

Traumatic Brain Injury for VR Counselors

Margaret A. Struchen, Ph.D. and Laura M. Ritter, Ph.D., M.P.H.

Training Session 1b: Understanding Terminology

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Glossary of Terms:

One of the most helpful skills that will increase your comfort level in working with clients with brain injury is to increase your familiarity with terminology that is typical for this population. When reviewing medical charts or the referral information that you may receive when asked to evaluate or treat a client with TBI, a basic knowledge of the medical terminology will be a great help. Such knowledge will also increase your ability to interact with the rehabilitation team or other healthcare providers who are providing services to your client. This may help you increase the contributions that you can make with an individual client through, for example, advocacy with the team or in clarifying with the client how medical or rehabilitative results may be implemented in the vocational setting. Familiarity with the medical and rehabilitative jargon will also increase your confidence as you participate in activities (such as team rounds) that will facilitate getting your client the services needed to help him/her return to work and to monitor the progress that the client is making in his/her treatments.

A number of new terms are introduced within the training modules included in this online educational resource. It is hoped that this will increase your comfort level with some of the basic terminology. A number of new terms are introduced within the training modules included in this online educational resource. It is hoped that this will increase your comfort level with some of the basic terminology. Another wonderful resource is a glossary of brain injury terms that was created as a project of the Traumatic Brain Injury (TBI) Model Systems funded by the National Institute on Disability and Rehabilitation Research (NIDRR) (Grant G0087C2016). This glossary was edited by L. Don Lehmkuhl, Ph.D., original Director of the Brain Injury Research Center at TIRR (The Institute for Rehabilitation and Research), and was published by HDI Publishers of Houston, Texas and was copyrighted in 1996 (ISBN 1-882855-06-X). This glossary can be ordered by contacting HDI Publishers at the following address:

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In addition, portions of this glossary have been made available online through the Oregon Brain Injury Resource Center. The following URL will take you directly to the glossary information:

<http://www.tr.wou.edu/tbi/glossary.htm>

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Measures of Injury Severity and Outcome:

Glasgow Coma Scale (GCS): The GCS is a widely used scale to assess responsiveness after TBI.¹ This scale measures three aspects of responsiveness: eye opening, motor response, and verbal response. The scores across these three components are summed to yield a total score. As previously noted, this scale is often used to gauge injury severity. To review, GCS scores of 13-15 are considered 'mild,' scores of 9-12 are 'moderate,' and scores of 3-8 are 'severe.' The scale values are shown here:

Eye Opening	
Spontaneous	4
To Voice	3
To Pain	2
No Response	1
Motor Response	
Follows commands	6
Localizes to pain	5
Withdraws from pain	4
Abnormal flexion	3
Extension (Posturing)	2
No Response	1
Verbal Response	
Oriented	5
Confused, Disoriented	4
Inappropriate Words	3
Incomprehensible Sounds	2
No Response	1



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The following are some commonly used outcome measures used in TBI. You may wish to consider using these scales or others that might be applicable to the outcomes you wish to measure. Further information about these and other commonly used measures in TBI can be found at the following website:

<http://www.tbims.org/combi/index.html>

- **Glasgow Outcome Scale²**: The Glasgow Outcome Scale is a widely used measure of overall outcome following TBI. It classifies persons into one of five categories according to their overall level of functioning: death, persistent vegetative state, severe disability (conscious but disabled), moderate disability (disabled but independent), or good recovery. This scale is often used in research studies of factors that affect outcome following TBI, but is not typically used in general clinical assessments. It is also relatively insensitive to clinical improvement in persons with TBI who are six months or more post-injury.
- **Disability Rating Scale³**: The Disability Rating Scale is also a widely used measure of overall outcome following TBI. It is an eight-item measure that assesses eye opening, communication ability, motor response, cognitive ability to perform self-care skills (feeding, toileting, and grooming), dependence on others, and employability as a full-time worker, homemaker or student. Scores range from 0 to 29, with lower scores representing better functioning and higher scores representing poorer functioning. The Disability Rating Scale is frequently used in TBI research and clinical settings. This measure is relatively sensitive to clinical improvement in persons with moderate to severe injuries who are six months or more post-injury, but is less sensitive to change for persons with mild TBI
- **Functional Independence Measure⁴**: The Functional Independence Measure is an 18-item measure used to assess self-care skills, toileting, bladder and bowel management, transfers and locomotion, communication, and social cognition. Clinicians rate the level of assistance needed to perform the above activities on a 7-point scale, with 7 classified as complete independence and 1 classified as requiring total assistance. Higher total scores represent greater independence with activities, while lower scores represent greater dependence. This measure is frequently used to assess a patient's progress during inpatient rehabilitation, but is less sensitive to change with increasing time post-injury.
- **Community Integration Questionnaire⁵⁻⁶**: The Community Integration Questionnaire is a 15-item measure used to assess community integration following TBI. Items assess integration into the home, integration into social activities, and



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productivity. Higher scores represent greater integration and lower scores represent less integration. This measure is often used to assess functional outcome in the later stages of recovery, once persons have been discharged from acute rehabilitation.

- **Craig Handicap Assessment and Reporting Technique⁷**: The Craig Handicap Assessment and Reporting Technique is a 32-item measure used to assess social and community participation. It was developed for use with persons with spinal cord injury, but has also been used to measure functional outcome in persons with TBI. Items assess six domains: physical independence, cognitive independence, mobility, occupation, social integration, and economic self-sufficiency. Each domain score as well as the overall score ranges from 0 to 100. Lower scores represent poorer functioning and higher scores representing better functioning. This measure is often used to assess functional outcome in the later stages of recovery, once persons have been discharged from acute rehabilitation.

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Some of the information in this guide was adapted, with permission of the authors, from the following sources:

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