

# Outpatient Upper Extremity Restoration Program

## **General Information About Upper Extremity Issues**

Following an acquired brain injury due to stroke or trauma, many individuals are left with decreased functional use of an arm, hand and fingers. This injury has a significant impact on their ability to manage self-care and home management tasks, and to participate in community activities.

Occupational therapists initially provide intervention that focuses on therapeutic and/or neuromuscular exercises, functional tasks and strategies, modalities and splinting, as well as teaching one-handed techniques and providing education regarding adaptive equipment. Despite their best efforts, many times individuals experience continued limitations in their hand and arm use that affects daily living. Recently, there have been some new and promising approaches to addressing these concerns.

## **Constraint Induced Activity Program**

This program has been developed for individuals who have limited use of one arm, and are at least three months past the date of their injury due to stroke or trauma that have limited use of one arm. The aim is to improve the functional use of participants' affected arm by restraining the use of the non-affected arm. Participants must have some movement in the involved arm, the ability to extend their wrist, voluntarily open their fingers and have good balance with some protective extension in case of a fall. The program is scheduled for two weeks. Participants wear a mitt on the non-affected arm for 90 percent of each day while awake. They participate in structured activities and exercises in a therapeutic environment for six hours per day with a one hour rest period. They are also provided functional tasks to perform at home. This treatment technique has been shown to improve function during the training period but also to transfer to real life daily living situations.

## **SaeboFlex Orthosis Training**

The SaeboFlex orthosis is a device used to assist neurological patients with performing grasp and release activities using their affected arm and hand. The SaeboFlex is a spring-loaded finger extension orthosis. It positions the wrist and fingers in extension in preparation for functional activity or exercise. The user grasps an object by voluntarily flexing his or her fingers. The extension springs assist in reopening the hand to release the object. The recommended exercises, along with functional activities, can be performed in the clinic or at home while using SaeboFlex.

Individuals most appropriate for the SaeboFlex exhibit some shoulder and elbow movement, but are unable to open their hand secondary to spasticity. Active movement requirements include shoulder elevation at 15 degrees, elbow flexion at 15 degrees and the ability to flex digits at least one quarter ranges in a fist position.

## **Referrals**

Individuals who wish to be evaluated for this program need a physician referral.

**For admission information or to make a referral please call 704-355-4300 or fax information to 704-355-7873.**