Assessing Gait and Mobility with

SmartStep[™] System

The SmartStep[™] System is an innovative biofeedback and monitoring system for lower-limb rehabilitation. The system enables clinicians to assess, treat, and monitor patients who have compromised lower-limb functions.

Who may benefit from SmartStep™?

- Individuals with post-operative orthopedic challenges and trauma patients
- Individuals who suffer from neurological impairment or disability
- Individuals with a sports injury

How does SmartStep[™] work?

The SmartStep[™] insole is worn in the patient's shoe. It measures the force applied by the heel and forefoot of the affected limb. The data is received and analyzed by the wireless miniature portable control unit worn around the ankle. This data is then transmitted to a computer running the SmartStep[™] software. The interactive training software enables self-training and exercise in front of a multimedia display.

What types of treatment can SmartStep[™] offer?

Patients can participate in gait-training exercises using auditory or visual display at different threshold levels depending upon ability. Patients can also perform gait-training exercises with interactive multimedia display games.

Advantages to using SmartStep[™] in rehabilitation:

The system can provide clinicians and patients with:

Self-treatment and exercise options with multiple repetitions

 Instantaneous visual and auditory feedback throughout the entire exercise

 Practice in various environments, platforms, and conditions

 Increased patient motivation through interactive training software





The Marianjoy Assistive Rehabilitation

Technology Institute offers solutions to
everyday problems of daily living encountered
by individuals with disabilities. The Institute
consists of seven distinct centers that apply
advancements in technology to benefit
individuals with disabilities through maximizing
functional independence, as well as expanding
educational, vocational, recreational, and
communicative opportunities.

- Assistive Communication and Daily Living Center
- Balance and Vestibular Center
- Driver Rehabilitation Center
- Gait Analysis and Mobility Center
- Prosthetic and Orthotic Center
- Swallowing and Voice Center
- Wheelchair and Positioning Center



To make an appointment or for more information, call

630-909-7150

or visit Marianjoy.org