

Occupational Therapy and **Community Reintegration of Persons With Brain Injury**

Brain injuries can affect motor, sensory, cognitive, and behavioral functioning. A person who has sustained a brain injury may find it challenging to return to work or school, or engage in many of the other activities that he or she enjoyed prior to the injury. Individuals may also have decreased balance and coordination, memory impairments, difficulty organizing and sequencing activities, and making decisions. Visual and auditory functions can also be affected by a brain injury. In addition, after a brain injury, many people experience a decrease in their frustration tolerance and an increase in impulsive behaviors.

As a result of the U.S. engagement in two combat fronts, the high number of wounded warriors with traumatic brain injuries (TBIs) who are attempting to reintegrate into the community has highlighted and reinforced an even greater need to address the long-term functional status of individuals with this condition. Those who have served in the military may exhibit posttraumatic stress disorder and other vestiges of their survival training for warfare that are not conducive to performing daily activities in a regular home or work environment. For example, wounded warriors may need to relearn how to drive in a noncombative way (contrary to their safety-oriented training on the battlefield) or address anger management issues with their families and others. Ultimately, regardless of where or how the individual sustained a TBI, there is a need to transfer skills learned in a rehabilitation setting to natural environments such as the home, workplace, and recreational settings so he or she can resume participation and function as close to prior levels as possible.

Rehabilitation often begins in the hospital environment. The focus in this early stage of recovery is typically on regaining physical, self-care, and general cognitive skills; however, many people with moderate or severe brain injuries will need ongoing rehabilitation to regain optimal function after they are discharged from a medical facility. Community-based rehabilitation is part of the continuum of care that assists individuals in regaining these skills. Community-based rehabilitation focuses on improving the acquisition and application of skills in the areas of physical and cognitive functioning, mobility, social integration, productivity, perception of self, interpersonal relationships, and independent living skills in natural environments where they are used in daily activities.

Individuals with brain injuries who participate in community-based rehabilitation have improved outcomes in physical and cognitive abilities, adjustment, and participation in the community.^{1,2} The National Institutes of Health *Consensus Development Conference Statement on Rehabilitation of Persons with Traumatic Brain Injury* recommended that community-based services be included in extended care and rehabilitation.³ They also recognized that individuals with brain injuries may benefit from modification of their home and social and work environments to enable full community participation.

The Role of Occupational Therapy

Occupational therapy practitioners are key rehabilitation professionals in assisting individuals with brain injury to reintegrate back into the community. Their education and training make them experts at evaluation and analysis of an individual's performance abilities relative to the demands of the activity. This perspective encompasses all aspects of an individual's life, including activities of daily living (e.g., self-care) and instrumental activities of daily living (e.g., home management, rest and sleep habits, work demands, play, leisure, social participation). They can then help clients relearn how to do these activities (remediate) or determine new ways of accomplishing them (compensatory strategies). Through guided, graded instruction within the context of the client's community, occupational therapy practitioners may work with individuals in real life settings such as the grocery store, bank, mall, bus/train, workplace, home, or any other environment in which they need to regain competence in occupational performance. Occupational therapy practitioners work as part of a team, which may include a physical therapist, speech-language pathologist, neuropsychologist, social worker, and other professionals as appropriate, such as teachers or vocational rehabilitation counselors.



Because every brain injury is different, each person's community reintegration plan will be different. The following are some of the broad areas an occupational therapy practitioner will address.

- Teach the use of memory compensation techniques such as daily planners, technological devices, checklists, and cueing systems.
- Assist in developing effective schedules and routines.
- Instruct individuals and family members in techniques to cope with changes in behavior and low frustration tolerance.
- Recommend environmental adaptations to assist with physical, perceptual, and cognitive functioning, such as labeling cupboards and drawers, or using lighting to improve vision and/or attention.
- Assist in relearning social skills through techniques such as pre-processing and rehearsal, where the individual and therapist anticipate challenging social situations and practice appropriate responses.
- Provide cognitive retraining exercises to address specific cognitive skills, such as attention, memory, and executive functioning (e.g., using computer-based programs).
- Provide training and adaptation (if needed) for activities of daily living, such as dressing, bathing, and grooming.
- Provide training and assist in the development of compensatory techniques for instrumental activities of daily living, such as preparing meals, shopping, and caring for children.
- Facilitate the identification and development of healthy, fulfilling hobbies or other leisure activities for individuals who may not be able to return to work.
- Consult with employers and/or educational systems to adapt the work or school environment to facilitate the individual's performance.

Where Do Occupational Therapy Practitioners Provide Community Reintegration Training?

- Free-standing community reintegration programs
- Home health agencies
- Medicaid waiver programs
- Private practice

Conclusion

Occupational therapy practitioners are experts in assessing functional activity demands against the performance abilities of clients and identifying and addressing deficits; therefore, they are key members of the community reintegration team. Through their expertise in task analysis, environmental modifications, and functional activities, they can help individuals with brain injuries re-learn skills or compensate for impairments. Community-based occupational therapy can help individuals with brain injury improve the quality of their lives and regain their maximal level of community independence.

References

1. Altman, I. M., Swick, S., Parrot, D., & Malec, J. F. (2010). Effectiveness of community-based rehabilitation after traumatic brain injury for 489 program completers compared with those precipitously discharged. *Archives of Physical Medicine and Rehabilitation, 91*, 1697-1704.
2. 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*, 709-719.
3. National Institutes of Health. (1998, October 26-28). Rehabilitation of persons with traumatic brain injury. *NIH Consensus Statement, 16*(1), 1-41.

Developed by Barbara Nadeau, MA, OTR/L, CBST, for the American Occupational Therapy Association. Copyright © 2011 by the American Occupational Therapy Association. This material may be copied and distributed for personal or educational uses without written consent. For all other uses, contact copyright@aota.org.

Living Life To Its Fullest™
O C C U P A T I O N A L T H E R A P Y

Occupational therapy enables people of all ages live life to its fullest by helping them to promote health, make lifestyle or environmental changes, and prevent—or live better with—injury, illness, or disability. By looking at the whole picture—a client's psychological, physical, emotional, and social make-up—occupational therapy assists people to achieve their goals, function at the highest possible level, maintain or rebuild their independence, and participate in the everyday activities of life.

