



Frank Hymson uses G-eo with the aide of physical therapist John Feely, PT, MS

MossRehab – World-Renowned in Physical Medicine and Rehabilitation, Research and Technology

MossRehab continues to pioneer the use of revolutionary technologies to help patients with disabling injuries relearn movement and regain strength and function. For the 18th year, MossRehab earned a spot on the *U.S. News & World Report* list of “America’s Best” rehabilitation hospitals. In 2011, the facility advanced its rankings to #9 in the U.S. and #1 in Pennsylvania.

MossRehab Debuts G-eo Systems Evolution

Going up or down stairs is often as daunting for a patient with a disability as climbing a mountain. MossRehab has a new robotic device to help patients train for that task.

MossRehab is the first in the United States to use G-eo Systems Evolution, a robotic device which looks like a combination stair-stepper and elliptical machine. The system helps patients practice walking and also mimics the motion of step climbing and descending. “Patients who have difficulty with stair climbing or walking can be trained on the G-eo

system prior to real world training with less risk to patient and staff,” said Alberto Esquenazi, MD, Chief Medical Officer at MossRehab and Director of the Sheerr Gait and Motion Analysis Laboratory.

Frank Hymson (shown above) has already seen improvement after about eight sessions with G-eo. Hymson, 51, of Churchville, Pa., had a tumor removed from his spinal cord last July which resulted in the loss of sensation and weakness in the lower portion of his body, particularly on his left side. He attributes increased strength and sensation in his calves and thighs to walking on the device.

Unique Hand Splint Enhances Independence

A stroke survivor was delighted when he was able to hold a soda bottle while attending a party. Other survivors have been pleased to grip a mixing bowl while cooking or hold onto their waistband while getting dressed. All are patients at MossRehab who accomplished these tasks wearing the RELEAS™, a unique hand splint invented by Joseph Padova, OT,



The RELEAS™ hand splint

a longtime MossRehab occupational therapist. MossRehab is the first facility in the country to offer the device and Einstein Healthcare Network recently patented the splint. A licensure was made between Einstein and Tiburon Medical Enterprises to mass produce the RELEAS and distribute it throughout the United States.

Half of the country's estimated 5.8 million stroke survivors have upper limb disabilities. Hands are notoriously difficult to restore to function after a stroke. The RELEAS is individually fitted by trained therapists to enable patients to open and close their hands to grip items while the other hand does the work, helping to enhance independence. The device has been tested with excellent results in patients even 20 years after their stroke.

MossRehab First in the U.S. to Offer Therapeutic Use of ReWalk™ Device

In a groundbreaking move, MossRehab is the first facility in the country to offer ReWalk-I™, an institutional version of ReWalk™, the only motorized exoskeleton that is approved by the FDA to be used in a rehabilitation setting. Patients with leg paralysis resulting from a spinal cord injury can now participate in self controlled gait training using ReWalk. The therapeutic use of ReWalk, also called ReWalking, involves physical therapists training patients to use the device to stand, sit, walk, and in some cases climb and descend stairs.

This next stage in ReWalk's evolution follows the successful clinical trials to determine its safety, efficacy and user satisfaction completed at Moss-Rehab. With its international reputation for clinical rehabilitation and research programs, MossRehab

was the exclusive clinical trial site in the United States for ReWalk; the trials concluded in August 2011. The information gained from the trial cleared the way for this next exciting phase to begin, allowing many patients to benefit from this technological advancement.

According to Alberto Esquenazi, MD, Chair of the Department of Physical Medicine and Rehabilitation at MossRehab who led the clinical trials for ReWalk and has been instrumental in developing the device, "Even though there isn't scientific proof yet, research subjects in the trials have reported reduction in spasticity and pain, and improved cardiopulmonary fitness and bladder and bowel management. We are thrilled to be the first institution in the country to offer this revolutionary therapy to help improve the health and well-being of people with paraplegia."



Ágnes Fejerdy uses ReWalk I