

# **SPINAL CORD MEDICINE**

## **HANDBOOK FOR PATIENT AND FAMILY**



### **Glossary**



**Frazier Rehab Institute**

A service of Jewish Hospital & St. Mary's HealthCare

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This Handbook is designed to give you the information to better understand spinal cord injury and the tools needed to manage your health care needs successfully. Information is intended for you and your family because, those who love you, will often be involved in assisting you with your care needs while in the hospital, and in the home environment. As you read through the Handbook, your rehab team at Frazier is available to address your questions and provide you more information pertinent to your needs.

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## **A BRIEF NOTE ABOUT THE FOUNDER OF FRAZIER REHAB INSTITUTE**

In her early 20's, Amelia Brown of Louisville sustained a spinal injury in a car accident in the 1940's. With no rehabilitation services in Louisville, she traveled to New York for treatment. After returning to Louisville, she married a physician, Dr. Harry Frazier. Believing Louisville needed its own rehabilitation facility, Mrs. Frazier founded the Frazier Institute of Physical Medicine and Rehabilitation in the early 1950s. Her son, Owsley Brown Frazier, served as Chairman of the Fund Raising Committee for Frazier's new building, named the Frazier Rehab and Neuroscience Center, which opened in 2006.

## **DISCLAIMER**

The information contained herein is intended to be used in accordance with the treatment plan prescribed by your physician and with the prior approval of your physician. You should not begin using any of the methods described in this publication until you have consulted your physician. Jewish Hospital & St. Mary's HealthCare, Inc. D.B.A. Frazier Rehab Institute, its affiliates, associates, successors and assigns, as well as its trustees, officers, directors, agents and employees are not liable for any damages resulting from the use of this publication.

## **GLOSSARY**

### **RESOURCES**

<http://www.sci-info-pages.com/glossary.html>

### **TERMS DEFINED**

**ABDOMINAL MUSCLE** - Another name for the stomach muscle; essential for a productive cough.

**ABDUCTION WEDGE** - An attachment for the seat of the wheelchair to keep the legs in a neutral position.

**ACTIVE ASSISTIVE RANGE OF MOTION** - Movement of a joint through partial range of movement performed by the patient. The remaining range of movement is performed by a caregiver.

**ACTIVE RANGE OF MOTION** - movement of a joint through the full range of movement voluntarily performed by the patient.

**ACTIVE RANGE OF MOTION EXERCISES** - Exercises that a person can perform under voluntary control. See Passive Range of Motion Exercises.

**ACTIVITIES OF DAILY LIVING (ADL)** - Basic self-care skills including dressing, bathing, toileting, grooming & hygiene, feeding.

**ADAPTED UTENSILS** - Forks, spoons, and knives that are modified to assist with feeding.

**ADAPTIVE EQUIPMENT** - Any device that enables an individual to interact more effectively with the environment following injury.

**ADDUCTION WEDGE** - An attachment for the seat of the wheelchair to keep the legs in a neutral position.

**ADL (ACTIVITIES OF DAILY LIVING)** - Basic self-care skills including dressing, bathing, toileting, grooming & hygiene, feeding.

**ADL SPLINT** - Allows user to hold utensils without grasp or wrist control.

**ALCOHOL ABUSE** - Loosely defined as drinking to excess and/or using drink as a way to deal with boredom, frustration, anger, and depression. Some individuals feel less inhibited or less shy/more sociable after a few drinks. Alcohol can be abused and include physical dependence.

**ALCOHOLIC** - Alcoholic Anonymous often defines an alcoholic as a person who uses alcohol to the degree that it creates a problem in at least one area of a person's life. Examples would include a problem with a relationship, job, finances, education, sleep, appetite, or sex, to name but a few. Alcoholics are well known for their denial of alcohol related problems. Unfortunately, those who are close to the alcoholic sometimes try to take responsibility for the alcoholic drinking less or may in subtle ways strengthen the alcoholic's determination to drink. Professional help is often appropriate for both the alcoholic and family.

**ALVEOLI** - Air sacks in the lung where oxygen enters the blood and waste products leave the blood.

**AMBULATE** - To walk.

**AMYOTROPHIC LATERAL SCLEROSIS (ALS)** - A progressive neurological disease affecting motor neurons that is considered fatal.

The **AMERICANS WITH DISABILITIES ACT of 1990 (ADA)** - Gives civil rights protection to individuals with disabilities. It guarantees equal opportunity for individuals with disabilities in employment, public accommodations, transportation, state and local government services and telecommunications.

**ANKLE FOOT ORTHOSIS** - A brace placed into the shoe that comes up on the back of the lower leg and straps around the calf. It is used to help keep the foot from resting in a dropped down position and to help prevent the toes from dragging during walking.

**ANTI-COAGULANTS** - Medications that lower the clotting ability of the blood.

**ANTI-TIPPERS** - Projections placed on the back of the wheelchair to prevent the chair from tipping backward during transfers, pressure relief, and propulsion over uneven surfaces.

**ARCHITECTURAL BARRIERS** - Typical architectural barriers may include steps, curbs, narrow doors, inaccessible toilet and sink facilities, carpet, and many more. Overcoming these barriers and learning about accessibility is typically a major concern to a spinal cord injured individual.

**ARTERIAL BLOOD GAS** - Measurement of oxygen levels, carbon dioxide levels, and acid/base status of the blood.

**ASSERTIVENESS** - People standing up for their rights. Being assertive means expressing one's needs, beliefs and expectations clearly and openly in a tactful, tasteful manner. It is not an excuse to be rude, angry or aggressive. Spinal cord injured persons are encouraged to learn appropriate assertive skills in order to facilitate effective and successful interactions with family, personal care attendants, employers and numerous professionals that may be in position to help provide services related to the spinal cord injury.

**ASSISTIVE TECHNOLOGY** - Advanced technology created to make tasks possible or easier for individuals with physical disabilities.

**ATROPHY** - Decrease of muscle size that happens when a muscle is not used.

**AUGMENTED COUGH** - A cough that is assisted by pressing down and up on upper abdominal muscles to increase the productiveness of the cough. Often helpful with persons with quadriplegia who cannot cough on their own.

**AUTONOMIC DYSREFLEXIA** - An emergent, potentially dangerous condition associated with a spinal cord injury patient whose level of injury is T6 or above. This condition is usually related to a noxious stimulus that is not sensed or felt by the individual due to the neural impulses blocked in the spinal cord due to the injury. During an episode of autonomic dysreflexia, the blood pressure can become very and can cause stroke if not treated appropriately.

**BED LADDER** - Series of connected loops attached to end of bed to assist with bed mobility.

**BED MOBILITY** - Ability to roll from side to side, sit, and lie down in bed.

**BEDSIDE COMMODE (BSC)** - Portable commode with armrests that can be used beside the bed or over the toilet.

**BLADDER** - The sac that stores urine from the kidneys prior to urination.

**BLADDER DISTENTION** - When the bladder holds more than the usual amount of urine resulting in stretching of the bladder.

**BLADDER PROGRAM** - Individualized program to manage the urinary eliminator process in a predictable and controlled manner. Most people with spinal cord injury are placed on a bladder program while in rehabilitation.

**BOWEL PROGRAM** - Individualized program to manage stool elimination process in a predictable and controlled manner. Most people with spinal cord injury are placed on a bowel program while in rehabilitation.

**BREATHING EXERCISES** - Exercises designed to strengthen the muscles involved in respiration (moving air in and out of the lungs).

**BRONCHI** - Air passages in the lungs that lead to the small alveoli.

**BRONCHIAL TREE** - Passageway of respiratory system through which air moves to get to air sacs (alveoli) in lungs.

**BRONCHOSCOPY** - A procedure that allows a visual examination inside of the lungs.

**BUTTON HOOK** - Assist user fasten button with impaired finger coordination.

**BUILT-UP HANDLES** - Handles with larger handles to assist user with weak grasp to perform ADLs

**BUTTON HOOKS** - Assist user who has poor hand control to fasten buttons.

**CALORIE** - A measure of the energy value of food; also refers to the heat output of the body. If too few calories are consumed from food as compared to the amount of calories “burned” by the body, weight loss will occur. Conversely, when more calories are consumed than expended, the body stores them and weight increases.

**CAMBER** - Slanting of the top of the rear tire in toward the wheelchair.

**CARBOHYDRATE** - One of the six classes of nutrients needed by the body. It serves as the body’s main fuel source and is subdivided into simple and complex carbohydrate groups

**CAR OR VEHICLE MODIFICATIONS** - Changes made to a vehicle, usually in the form of hand controls that will allow the spinal cord injured person to drive independently. Modifications may also be made in the form of wheelchair lifts, so that a person can stay in their wheelchair and be lifted into a van.

**CASTERS** - The small wheels on the front of the wheelchair.

**CAT SCAN** - Computerized Assisted Tomography is a radiographic test that takes a series of x-rays from numerous different perspectives. A computer analysis of the information provides multiple pictorial slices of the x-rayed body part.

**CATHETER** - A small, flexible tube used for urinary elimination (catheterization).

**CATHETERIZATION** - A procedure where a tube (catheter) is placed into the urethra to remove urine from the bladder.

**CAUDA EQUINA** - Literally “horses tail”. The collection of peripheral nerves that have exited from the spinal cord, but have not exited from the bony canal. Located at the lumbar level and below, they have the appearance of a horses tail.

**C.C.** - Abbreviation for cubic centimeters - metric term for measurement of volume, usually liquid (30 cc = 1 fluid ounce; 360 cc = one 12 ounce can of soft drink).

**CERVICAL** - Term referring to the neck region.

**CERVICAL VERTEBRAE** - Bones making up the spinal column in the neck region. The upper most 7 vertebrae of the spinal cord.

**CHEST STRAP** - A strap that goes around the chest to keep the body upright in the wheelchair.

**CHIN CONTROL** - A control used to drive a power chair that is activated by chin movements.

**CHRONIC PAIN** - The term typically reserved for those cases where pain is interfering with daily functioning and has been present for greater than a 6-month period, and is generally unresponsive to a variety of interventions such as surgery, medications and local treatment such as heat or ice.

**CILIA** - Hair like structures in the bronchi that move in a wave like fashion to remove pollutants from the lungs.

**CIRCLE SITTING** - Sitting position in which legs are supported on bed, mat, or floor with knees bent and out to the side with bottom of feet touching each other.

**CLEAN TECHNIQUE** - A procedure used in urinary catheterization that helps minimize contamination without using sterile supplies.

**CLOTHES GUARD** - A plastic or cloth attachment to the wheelchair to prevent clothes damage during movement of the wheels.

**COMPLETE INJURY** - An injury to the spinal cord where no neural signals are communicated past the level of injury, either from the brain to body parts below the injury or sensory signals from the lower body to the brain.

**COMPLEX CARBOHYDRATES** - These found components are more chemically complex and take longer to break down to yield energy for the body as compared to simple carbohydrates. Examples are whole grain cereals, carrots and dried beans. Many of these foods are high in fiber, an indigestible form of carbohydrate, and consequently, can help a bowel program.

**COMPRESSION** - Pressure on the spinal cord that can disrupt or stop the flow of information up and down the spinal cord.

**CONDOM** - Also known as prophylactic. A sleeve that can be rolled onto the penis in much the same way as a glove on the finger. Condoms are used to prevent sexually transmitted diseases such as gonorrhea, syphilis and AIDS, and also used to prevent pregnancy, as they prevent sperm from entering the vagina. Condoms are typically made of latex rubber and, therefore, petroleum-based lubricants should never be used, as these will weaken the latex rubber and can lead to breakage or leakage. Other condoms are made from animal tissue and are effective in preventing pregnancy, but are not effective in preventing transmission of AIDS.

**CONDOM CATHETER** - Type of condom that is fitted over the penis. This condom serves as a collection device for urine as it has an opening at its tip where a small tube attaches allowing urine to flow into a collection bag.

**CONSTIPATION** - Difficulty having a bowel movement, typically related to inactivity, dehydration and/or narcotic medications. It is important to maintain regular bowel movements to prevent constipation. Routine use of stool softeners and/or suppositories can also help prevent constipation. However, the proper diet can also help to manage/prevent constipation.

**CONTRACTURE** - Muscle or joint that “gets stuck” in one position and cannot be moved. Happens when the muscle or joint is not used for a long period of time.

**CONTUSION** - A bruise on the spinal cord that can disrupt or stop the flow of information up and down the spinal cord.

**CREDE’** - This term is typically seen in conjunction with the word “technique” or “maneuver,” such as Crede’ technique/Crede’ maneuver, and refers to the technique of pressing on the lower abdomen just above the pubic bone to either initiate a bladder contraction, thereby emptying the bladder of urine, or to help the bladder completely empty once a bladder contraction has started.

**DECUBITUS ULCER** – Breakdown of the skin due to unrelieved pressure.

**DEEP VEIN THROMBOSIS (DVT)** - A blood clot within a vein, typically caused by pooling of blood in the vein. This can prevent blood from returning to the heart, thereby causing the extremity to swell. If a piece of this blood clot breaks loose it may return to the heart and be pumped out to the lungs, where it will block blood vessels going to the lung. If the blood clot is large enough, it can cause death.

**DEHYDRATION** - Excessive loss of water.

**DEPRESSION** - Situational depression is a type of depression that is a fairly common response to a loss of a loved one, failure, problem, loss of a job, or some other event. Usually this “downness” will pass in due order. Adjusting one’s attitude or activities is very instrumental in constructively dealing with this type of depression.

A second type of depression, called bio-chemical depression, is the result of chemical changes that take place in the brain that adversely affect normal brain activity. Counseling or psychotherapy may be helpful with both types of depression. For the later though, antidepressant medication is often needed. Typical symptoms of bio-chemical depression include, but are not limited to, the following: too little sleep or too much sleep, change in appetite, loss of interest in happenings that were once stimulating or enjoyable, lowered sex drive, low energy, short temper, and/or no drive to do anything.

**DIAPHRAGM** - Major muscle of breathing (inspiration) that is attached to the bottom of the lungs and lower ribs. Those with spinal cord injuries below C-3 typically remain in control of the diaphragm.

**DIARRHEA** - A disorder of the intestine marked by abnormal fluid or loose, and/or frequent bowel movements. Sometimes this condition is affected by an infection, medication side effects and/or by diet.

**DIETITIAN** - Is a nutritionist who has completed 1) an approved college degree in nutrition, 2) specific clinical experiences and 3) a registration examination given by the American Dietetic Association. A dietitian analyzes a person's diet for adequacy of energy, protein and other nutrients and also makes practical suggestions for diet improvements.

**DIGITAL STIMULATION** - Rotating a finger in the rectal vault to assist with bowel elimination.

**DISC** - The cushion between each vertebrae of the spine that acts as a shock absorber.

**DISCHARGE PLANNING** - Team plan for transitioning the patient from inpatient to home. Coordinated by the Case Manager it addresses the concerns of the patient, family and treatment team to ensure a smooth and efficient program focused on patient/family needs.

**DIURETIC EFFECTS** – An increase in the secretion of urine. Some ingredients in foods such as caffeine and some medications can cause frequent urination

**DIVERTICULOSIS** – This is the condition where diverticula, small pouches, push out from the wall of the large intestine. If a pouch becomes blocked or infected, an inflamed state of diverticulitis can occur and become problematic.

**DORSAL WRIST SPLINT (ADL SPLINT)** - Allows the wrist to be supported for better hand function. It has a cuff part that can be used to hold and ADL item such as a spoon or fork to increase the use of the hand in self-care activities.

**DRESSING STICKS** - Assist user to reach legs without bending for putting on pants.

**DROP-ARM BEDSIDE COMMUNE** - Portable commode with removable armrests that can be used beside the bed or over the toilet.

**DYSPHAGIA** – A condition in which there is an inability to swallow or difficulty in swallowing. Sometimes foods and beverages modified in texture can compensate for this condition in assuring that foods are safely swallowed

**EDEMA** - Collection of fluid in soft tissues. Typically seen in the feet, it is also referred to as swelling.

**ELASTIC SHOE LACES** - Shoelaces made out of elastic material that are laced into shoes and permanently tied to allow shoes to slip on/off.

**ELBOW EXTENSION SPLINT OR CAST** - Splint used to reduce tightness to allow normal elbow ROM.

**ELECTRICAL STIMULATION (E-Stim)** - The use of electrical current to cause a muscle contraction. Electrodes are placed on the skin over the muscle to be worked. It can be used to strengthen a weak muscle, maintain muscle tone of non-functioning muscle, or re-educate muscle to work. It cannot strengthen a muscle that does not have active movement.

**ELECTROMYOGRAPHIC (EMG)** - An electrical tool used for evaluation and treatment of muscles.

**ENABLER** - A person who encourages (“enables”) directly or indirectly the dysfunctional behavior of another person. In spinal injury, an enabler might meet his or her own needs by indirectly encouraging dependency or helplessness from the injured person. Such dysfunctional relationships often are not recognized by either party.

**ENDURANCE LEVEL** - Tolerance level for activities can be measured in weight, repetitions or length of time it takes to complete an activity.

**ENVIRONMENT CONTROLS** - Devices which enable an individual with spinal cord impairment to control certain aspects of their environment, i.e., television, stereo, telephone, lights, doorways, etc.

**ENVIRONMENTAL CONTROL SYSTEM** - Advanced technology systems for home or office used to control lights, phone, doors, television, bed and other items using remote control devices.

**ENVIRONMENTAL CONTROL UNITS (ECU)** - Electronic system that allows user to control aspects of his/her environment.

**FAMILY TEACHING DAY** - Family members spend the day at Frazier with the patient learning about the specific care needs of the patient that may be required of them when the patient returns home.

**FAT** - One of the six nutrients needed by the body. While some fat is important to good health, excess fat can contribute to obesity and other health issues. Fatty foods include butter, margarine, oils and fats hidden in poultry skin, cheese, sausage, olives and nuts among many other sources.

**FIBER** - Is the portion of a food which is not digestible, which remains in the intestine and becomes a component in stool. High fiber foods promote regular bowel movements that are very important to patients with spinal cord injury. Low fiber and/or high sugar diets encourage constipation.

**FINE MOTOR COORDINATION** - Ability to utilize individual finger movements to complete activities.

**FLACCID** - Absence of tone in muscles and/or soft tissues. Synonymous with the term “limp.” Can be used to describe an extremity such as the leg, a body part such as the penis or a muscle such as the bladder.

**FLACCID BOWEL** - The result of reflexes not working properly and the anal muscles remain relaxed.

**FRAME** - Main part of a wheelchair to which all other parts are attached.

**FRIEDREICH'S ATAXIA** - A progressive disease affecting the nervous system impacting muscles used for movement, bowel and bladder control, speech and heart function.

**GAIT** - The walking pattern a person uses.

**GASTRIC TUBE** - Feeding tube surgically implanted through the abdominal wall into the stomach.

**GRAB BARS** - Mounted onto wall to assist with balance and transfers

**GRIEF PROCESS** – Individuals following a loss typically go through a period of grief. Some elements common in the process are seeing the reality of the loss, experiencing the associated emotional pain, learning to deal with the world given the physiological changes and investing in life in the present.

**GOALPOST** - A control used to drive a power chair that looks similar to a football goalpost.

**GRADE AIDS** - An attachment mounted along with the brakes on the wheelchair that allow the wheels to roll forward, but prevent them from rolling backward when going uphill.

**HALO** - Type of brace used to stabilize the cervical spine (neck) and prevent any movement while healing following surgery. It is embedded into the skull with screws, and a set of rods connects to a body jacket.

**HAND HELD SHOWER (HHS)** - Showerhead with a hose that allows user to hold shower in his/her hand to direct the spray. A HHS with the controls on the handle is recommended.

**HANDRIM** - Rim on the outside of the wheels that provide a surface on which to push to move the chair.

**HAND SPLINT/ORTHOTICS** - Individually fabricated braces that are frequently utilized to prevent the development of contracture and deformity as well as to promote optimal hand functions.

**HEAD CONTROLS** - A control used to drive a power chair that is activated by head movements.

**HETEROTOPIC OSSIFICATION** - Growth of bone tissue in locations where it should not be found. This condition can cause joints to become stiff and limit movement.

**IDEAL BODY WEIGHT** - Is the healthy weight for an individual based on sex, height, frame size and activity factors. Following a spinal cord injury, a person's ideal body weight typically is lowered due to muscle loss and decreased activity levels.

**IMPACTION** - Hard, firm stool that is unable to be removed with a normal bowel movement.

**INCENTIVE SPIROMETER** - Device used to encourage deep breathing.

**INCOMPLETE SPINAL INJURY** - An injury to the spinal cord where some neural signals are communicated past the level of injury, either from the brain to body parts below the injury or sensory signals from the lower body to the brain.

**INCONTINENCE** - Inability to voluntarily control the bladder or bowels.

**INFORMATION AND REFERRAL CENTER** - Many community agencies provide information that may be beneficial to the spinal cord injured person, or, if unable to help, they may refer you to another agency or someone who can help. In the Louisville area, the Crisis & Information Center is a 24-hour telephone service that provides counseling as well as information and referral.

**INTERMITTENT CATHETERIZATION (IC)** - A procedure used to empty the bladder of urine using a catheter at scheduled times.

**LAMINECTOMY** - A surgery to one or more of the vertebra of the spine. The surgery actually removes a portion of the bone that makes up the spinal canal through which the spinal cord passes. The purpose of this surgery is to prevent pressure on the spinal cord in case the spinal cord is swollen and might press against this bone.

**LAP TRAY** - Wooded or plastic tray attached to wheelchair to provide support for arms.

**LARYNX** - Voice Box.

**LATERAL SUPPORTS** - Supports placed on the side of the chair to keep the trunk upright while sitting in the wheelchair.

**LEG STRAPS** - Attach to users legs at thigh, knee, and ankle to assist with moving legs during activity.

**LESION** - A general term meaning damage or an abnormality to some part of the body. A person can have a spinal cord lesion, skin lesion, bone lesion, etc.

**LEVEL OF INJURY** - Refers to the lowest level where the spinal cord is functioning normally.

**LOANER WHEELCHAIR** - A wheelchair that is loaned to a patient from the equipment vendor until the custom wheelchair can be ordered and delivered.

**LONG-HANDLED COMB/BRUSH** – Comb or brush placed at the end of flexible, extended handle to allow user to reach hair.

**LONG-HANDLED SHOE HORNS** - Extra-long shoehorn to allow user to keep heel of shoe up without bending over while putting on shoes

**LONG-HANDLED SPONGE (LHS)** - Bath sponge placed at the end of an extended handle to allow user to reach legs and feet without bending.

**LONG OPPONENS SPLINT** - Splint with a component to position the thumb in order to improve grasp and release during self-care activities.

**LONG SITTING** - Sitting with the legs positioned straight out in front.

**LONG STRAW** - Extended, reusable straw to allow user independently drink from a cup.

**LOWER EXTREMITIES** - The hips, legs and feet.

**LOWER MOTOR NEURON INJURY** - A lower motor neuron injury occurs below the L<sub>1-2</sub>.

**LUMBAR** - Refers to the low back region that includes five vertebrae between the thoracic and sacral regions.

**MAGNETIC RESONANCE IMAGING (MRI)** - A radiology imaging study using a very large magnet in the shape of a doughnut that allows improved precision of images compared with traditional x-rays.

**MANUAL DISIMPACTION** - Using a finger to manually remove stool from the rectum.

**MANUAL RESUSCITATOR** - Device which allows increased amount of air or oxygen to be given to lungs.

**MANUAL WHEELCHAIR** - A wheelchair that requires the user to push the wheels for movement.

**MEDICAID** - Is a federal and state funded medical assistance program that pays for approved and needed medical care for persons who meet specific requirements. If a person could be included in one or more of ten different categories they may be able to receive Medicaid benefits. The spinal cord injured person would be included in the disabled category. To receive Medicaid benefits a person must also meet other requirements including residency, citizenship, income and resource criteria.

**MEDICARE** - Is a federal program that pays for approved and needed medical care for persons who are eligible. It is divided into two parts. Part A is Hospital insurance that protects you against the costs of hospitalization, certain related inpatient, skilled nursing facility care, and home health services. Part B deals primarily with doctors' fees, most outpatient hospital services, and certain other related services. Medicare may be available to the spinal cord injured patient if they are age 65 or older or after they have been receiving Social Security disability benefits for 2 years.

**METABOLISM** - Refers to energy and material changes that occur in the body. It reflects chemical changes that take place with physical growth, body temperature maintenance, energy required for your heart to beat and for breathing to take place, food to digest and many other processes to carry on.. Simply stated, your metabolic rate reveals how quickly your body uses energy. With decreased physical activity, your metabolic rate is likely to decrease. A "low metabolism" infers that the diet should be managed to prevent overloading of calorie/food intake.

**MOBILE ARM SUPPORTS** - Mounted arm supports that assist user with feeding and other ADL's.

**MOTOR NERVES** - Nerves that carry information from the brain to muscles for muscles to contract, create movement.

**MOUTHSTICK** - Allows person with limited arm function to use mouth to access switches.

**MP BLOCK SPLINT** - Splint that supports the joints of the fingers to prevent clawing of the hand and promote normal grasp and release movement during functional tasks.

**MUCUS** - Viscid fluid secreted by the mucous membranes and glands.

**NASOGASTRIC TUBE** - Feeding tube from nose to the stomach.

**NON-SKID BOWL** - Dish with non-skid material on bottom to provide stability during feeding.

**OBESITY** - Refers to an overweight condition that is in an unhealthy range and which increases your risk for developing chronic disease. It is the result of an imbalance in the amount of calories taken in and the amount of energy expended. Nearly half of all people in the US are overweight.

**OCCUPATIONAL THERAPIST** - Therapist who specializes in daily living skills; develops pre-vocational and leisure skills. Designs, fabricates, or applies selected orthotic and prosthetic devices or selected adaptive equipment; Uses specifically designed exercise and activities to enhance upper extremity functional performance.

**ORTHOSIS** - A bracing or splinting device that is placed on a body part for positioning, protection, alignment, support or comfort. Examples include wrist splints, tenodesis splints, oyster shell braces, leg braces, etc.

**ORTHOSTATIC HYPOTENSION** - A condition where the blood pressure suddenly drops when going from a lying to an upright position.

**OSTEOPOROSIS** - The condition of porous bones; the loss of bone density and mineral content which occurs when new bone is not created as quickly as old bone is broken down - It can lead to bone brittleness and the risk of increased fractures.

**OVERHEAD SUSPENSION SLING** - Sling that can be used to support weak muscles against the force of gravity, while allowing the individual to use the hand for functional tasks such as feeding and computer tasks. Moveable rods can allow the individual to adjust the height for different tasks.

**PARAPARESIS** - Weakness or partial paralysis of both legs.

**PARALYSIS** - Inability to control movement in one or more parts of the body.

**PARAPLEGIA** - Loss of motor and/or sensory function in the trunk, abdomen and legs caused by injury to the thoracic or lumbar (trunk or low back).

**PARAPLEGIC** - Paralysis that includes weakness or paralysis both legs.

**PASSIVE RANGE OF MOTION** - Movement of a joint through the full range of movement performed by a caregiver.

**PASSIVE RANGE OF MOTION EXERCISES** - Exercises employed by an individual to move limbs and joints that may be paralyzed. The individual may need someone to provide assistance with these exercises.

**PASSY MUIR SPEAKING VALVE** - Placed on the end of a tracheostomy tube that allows a person to speak and be heard.

**PERISTALSIS** - Wave like muscle contractions that helps move food through the digestive tract.

**PHLEGM** - Thick mucus.

**PHYSIATRIST** - A physician who specializes in physical and rehabilitative medicine.

**PHYSICAL THERAPIST** - Therapist who works to increase overall strength, endurance, and mobility most frequently in the lower extremities. Physical therapists focus on learning techniques to increase bed mobility, transfers, fit patients with an appropriate wheelchair, wheelchair mobility and provide assistance with walking if appropriate.

**PLATE GUARD** - Attaches to rim of plate to allow user to scoop items onto fork/spoon.

**PNEUMONIA** - Infection in the lungs.

**POSTURAL DRAINING** - To help drain the lungs, the patient is placed in a posture (head below feet while lying in bed).

**POWER ASSIST WHEELCHAIR** - A mixture between a manual and power wheelchair. It has the frame of a manual chair, but has power driven wheels to assist with propulsion.

**PRESSURE RELIEF** - The act of taking weight off a part of the body that has had pressure on it for a long period of time.

**PRESSURE SORE** - A breakdown in the skin that starts as a red spot on the skin and can grow into a hole in the body that can extend down to the bone if not properly cared for.

**PRESSURE ULCER** - (see pressure sore)

**PRONE** - Position lying on the stomach.

**PROTEIN** - One of the six classes of nutrients needed by the body, specifically for the growth and repair of tissue. Some high protein foods include egg white, milk products, meat, nuts and dried beans/legumes.

**PUSH HANDLES** - Handles on the back of the wheelchair used by a caregiver to push the chair.

**QUAD COUGHING** - A cough that is assisted by pressing down and up on upper abdominal muscles to increase the productiveness of the cough. Often helpful with persons with quadriplegia or tetraplegia who cannot cough on their own.

**QUADRIPARISIS** - Weakness or partial paralysis of both arms and legs.

**QUADRIPLEGIC** - Paralysis (i.e. inability to move) that affects both arms and legs.

**RAISED TOILET SEAT (RTS)** - Attaches to existing toilet to increase the height for easier transfers.

**RANGE OF MOTION** - Amount of movement possible at joint when limb is moved.

**RANGE OF MOTION EXERCISES** - Movements of a joint or body part through the available amount of motion.

**REACHERS** - Allows user to retrieve items out of reach.

**RECREATIONAL THERAPIST** - A professional who focuses on helping patients develop continued satisfaction in activities of recreation and leisure.

**RECTUM** - Area between the end of the colon and the anus.

**REFLEXIC BOWEL** - When the bowel becomes full, it triggers a reflex that automatically empties the bowel.

**RENTAL WHEELCHAIR** - A wheelchair that is rented by a patient or insurance company to use for a short period of time.

**RESPIRATOR** - Breathing machine.

**RESTING HAND SPLINT (RHS)** - Splint that keeps the hand in a position that supports the wrist and hand to reduce the risk of joints getting stuck in one position.

**SCOOP DISH** - Dish with one side sloped upward to allow user to scoop items onto fork/spoon.

**SOCK AID** - Allows user to put sock on without bending.

**SACRUM** - Refers to the area involving the lowest 5 vertebrae below the lumbar area in the buttock/tailbone region.

**SCAR TISSUE** - Results from the human body's attempt to heal itself, most commonly seen as scar tissue on the skin which, for the most part, can serve its purpose of protecting the body, but scar tissue is never as good as the previously normal tissue. After a spinal cord injury, the body attempts to heal itself; typically, this results in the formation of scar tissue in the spinal cord at the level of injury. Scar tissue in the nerve tissue in the spinal cord slows or stops signals to and from the brain.

**SELF RANGE OF MOTION** - Movement of a joint or body part through the full range of movement performed by the patient. Can be active, active assistive, or passive (See definitions). Often requires the use of fully functioning body parts to move impaired body parts.

**SENSATION** - The body's ability to perceive external stimuli such as odors, taste and vision. In spinal cord injury, is most commonly used to describe the skin's ability to perceive stimulus such as pain, heat, touch, vibration and position in space.

**SHORT OPPONENS SPLINT** - Splint that allows tenodesis use of the hand in individuals with the ability to use their wrists.

**SHOULDER SUPPORT SLINGS** - Sling used to support a weak or painful shoulder and arm, especially in individuals who are working in a standing position in which the arm would dangle without a sling's support.

**SHOWER CHAIR (WITH TILT/RECLINE FEATURE)** - Rolling chair with tall back that will recline to assist with balance/safety in a roll-in shower

**SIMPLE CARBOHYDRATE** - One of the two subgroups of carbohydrate, which, due to their simple chemical structure are quick to be absorbed/used by the body. Examples

include table sugar, corn syrup, honey, and fruit sugar. Often times “simple carbs” offer empty calories, meaning low vitamin/mineral value and should be minimized in a diet plan.

**SIP AND PUFF CONTROL** - A control used to drive a power chair that is activated by a series of sips or puffs on a straw.

**SKIN INSPECTION** - Looking at the skin for areas of redness or skin breakdown, especially over bony areas of the body.

**SKIN INSPECTION MIRROR** - Dual sided mirror attached to extended, flexible handle to assist with inspecting skin for pressure sores.

**SOCIAL SECURITY** - Is the term most often associated with the money paid to a person after they retire. The amount a person receives each month is primarily based on the persons’ work history. A spinal cord injured person may also be able to receive social security after being declared disabled, and does not have to be 65 years of age or older. In this case then, the money received each month is referred to as Social Security Disability Insurance. If the spinal cord injured person has minor children they may also be eligible for social security benefits.

**SOCIAL WORKER** - The social worker from the Department of Admission and Discharge Planning often talks with the patient and/or family shortly after admission to collect background information about the patient. Toward the end of a patient’s hospitalization, the social worker will assist with making arrangements for the patient’s discharge from Frazier.

**SOCK AIDS** - Allows user to put sock on without bending.

**SPASM** - An involuntary contraction of a muscle.

**SPASTICITY** - A state of increased muscle tone and excessive response often occurring when a muscle is stretched. It can cause an arm or leg to feel tight and be difficult to move.

**SPHINCTER** - Round, donut shaped muscle that constricts an opening. For example, the sphincter when closed, keeps stool in the rectum; when the sphincter is relaxed, stool can be passed.

**SPINAL CORD IMPAIRMENT** - Any damage to the spinal cord that results in loss of sensation or muscle control.

**SPOKE GUARDS** - Plastic covering placed over a wheel to protect the spokes from damage.

**STANDING FRAME** – A device that holds a person in a standing position.

**STOOL SOFTENERS** - Medications that are used to keep the stool soft as it moves through the digestive tract making elimination easier.

SUCTION - Use of external vacuum to remove secretions from trachea and lungs.

SUPPLEMENTAL SECURITY INCOME - Pays monthly checks to people who are aged, disabled or blind and who have limited income. People who qualify for SSI usually are eligible for food stamps and a Medical Assistance card which helps pay doctor and hospital bills.

SWIVEL UTENSILS - Utensils attached to moving handle to assist user with getting food into mouth

TED HOSE - Tight fitted stocking that is used to prevent pooling of blood and other body fluids in the lower extremities. TED hose assist in venous blood return to the heart.

TENODESIS - The ability to pinch or grasp objects with the thumb and index finger through the use of a specific wrist movement.

TENODESIS SPLINT - Allows proper positioning of the fingers and thumb when the wrist is bent back to allow one to grasp and release objects.

TETRAPLEGIA - (formally quadriplegia) Loss of motor and/or sensory function in the arms, trunk, and legs caused by injury or disease to the cervical (neck) segments of the spinal cord.

THORACIC - The region involving 12 vertebrae in the spine that runs from the shoulder to the lower ribs. Is below the cervical region and above the lumbar region.

THRESHOLD INSPIRATORY MUSCLE TRAINER

TILT IN SPACE WHEELCHAIR - A wheelchair that tilts backward while keeping the user in a seated position.

TOILET AID - Toilet tissue aid designed to assist user in cleaning perineal area when reaching is difficult..

TRACHEA - Wind pipe carrying air to and from the lungs.

TRACHEOSTOMY - Opening in the throat, through trachea which allows a tube to be inserted.

TRANSFER - Technique used to move from one surface to another.

TRANSFER BOARD - Plastic or wooden board used to bridge the gap between two surfaces.

TRICEPS - Group of muscles located on the back of the upper arm that act to straighten out the elbow.

TUB CHAIR/TUB BENCH WITH A BACK - Placed into tub or shower to provide surface for bathing.

TUB/SHOWER CHAIR - Fits into tub or shower to provide surface for bathing. A shower chair with a back and seatbelt is recommended for increased stability and balance.

TUB TRANSFER BENCH - Base of bench extends outside tub to make transfers easier. A tub transfer bench with back and seatbelt is recommended for increased balance and stability.

UNIVERSAL-CUFFS (U-Cuff) – Splint that allows user to hold ADL items without grasp

UPPER MOTOR NEURON INJURY - An upper motor neuron injury occurs above the L<sub>1,2</sub> level.

URINARY TRACT INFECTION (UTI) - A bacterial or fungal infection occurring in the kidneys, ureters or urinary bladder.

VENTILATION - Movement of air in and out of lungs.

VENTILATOR - Machine used to move air in and out of the lungs for individuals unable to adequately control respiratory muscles.

VENTILATOR TRAY - An attachment used to transport a ventilator on the wheelchair.

VERTEBRA - A single bone in the spinal column.

VERTEBRAE - Plural form of vertebra.

VITAL CAPACITY - Maximum amount of air a person can breathe in and breath out

VOCATIONAL REHABILITATION - A state funded agency that assists individuals with disabilities return to employment through the provision of continued education, job training, additional therapy and assistive technologies.

WASH MITT - Large mitt that can be used by a person with limited hand function to bathe.

WORKER'S COMPENSATION - Programs funded by employers, insurance companies and government to pay employees for some part of the cost incurred if they were injured on the job. Depending on the policy, the compensation may involve a monthly benefit as well as coverage for medical care, equipment and other support services.

WRIST COCK UP SPLINT - Splint that supports the wrist in a bent back position for better hand use.