, perhaps gained pre-injury or through re-training, self-employment may be a viable option. Depending on the impairments experienced, prospective entrepreneurs with brain injuries may benefit extensively from business plan development support as well as during the initial business launch period to manage and put into place mitigation strategies for executive functioning and other challenges.

Brain Injury Competencies for Employment Service Providers

The Administration for Community Living (ACL) is home to the federal TBI Program, and awards State Partnership Grants focused on systems of service and supports that maximize the independence, well-being, and health of persons with TBI. Workgroups promote collaboration toward these initiatives. Several states (Nebraska, Indiana, Vermont and North Carolina, Iowa) focused on Transition and Employment over the last funding cycle, and created numerous resources, including one tool that identifies competencies recommended for VR counselors serving individuals who are working to enter or re-enter the workforce following a brain injury. These competencies can serve as a general guide for the professional development of knowledge, skills, and abilities needed for the field of brain injury and as best practice related to training and career development. One item to note is that while these competencies may also be helpful to other staff in the employment assistance arena, such as placement specialists, job coaches and career center staff, other competencies specific to these experts are not yet identified.

These states also developed a repository of resources: grant-funded legacy and other more current materials, with dates ranging from 2009 – 2020; literature search materials; and suggested items of interest collected up to January 2021. The materials referenced include a rich variety of employment training tools, best practices in the field, and research that has been conducted. These can all be found at: <https://www.nashia.org/acl-te>

Case Examples

1. John sustained a TBI during a motor vehicle crash two years ago. He holds a bachelor's degree in marketing and was working for a mid-sized automotive business as an account executive. John has short-term memory issues, difficulty with managing and prioritizing tasks, and struggles with word retrieval and handling difficult interactions with others. He tried to return to his former job but was unsuccessful managing all the demands and the pressure to bring in new business. After meeting with a VR counselor who gathered all his medical records and referred him for a full neuropsychological assessment and vocational evaluation, John relayed his interests and he and the VR counselor discussed his strengths and areas of challenge.

John and his counselor decided that his hobby of working on old engines could be a new avenue to explore vocationally. After job shadowing at a local automotive repair service, John decided he would like to become certified in auto body repair. An industrial training program was selected and after completion, John was assisted by a community employment specialist in refining his resume, discussing interviewing challenges,



completing an application, and beginning an on-the-job training program that eventually led to a job offer. John continued to talk with his counselor throughout this process about how best to work with others on his new job and handle responsibilities. AT services resulted in a recommendation for a low-tech option to help John with task management.

2. Kenisha received services through her mental health center's Individual Placement and Support (IPS) program and based on previous experience in human services, she started preparations to become a paid peer mentor. During her two-week training program, Kenisha overslept three times and, when in attendance, often kept her head down on her desk. She could not retain the necessary information from the course, and she told her employment service provider that she could not understand what was happening. She shared that becoming a peer mentor was her dream job, and she felt like her depression had stabilized in recent months.

While the initial placement attempt did not lead to success, Kenisha later discovered following a suggestion that she participate in a lifetime history of brain injury screen, that she likely sustained multiple concussions during a former relationship with an abusive partner. She learned about sleep hygiene and its significance for people with brain injuries. She also began to understand her own sensitivities to certain lighting conditions and over-stimulating environments. She implemented the use of recordings so that she could easily re-review information presented auditorily, and she asked her employment service provider to check in with her on the use of her newfound strategies. Kenisha is now on her way to becoming a peer mentor and brings along an understanding of people living with brain injury.

For additional resources for people with brain injury visit:

<https://nashia.org>

<https://aoddisabilityemploymentcenter.com/category/community-of-practice/detac-publications/tbi-publications/>



References:

1. US Bureau of Labor Statistics. (2022). Retrieved from www.bls.gov.
2. 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*.
3. New Editions Consulting, LLC. (2010). VR research in brief: achieving vocational success after traumatic brain injury.
4. Catalano, D., Pereira, A., Wu, M., Ho, H., & Chan, F. (2006). Service patterns related to successful employment outcomes of persons with traumatic brain injury in vocational rehabilitation. *NeuroRehabilitation*, 21, 279-293.
5. Johnstone, B., Vessell, R., Bounds, T., et al. (2003). Predictors of success for state vocational rehabilitation clients with traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, 84, 161-167.
6. Johns Hopkins Medicine. (2022). Traumatic brain injury. *Conditions and Diseases*. Retrieved from <https://www.hopkinsmedicine.org/health/conditions-and-diseases/traumatic-brain-injury>
7. Zuger, R., Brown, M., O'Neill, J., Stack, R., & Amitai, H. (2002). Vocational rehabilitation, traumatic brain injury and the power of networking. *TBI-NET*, Mt. Sinai Medical Center.
8. ACL TBI Technical Assistance and Resource Center. (2020). Full participation guidelines: Recommendations for ensuring meaningful engagement for individuals and family members in program activities.
9. Le, L. (2006). Employment tips for staff.
10. Administration for Community Living. (2019). Medicaid “buy-in” q & a. Retrieved from <https://www.dol.gov/sites/dolgov/files/odep/topics/medicaidbuyinqaf.pdf>.

