Module X.  Glossary of Terms for Brain Injury

“…every time of year you can find it here…” (The Eagles)
Instructions to This Module:

- It is impossible to know every term, but you should get familiar with them.
- Look on the internet where you will find a wealth of glossaries on Brain Injury.

Objectives of This Module:

- To become more familiar with the common terms of Brain Injury.
Abstract Concept - A concept or idea not related to any specific instance or object and which potentially can be applied to many different situations or objects. Persons with cognitive deficits often have difficulty understanding abstract concepts.

Abstract Thinking - Being able to apply abstract concepts to new situations and surroundings.

Abulia - Absence or inability to exercise will-power or to make decisions. Also, slow reaction, lack of spontaneity, and brief spoken responses. Usually associated with damage to a cerebellar vessel. See also cerebellum.

Acalculia - The inability to perform simple problems of arithmetic. See also parietal lobe.

Acute Care - The phase of managing health problems which is conducted in a hospital on patients needing medical attention.

Acute Rehabilitation Program - Primary emphasis is on the early phase of rehabilitation that usually begins as soon as the patient is medically stable. The program is designed to be comprehensive and based in a medical facility with a typical length of stay of 1-3 months. Treatment is provided by an identifiable team in a designated unit. See Program/Service Types.

Adaptive/Assistive Equipment - A special device which assists in the performance of self-care, work or play/leisure activities or physical exercise. See also adaptive equipment catalog.

Affect - The observable emotional condition of an individual at any given time. See also frontal lobe.

Agnosia - Failure to recognize familiar objects although the sensory mechanism is intact. May occur for any sensory modality.

Agraphia - Inability to express thoughts in writing. See also parietal lobe.

Alexia - Inability to read. See also parietal lobe.

Ambulate - To walk.

Amnesia - Lack of memory about events occurring during a particular period of time. See also: anterograde amnesia, retrograde amnesia, post-traumatic amnesia.

Aneurysm - A balloon-like deformity in the wall of a blood vessel. The wall weakens as the balloon grows larger, and may eventually burst, causing a hemorrhage.

Anomia - Inability to recall names of objects. Persons with this problem often can speak fluently but have to use other words to describe familiar objects. See also parietal lobe.

Anosmia - Loss of the sense of smell.

Anoxia - A lack of oxygen. Cells of the brain need oxygen to stay alive. When blood flow to the brain is reduced or when oxygen in the blood is too low, brain cells are damaged.
Anterograde Amnesia - Inability to consolidate information about ongoing events. Difficulty with new learning.

Anticonvulsant - Medication used to decrease the possibility of a seizure (e.g., Dilantin, Phenobarbital, Mysoline, Tegretol). See also pharmacology guide.

Antidepressants - Medication used to treat depression. See also pharmacology guide.

Aphasia - Loss of the ability to express oneself and/or to understand language. Caused by damage to brain cells rather than deficits in speech or hearing organs. See also frontal and temporal lobes.

Apraxia - Inability to carry out a complex or skilled movement; not due to paralysis, sensory changes, or deficiencies in understanding. See also parietal lobe.

Aprosodia - A condition in which there is a loss of production or comprehension of the meaning of different tones of voice.

Arousal - Being awake. Primitive state of alertness managed by the reticular activating system (extending from medulla to the thalamus in the core of the brain stem) activating the cortex. Cognition is not possible without some degree of arousal. See also brain stem.

Articulation - Movement of the lips, tongue, teeth and palate into specific patterns for purposes of speech. Also, a movable joint.

Aspiration - When fluid or food enters the lungs through the wind pipe. Can cause a lung infection or pneumonia.

Astereognosia - Inability to recognize things by touch. See also parietal lobe.

Ataxia - A problem of muscle coordination not due to apraxia, weakness, rigidity, spasticity or sensory loss. Caused by lesion of the cerebellum or basal ganglia. Can interfere with a person's ability to walk, talk, eat, and to perform other self care tasks. See also cerebellum.

Attendant Care - Provision of assistance in activities of daily living for a person with disability. Daily number of hours of required assistance, either physical or supervisory.

Atrophy - A wasting away or decrease in size of a cell, tissue, organ, or part of the body caused by lack of nourishment, inactivity or loss of nerve supply.

Attention/Concentration - The ability to focus on a given task or set of stimuli for an appropriate period of time.

Audiologist - One who evaluates hearing defects and who aids in the rehabilitation of those who have such defects.

Augmentative and Alternative Communication - Use of forms of communication other than speaking, such as: sign language, "yes, no" signals, gestures, picture board, and computerized speech systems to compensate (either temporarily or permanently) for severe expressive communication disorders.
ADL - Activities of daily living. Routine activities carried out for personal hygiene and health (including bathing, dressing, feeding) and for operating a household.

B
Balance - The ability to use appropriate righting and equilibrium reactions to maintain an upright position. It is usually tested in sitting and standing positions.

Behavior - The total collection of actions and reactions exhibited by a person. See also Working with Behavior Disorders.

Bilateral - Pertaining to both right and left sides.

Brain Injury, Acquired - The implication of this term is that the individual experienced normal growth and development from conception through birth, until sustaining an insult to the brain at some later time that resulted in impairment of brain function.

Brain Injury, Closed - Occurs when the head accelerates and then rapidly decelerates or collides with another object (for example the windshield of a car) and brain tissue is damaged, not by the presence of a foreign object within the brain, but by violent smashing, stretching, and twisting, of brain tissue. Closed brain injuries typically cause diffuse tissue damage that results in disabilities that are generalized and highly variable.

Brain Injury, Mild - A patient with a mild traumatic brain injury is a person who has had a traumatically-induced physiological disruption of brain function, as manifested by at least one of the following: 1) any period of loss of consciousness, 2) any loss of memory for events immediately before or after the accident, 3) any alteration in mental state at the time of the accident (e.g., feeling dazed, disoriented, or confused), 4) focal neurological deficit(s) which may or may not be transient; but where the severity of the injury does not exceed the following: a) loss of consciousness of approximately 30 minutes or less; b) after 30 minutes, an initial Glasgow Coma Scale score of 13-15; c) Post Traumatic Amnesia not greater than 24 hours.

Brain Injury, Traumatic - Damage to living brain tissue caused by an external, mechanical force. It is usually characterized by a period of altered consciousness (amnesia or coma) that can be very brief (minutes) or very long (months/indefinitely). The specific disabling condition(s) may be orthopedic, visual, aural, neurologic, perceptive/cognitive, or mental/emotional in nature. The term does not include brain injuries that are caused by insufficient blood supply, toxic substances, malignancy, disease-producing organisms, congential disorders, birth trauma or degenerative processes.

Brain Plasticity - The ability of intact brain cells to take over functions of damaged cells; plasticity diminishes with maturation.

Brain Scan - An imaging technique in which a radioactive dye (radionuclide) is injected into the blood stream and then pictures of the brain are taken to detect tumors, hemorrhages, blood clots, abscesses or abnormal anatomy.

Brain Stem - The lower extension of the brain where it connects to the spinal cord. Neurological functions located in the brain stem include those necessary for survival (breathing, heart rate) and for arousal (being awake and alert).
**Case Management** - Facilitating the access of a patient to appropriate medical, rehabilitation and support programs, and coordination of the delivery of services. This role may involve liaison with various professionals and agencies, advocacy on behalf of the patient, and arranging for purchase of services where no appropriate programs are available.

**Catheter** - A flexible tube for withdrawing fluids from, or introducing fluids into, a cavity of the body. Frequently used to drain the urinary bladder (Foley catheter).

**Cerebellum** - The portion of the brain (located at the back) which helps coordinate movement. Damage may result in ataxia.

**Cerebral-spinal Fluid (CSF)** - Liquid that fills the ventricles of the brain and surrounds the brain and spinal cord.

**Chronic** - Marked by long duration or frequent recurrence.

**Circumlocution** - Use of other words to describe a specific word or idea that cannot be remembered.

**Client** - A person under the protection of another; one who engages the professional advice or services of another. See Consumer and Patient.

**Clonus** - A sustained series of rhythmic jerks following quick stretch of a muscle.

**Cognition** - The conscious process of knowing or being aware of thoughts or perceptions, including understanding and reasoning.

**Cognitive Rehabilitation** - Therapy programs that aid persons in the management of specific problems in perception, memory, thinking and problem solving. Skills are practiced and strategies are taught to help improve function and/or compensate for remaining deficits. The interventions are based on an assessment and understanding of the person's brain-behavior deficits and services are provided by qualified practitioners.

**Coma** - A state of unconsciousness from which the patient cannot be awakened or aroused, even by powerful stimulation; lack of any response to one's environment. Defined clinically as an inability to follow a one-step command consistently; Glasgow Coma Scale score of 8 or less.

**Communicative Disorder** - An impairment in the ability to 1) receive and/or process a symbol system, 2) represent concepts or symbol systems, and/or 3) transmit and use symbol systems. The impairment may be observed in disorders of hearing, language, and/or speech processes.

**Community Skills** - Those abilities needed to function independently in the community. They may include: telephone skills, money management, pedestrian skills, use of public transportation, meal planning and cooking.

**Comprehension** - Understanding of spoken, written, or gestural communication.

**Concentration** - Maintaining attention on a task over a period of time; remaining attentive and not easily diverted.

**Concrete Thinking** - A style of thinking in which the individual sees each situation as unique and is unable to generalize from the similarities between situations. Language and perceptions
are interpreted literally so that a proverb such as "a stitch in time saves nine" cannot be readily grasped.

**Concussion** - The common result of a blow to the head or sudden deceleration usually causing an altered mental state, either temporary or prolonged. Physiologic and/or anatomic disruption of connections between some nerve cells in the brain may occur. Often used by the public to refer to a brief loss of consciousness.

**Confabulation** - Verbalizations about people, places, and events with no basis in reality. May be a detailed account delivered.

**Confusion** - A state in which a person is bewildered, perplexed, or unable to self-orient.

**Conjugate Movement** - Both eyes move simultaneously in the same direction. Convergence of the eyes toward the midline (crossed eyes) is a disconjugate movement.

**Contracture** - Loss of range of motion in a joint due to abnormal shortening of soft tissues.

**Convergence** - Movement of two eyeballs inward to focus on an object moved closer. The nearer the object, the greater is the degree of convergence necessary to maintain single vision. See also vision after head injury.

**Cortical Blindness** - Loss of vision resulting from a lesion of the primary visual areas of the occipital lobe. Light reflex is preserved.

**Contrecoup** - Bruising of brain tissue on the side opposite where the blow was struck.

**CT Scan/Computerized Axial Tomography** - A series of X-rays taken at different levels of the brain that allows the direct visualization of the skull and intracranial structures. A scan is often taken soon after the injury to help decide if surgery is needed. The scan may be repeated later to see how the brain is recovering.

**D**

**Decerebrate Posture (Decerebrate Rigidity)** - Exaggerated posture of extension as a result of a lesion to the preponpine area of the brain stem, and is rarely seen fully developed in humans. In reporting, it is preferable to describe the posture seen.

**Decorticate Posture (Decorticate Rigidity)** - Exaggerated posture of upper extremity flexion and lower extremity extension as a result of a lesion to the mesencephalon or above. In reporting, it is preferable to describe the posture seen.

**Decubitus** - Pressure area, bed sore, skin opening, skin breakdown. A discolored or open area of skin damage caused by pressure. Common areas most prone to breakdown are buttocks or backside, hips, shoulder blades, heels, ankles and elbows.

**Diffuse Axonal Injury (DAI)** - A shearing injury of large nerve fibers (axons covered with myelin) in many areas of the brain. It appears to be one of the two primary lesions of brain injury, the other being stretching or shearing of blood vessels from the same forces, producing hemorrhage.
**Diffuse Brain Injury** - Injury to cells in many areas of the brain rather than in one specific location.

**Diplopia** - Seeing two images of a single object; double vision. See also vision after head injury.

**Discipline** - When referring to health care or education it means a particular field of study, such as medicine, occupational therapy, nursing, recreation therapy or others.

**Disinhibition** - Inability to suppress (inhibit) impulsive behavior and emotions.

**Disorientation** - Not knowing where you are, who you are, or the current date. Health professionals often speak of a normal person as being oriented "times three" which refers to person, place and time.

**Dorsiflexion** - When applied to the ankle, the ability to bend at the ankle, moving the front of the foot upward.

**Dysarthria** - Difficulty in forming words or speaking them because of weakness of muscles used in speaking or because of disruption in the neuromotor stimulus patterns required for accuracy and velocity of speech.

**Dysphagia** - A swallowing disorder characterized by difficulty in oral preparation for the swallow, or in moving material from the mouth to the stomach. This also includes problems in positioning food in the mouth.

**Edema** - Collection of fluid in the tissue causing swelling.

**Electroencephalogram (EEG)** - A procedure that uses electrodes on the scalp to record electrical activity of the brain. Used for detection of epilepsy, coma, and brain death.

**Electromyography (EMG)** - An insertion of needle electrodes into muscles to study the electrical activity of muscle and nerve fibers. It may be somewhat painful to the patient. Helps diagnose damage to nerves or muscles.

**Emotional Lability** - Exhibiting rapid and drastic changes in emotional state (laughing, crying, anger) inappropriately without apparent reason.

**Endotracheal Tube** - A tube that serves as an artificial airway and is inserted through the patient's mouth or nose. It passes through the throat and into the air passages to help breathing. To do this it must also pass through the patient's vocal cords. The patient will be unable to speak as long as the endotracheal tube is in place. It is this tube that connects the respirator to the patient.

**Evoked Potential** - Registration of the electrical responses of active brain cells as detected by electrodes placed on the surface of the head at various places. The evoked potential, unlike the waves on an EEG, is elicited by a specific stimulus applied to the visual, auditory or other sensory receptors of the body. Evoked potentials are used to diagnose a wide variety of central
nervous system disorders.

**Extended Care Facility-Basic** - Residential facility that supplies 24-hour nursing care and supervision and assistance with activities of daily life. See Program/Service Types.

**Extended Care Facility-Skilled** - A residential facility for the patient who requires 24-hour nursing care (IV, intramuscular injections, special feeding tubes, skin care, oxygen) and rehabilitative therapy, such as physical therapy, occupational therapy, or speech therapy on a less intensive basis than as an inpatient in a comprehensive rehabilitation center. An extended care facility can be a short-term alternative (a few months) prior to placement at home (with outpatient therapy) or in a nursing home. See Program/Service Types.

**Extremity** - Arm or leg.

**F**

**Figure-Ground** - The differentiation between the foreground and the background of a scene; this refers to all sensory systems, including vision, hearing, touch.

**Flaccid** - Lacking normal muscle tone; limp.

**Flexion** - Bending a joint.

**Foley Catheter** - This is a tube inserted into the urinary bladder for drainage of urine. The urine drains through the tube and collects into a plastic bag.

**Frontal Lobe** - Front part of the brain; involved in planning, organizing, problem solving, selective attention, personality and a variety of "higher cognitive functions."

**Current News:**

- **Two Brain Areas Involved in Doing Math**

**Frustration Tolerance** - The ability to persist in completing a task despite apparent difficulty. Individuals with a poor frustration tolerance will often refuse to complete tasks that are the least bit difficult. Angry behavior, such as yelling or throwing things while attempting a task is also indicative of poor frustration tolerance.

**G**

**Gainful Occupation** - Includes employment in the competitive labor market, practice of a profession, farm or family work (including work for which payment is "in kind" rather than in cash), sheltered employment, work activity (to the extent that there is net pay), and home industries or other home-bound work.

**Gait Training** - Instruction in walking, with or without equipment; also called "ambulation training."

**GI Tube** - A tube inserted through a surgical opening into the stomach. It is used to introduce liquids, food, or medication into the stomach when the patient is unable to take these substances by mouth.
**Glasgow Coma Scale** - A standardized system used to assess the degree of brain impairment and to identify the seriousness of injury in relation to outcome. The system involves three determinants: eye opening, verbal responses and motor response all of which are evaluated independently according to a numerical value that indicates the level of consciousness and degree of dysfunction. Scores run from a high of 15 to a low of 3. Persons are considered to have experienced a `mild' brain injury when their score is 13 to 15. A score of 9 to 12 is considered to reflect a `moderate' brain injury and a score of 8 or less reflects a 'severe' brain injury.

**Head Injury** - Refers to an injury of the head and/or brain, including lacerations and contusions of the head, scalp and/or forehead. See also **Brain Injury**.

**Hematoma** - The collection of blood in tissues or a space following rupture of a blood vessel. Regarding Brain: Epidural--Outside the brain and its fibrous covering, the dura, but under the skull. Subdural--Between the brain and its fibrous covering (dura). Intracerebral--In the brain tissue. Subarachnoid--Around the surfaces of the brain, between the dura and arachnoid membranes.

**Hemianopsia Hemianopia** - Visual field cut. Blindness for one half of the field of vision. This is not the right or left eye, but the right or left half of vision in each eye. See also **vision after head injury**.

**Hemiparesis** - Weakness of one side of the body.

**Hydrocephalus** - Enlargement of fluid-filled cavities in the brain, not due to brain atrophy.

**Hypoxia** - Insufficient oxygen reaching the tissues of the body.

**Impulse Control** - Refers to the individual's ability to withhold inappropriate verbal or motor responses while completing a task. Persons who act or speak without first considering the consequences are viewed as having poor impulse control.

**Incontinent** - Inability to control bowel and bladder functions. Many people who are incontinent can become continent with training.

**Initiative** - Refers to the individual's ability to begin a series of behaviors directed toward a goal.

**Interdisciplinary Approach** - A method of diagnosis, evaluation, and individual program planning in which two or more specialists, such as medical doctors, psychologists, recreational therapists, social workers, etc., participate as a team, contributing their skills, competencies, insights, and perspectives to focus on identifying the developmental needs of the person with a disability and on devising ways to meet those needs.

**Intracranial Pressure (ICP)** - Cerebrospinal fluid (CSF) pressure measured from a needle or bolt introduced into the CSF space surrounding the brain. It reflects the pressure inside of the skull.
J

**Jargon** - Spoken language that has a normal rate and rhythm but is full of nonsense words.

**Job Analysis** - Involves the systematic study of an occupation in terms of what the worker does in relation to data, people, and things; the methods and techniques employed, the machines, tools, equipment, and work aids used; the materials, products, subject matter or services which result, and the traits required of the worker.

K

**Kinesthesia** - The sensory awareness of body parts as they move (see Position Sense and Proprioception).

L

**Lability** - State of having notable shifts in emotional state (e.g., uncontrolled laughing or crying).

**Leg Bag** - A small, thick plastic bag that can be tied to the leg and collects urine. It is connected by tubing to a catheter inserted into the urinary bladder.

**Locked-in Syndrome** - A condition resulting from interruption of motor pathways in the ventral pons, usually by infarction. This disconnection of the motor cells in the lower brain stem and spinal cord from controlling signals issued by the brain leaves the patient completely paralyzed and mute, but able to receive and understand sensory stimuli; communication may be possible by code using blinking, or movements of the jaw or eyes, which can be spared.

M

**Magnetic Resonance Imaging (MRI)** - A type of diagnostic radiography using electromagnetic energy to create an image of soft tissue, central nervous system and musculoskeletal systems.

**Malingering** - To pretend inability so as to avoid duty or work.

**Memory, Episodic** - Memory for ongoing events in a person's life. More easily impaired than semantic memory, perhaps because rehearsal or repetition tends to be minimal.

**Memory, Immediate** - The ability to recall numbers, pictures, or words immediately following presentation. Patients with immediate memory problems have difficulty learning new tasks because they cannot remember instructions. Relies upon concentration and attention.

**Memory, Long Term** - In neuropsychological testing, this refers to recall thirty minutes or longer after presentation. Requires storage and retrieval of information which exceeds the limit of short term memory.

**Memory, Short Term** - Primary or 'working' memory; its contents are in conscious awareness. A limited capacity system that holds up to seven chunks of information over periods of 30 seconds to several minutes, depending upon the person's attention to the task.

**Money Management** - Ability to distinguish the different denominations of money, count money, make change, budget.
**Motor Control** - Regulation of the timing and amount of contraction of muscles of the body to produce smooth and coordinated movement. The regulation is carried out by operation of the nervous system.

**Motor Planning** - Action formulated in the mind before attempting to perform.

**Muscle Tone** - Used in clinical practice to describe the resistance of a muscle to being stretched. When the peripheral nerve to a muscle is severed, the muscle becomes flaccid (limp). When nerve fibers in the brain or spinal cord are damaged, the balance between facilitation and inhibition of muscle tone is disturbed. The tone of some muscles may become increased and they resist being stretched—a condition called hypertonicity or spasticity.

**N**

**Nasogastric Tube (NG Tube)** - A tube that passes through the patient's nose and throat and ends in the patient's stomach. This tube allows for direct “tube feeding” to maintain the nutritional status of the patient or removal of stomach acids.

**Neglect** - Paying little or no attention to a part of the body.

**Neologism** - Nonsense or made-up word used when speaking. The person often does not realize that the word makes no sense.

**Neurologist** - A physician who specializes in the nervous system and its disorders.

**Neuropsychologist** - A psychologist who specializes in evaluating (by tests) brain/behavior relationships, planning training programs to help the survivor of brain injury return to normal functioning and recommending alternative cognitive and behavioral strategies to minimize the effects of brain injury. Often works closely with schools and employers as well as with family members of the injured person.

**Non-ambulatory** - Not able to walk.

**Nystagmus** - Involuntary horizontal, vertical, or rotary movement of the eyeballs. See also vision after head injury.

**O**

**Occipital Lobe** - Region in the back of the brain that processes visual information. Damage to this lobe can cause visual deficits.

**Occupational Therapy** - Occupational Therapy is the therapeutic use of self-care, work and play activities to increase independent function, enhance development and prevent disability; may include the adaptation of a task or the environment to achieve maximum independence and to enhance the quality of life. The term occupation, as used in occupational therapy, refers to any activity engaged in for evaluating, specifying and treating problems interfering with functional performance.

**Orientation** - Awareness of one's environment and/or situation, along with the ability to use this information appropriately in a functional setting.
Orthopedics - The branch of medicine devoted to the study and treatment of the skeletal system, its joints, muscles and associated structures.

Orthosis - Splint or brace designed to improve function or provide stability.

Outpatient - The patient residing outside the hospital but returning on a regular basis for one or more therapeutic services.

P
Paraplegia - Paralysis of the legs (from the waist down).

Parietal Lobe - One of the two parietal lobes of the brain located behind the frontal lobe at the top of the brain.

Perception - The ability to make sense of what one sees, hears, feels, tastes or smells. Perceptual losses are often very subtle, and the patient and/or family may be unaware of them.

Perseveration - The inappropriate persistence of a response in a current task that may have been appropriate for a former task. Perseverations may be verbal or motoric.

Persistent Vegetative State (PVS) - A long-standing condition in which the patient utters no words and does not follow commands or make any response that is meaningful.

Phonation - The production of sound by means of vocal cord vibration.

Physiatrist - Pronounced Fizz ee at' rist. A physician who specializes in physical medicine and rehabilitation. Some physiatrists are experts in neurologic rehabilitation, trained to diagnose and treat disabling conditions. The physiatrist examines the patient to assure that medical issues are addressed; provides appropriate medical information to the patient, family members and members of the treatment team. The physiatrist follows the patient closely throughout treatment and oversees the patient's rehabilitation program.

Physical Therapist - The physical therapist evaluates components of movement, including: muscle strength, muscle tone, posture, coordination, endurance, and general mobility. The physical therapist also evaluates the potential for functional movement, such as ability to move in the bed, transfers and walking and then proceeds to establish an individualized treatment program to help the patient achieve functional independence.

Plasticity - The ability of cellular or tissue structures and their resultant function to be influenced by an ongoing activity.

Plateau - A temporary or permanent leveling off in the recovery process.

Post Traumatic Amnesia (PTA) - A period of hours, weeks, days or months after the injury when the patient exhibits a loss of day-to-day memory. The patient is unable to store new information and therefore has a decreased ability to learn. Memory of the PTA period is never stored, therefore things that happened during that period cannot be recalled. May also be called Anterograde Amnesia.
Posture - The attitude of the body. Posture is maintained by low-grade, continuous contraction of muscles which counteract the pull of gravity on body parts. Injury to the nervous system can impair the ability to maintain normal posture, for example holding up the head.

Pre-Morbid Condition - Characteristics of an individual present before the disease or injury occurred.

Problem-Solving Skill - Ability to consider the probable factors that can influence the outcome of each of various solutions to a problem, and to select the most advantageous solution. Individuals with deficits in this skill may become "immobilized" when faced with a problem. By being unable to think of possible solutions, they may respond by doing nothing.

Prognosis - The prospect as to recovery from a disease or injury as indicated by the nature and symptoms of the case.

Program/Service Types - The following program/service categories describe the array of organized services (not mutually exclusive) and not an exhaustive list available for the rehabilitation of persons with brain injury:

Acute Rehabilitation
Based in a medical facility; accepts patient as soon as medically stable; focuses on intensive physical and cognitive restorative services in early months after injury; typical length of stay one week to several months (short term); identifiable team and program with specialized unit.

Behavior Disorders
For the patient exhibiting patterns of behavior preventing participation in active rehabilitation, including destructive patient behavior to self and others; continuum of controlled settings.

Community Integration Program
Provides services designed to accomplish functional outcomes focused on home and community integration, including productive activity. Services may be provided in residential facilities, day treatment programs, the consumer's home. They may be of short-term (several weeks) or long-term duration (several months).

Independent Living
Community-based to maximize a person's ability to be empowered and self-directed; allows an individual to live in one's own home with maximum personal control over how services are delivered, combined with the opportunity to work as appropriate.

Lifelong Living
For persons discharged from rehabilitation who need ongoing lifetime supports; located in residential or skilled nursing environment; structured activities available on individual and group basis.

Postacute Rehabilitation
Are programs designed to provide intensive, 24-hour rehabilitation to improve cognitive, physical, emotional, and psychosocial abilities, to facilitate better independent living skills. Facilities typically provide a full spectrum of clinical therapies, as well as life-skills training in a residential setting.

Residential Services
Assumes a 24-hour residential environment outside the home and includes 24-hour provision of or access to support personnel capable of meeting the client's needs.

(Adopted by the PostAcute Committee of ISIG on Head Injury October 28, 1991.)

Subacute
May follow a period of acute rehabilitation; not necessarily hospital based; typical length of rehabilitation stay 6-24 months (short to intermediate term); stay based on demonstrated improvement; identifiable team and program with specialized unit.

**Supervised Living**
Setting is a home that is like other homes in the neighborhood in terms of size and number of residents. Consumers are provided individualized care, supervision, support and training services to maximize and/or maintain function and self-direction. Staff is present at night and other times when the consumer is present.

**Supported Independent Living**
Setting is a home chosen by the consumer who is primarily independent. Program offers support to assist the resident in maximizing and/or maintaining independence and self-direction. Staff is available as needed and at planned intervals to offer assistance and support but not to provide supervision.

**Transitional Living**
Non-medical residential program providing training for living in a setting of greater independence. The primary focus is on teaching functional skills and compensating for abilities that cannot be restored.

**Vocational Evaluation**
An organized and comprehensive service staffed by specialists who systematically and comprehensively utilize work activities (real or simulated) and/or educational services as the focal point for educational and vocational assessment and exploration. In addition, psychological testing, counseling, social summaries, occupational information, etc., are other evaluation tools that are used. It incorporates the medical, psychological, social, vocational, educational, cultural, and economic data for establishment and attainment of individual goals.

**Prone** - Lying on one's stomach.

**Proprioception** - The sensory awareness of the position of body parts with or without movement. Combination of kinesthesia and position sense.

**Psychologist** - A professional specializing in counseling, including adjustment to disability. Psychologists use tests to identify personality and cognitive functioning. This information is shared with team members to assure consistency in approaches. The psychologist may provide individual or group psychotherapy for the purpose of cognitive retraining, management of behavior and the development of coping skills by the patient/client and members of the family.

**Range of Motion (ROM)** - Refers to movement of a joint (important to prevent contractures).

**Reasoning, Abstract** - Mode of thinking in which the individual recognizes a phrase that has multiple meanings and selects the meaning most appropriate to a given situation. The term "abstract" typically refers to concepts not readily apparent from the physical attributes of an object or situation.

**Reasoning, Concrete** - The ability to understand the literal meaning of a phrase.

**Reasoning, Problem-Solving** - The ability to analyze information related to a given situation and generate appropriate response options. Problem-solving is a sequential process that
typically proceeds as follows: identification of problem; generation of response options; evaluation of response option appropriateness; selection and testing of first option; analysis as to whether solution has been reached. A patient/client may discontinue making a cup of coffee because the sugar bowl is empty, even though sugar is readily available in a nearby cabinet. A patient/client may easily navigate his way into a room crowded with furniture, but request staff assistance to navigate his way out.

**Reasoning, Sequencing** - The ability to organize information or objects according to specified rules, or the ability to arrange information or objects in a logical, progressive manner. Nearly every activity, including work and leisure tasks, requires sequencing. For example, in cooking certain foods it is important that ingredients be added and mixed in a specified order; in dressing, undergarments must be put on prior to outer garments.

**Recreation Therapist** - Individual within the facility responsible for developing a program to assist persons with disabilities plan and manage their leisure activities; may also schedule specific activities and coordinate the program with existing community resources.

**Rehabilitation** - Comprehensive program to reduce/overcome deficits following injury or illness, and to assist the individual to attain the optimal level of mental and physical ability.

**Rehabilitation Counselor** - Also called Vocational Counselor. A specialist in social and vocational issues who helps the patient develop the skills and aptitudes necessary for return to productive activity and the community.

**Rehabilitation Facility** - Agency of multiple, coordinated services designed to minimize for the individual the disabling effects of one's physical, mental, social, and/or vocational difficulties and to help realize individual potential.

**Rehabilitation Nurse** - A nurse specializing in rehabilitation techniques as well as basic nursing care. Nurses assist the patient and family in acquiring new information, developing skills, achieving competence and exhibiting behaviors that contribute to the attainment of a healthy state.

**Retrograde Amnesia** - Inability to recall events that occurred prior to the accident; may be a specific span of time or type of information.

**S**

**Seizure** - An uncontrolled discharge of nerve cells that may spread to other cells nearby or throughout the entire brain. It usually lasts only a few minutes. It may be associated with loss of consciousness, loss of bowel and bladder control and tremors. May also cause aggression or other behavioral change.

**Sensation** - Feeling stimuli that activate sensory organs of the body, such as touch, temperature, pressure and pain. Also seeing, hearing, smelling and tasting.

**Sensorimotor** - Refers to all aspects of movement and sensation and the interaction of the two.

**Sensory Integration** - Interaction of two or more sensory processes in a manner that enhances the adaptiveness of the brain.
Sequencing - Reading, listening, expressing thoughts, describing events or contracting muscles in an orderly and meaningful manner.

Sheltered Workshop - A work setting certified as such by the Wage & Hour Division. It provides transitional and/or long-term employment in a controlled and protected working environment for those who are unable either to compete or to function in the open job market due to their disabilities. May provide vocational evaluation and work adjustment services.

Shunt - A procedure to draw off excessive fluid in the brain. A surgically-placed tube running from the ventricles which deposits fluid into either the abdominal cavity, heart or large veins of the neck.

Somatosensory - Sensory activity having its origin elsewhere than in the special sense organs (such as eyes and ears) and conveying information to the brain about the state of the body proper and its immediate environment.

Spasticity - An involuntary increase in muscle tone (tension) that occurs following injury to the brain or spinal cord, causing the muscles to resist being moved. Characteristics may include increase in deep tendon reflexes, resistance to passive stretch, clasp knife phenomenon, and clonus.

Spatial Ability - Ability to perceive the construction of an object in both two and three dimensions. Spatial ability has four components: the ability to perceive a static figure in different positions, the ability to interpret and duplicate the movements between various parts of a figure, the ability to perceive the relationship between an object and a person's own body sphere, and the ability to interpret the person's body as an object in space.

Speech-language Pathology Services - A continuum of services including prevention, identification, diagnosis, consultation, and treatment of patients regarding speech, language, oral and pharyngeal sensorimotor function.

Spontaneous Recovery - The recovery which occurs as damage to body tissues heals. This type of recovery occurs with or without rehabilitation and it is very difficult to know how much improvement is spontaneous and how much is due to rehabilitative interventions. However, when the recovery is guided by an experienced rehabilitation team, complications can be anticipated and minimized; the return of function can be channeled in useful directions and in progressive steps so that the eventual outcome is the best that is possible.

Subdural - Beneath the dura (tough membrane) covering the brain and spinal cord.

Supine - Lying on one’s back.

Suppository - Medicine contained in a capsule that is inserted into the rectum so that the medicine can be absorbed into the blood stream.

Tactile Defensiveness - Being overly sensitive to touch; withdrawing, crying, yelling or striking when one is touched.
**Task Analysis** - Breakdown of a particular job into its component parts; information gained from task analysis can be utilized to develop training curricula or to price a product or service.

**Temporal Lobes** - There are two temporal lobes, one on each side of the brain located at about the level of the ears. These lobes allow a person to tell one smell from another and one sound from another. They also help in sorting new information and are believed to be responsible for short-term memory.
Right Lobe—Mainly involved in visual memory (i.e., memory for pictures and faces).
Left Lobe—Mainly involved in verbal memory (i.e., memory for words and names).

**Tracheotomy** - A temporary surgical opening at the front of the throat providing access to the trachea or windpipe to assist in breathing.

**Tracking, Visual** - Visually following an object as it moves through space. See also *vision after head injury*.

**Tremor, Intention** - Course, rhythmical movements of a body part that become intensified the harder one tries to control them.

**Tremor, Resting** - Rhythmical movements present at rest and may be diminished during voluntary movement.

**U**

**Unilateral Neglect** - Paying little or no attention to things on one side of the body. This usually occurs on the side opposite from the location of the injury to the brain because nerve fibers from the brain typically cross before innervating body structures. In extreme cases, the patient may not bathe, dress or acknowledge one side of the body.

**Urinary Tract Infection** - When bacteria have reproduced to a large number in the bladder. This can cause fever, chills, burning on urination, urgency, frequency, incontinence or foul smelling urine.

**V**

**Verbal Apraxia** - Impaired control of proper sequencing of muscles used in speech (tongue, lips, jaw muscles, vocal cords). These muscles are not weak but their control is defective. Speech is labored and characterized by sound reversals, additions and word approximations.

**Vestibular** - Pertaining to the vestibular system in the middle ear and the brain that senses movements of the head. Disorders of the vestibular system can lead to dizziness, poor regulation of postural muscle tone and inability to detect quick movements of the head.

Source: [www.braininjurybooks.com](http://www.braininjurybooks.com)

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