A Novel Wrist Wearable Sensor System to Promote Hemiparetic Upper Extremity Use in Subacute Stroke Survivors

NCT06797154

Status	RECRUITING
Phase	Not Applicable
Sponsor	Spaulding Rehabilitation Hospital
Enrollment	88 participants

Key Eligibility Criteria

Inclusion (6)

- Male or female, 18-85 years of age at the time of enrollment
- Anterior circulation ischemic stroke at least 1 month and no more than 6 months prior to study enrollment;
- Unilateral upper extremity hemiparesis as characterized by initial scores on upper limb subtest of the Fugl-Meyer Assessment (FMA-UE) between 20 and 45;
- Intact cognitive function to understand the study procedures and goal setting (MMSE score above 23 and able to follow 3step command) ;
- Owning a smartphone (iOS or Android) and being familiar and comfortable with and owning a tablet or smartphone

... and 1 more (see full listing online)

Exclusion (9)

- Severe spasticity (defined as a Modified Ashworth scale score of 3 or more) that would prevent safe performance of UE tasks;
- Visual impairments as assessed by the NIH Stroke Scale Visual Field subscale (only subjects with no visual loss will participate in the study); or hemispatial neglect that would impair the subject ability to see the feedback on the app screen (as assessed with the Mesulum cancellation test);
- Individuals with open wounds or recent fracture (less than 3 months) in the upper extremity, fragile skin or active infection;
- Upper-extremity orthopedic injuries or severe pain resulting in movement limitations;
- Diagnosis of other neurological disease; (i.e., Parkinson's disease, multiple sclerosis, ...);

... and 4 more (see full listing online)

Locations (1 total)

Spaulding Rehabilitation Hospital, Boston, Massachusetts, United States