Evaluation of MyoPro2 Motion G for Assisting Upper Limb Function in Persons with Impaired Function due to Stroke

Northwestern University is participating in a study to evaluate the ability of the MyoPro2 Motion G elbow-wrist-hand brace, to assist upper limb function in persons with impaired function due to stroke. Specifically, this brace helps move the elbow and fingers when intended using small motors that are triggered when an attempt is made to use the arm muscles.

The research will take place at the Northwestern University Prosthetics-Orthotics Center (NUPOC) which is located at 680 N Lake Shore Drive in Chicago.

During the study, upper limb functional data will be collected without any device, with a resting splint and with the MyoPro2 Motion G will be collected. You will first be fit with the devices, then given two training sessions for each device, and then tested in each condition on separate days. Testing involves a mix of tasks to be performed with the impaired upper limb.

The study requires 7 visits spread over three weeks.

Please contact Jessica Yohay (312) 503-5729 or jessica.yohay1@northwestern.edu in the Department of Physical Medicine and Rehabilitation if you are interested in learning more about the study or potentially participating.

Participants must meet the following criteria:

- be between 18 and 85 years
- have arm impairment due to stroke 12 months or more previous
- be taller than 5 feet tall and between 110 and 250 pounds with an arm size that will fit the dimensions of the devices to be tested
- have some minimal amount of muscle strength in the arm and some shoulder motion
- be able to create detectable muscle signals in the arm
- have not used a myoelectric arm brace for at least 6 months
- be able to speak and read English

Subjects will be screened to confirm eligibility by study doctors.

Participants will receive compensation for taking part in this study.