

## Scientific/Clinical Workshop

### Workshop Title

Clinical Implementation of a Robotics Program Into a Rehabilitation Continuum

### Workshop Responsible

Trent Maruyama (Barrow Neurological Institute Neuro-Rehabilitation Center)

### Speakers

Trent Maruyama, Jeremy Palmiscno

### Attendee Engagement

We will be providing a interactive didactic workshop where we will be showing some videos of the programs and explaining our program to participants. We want to encourage this interactive session to include questions about how we set this up and providing consultation to help others implement a similar program at their facility through discussion and brainstorming sessions. We plan to have a device to demonstrate and show the utility of the devices and how to manipulate the condition of observation to meet the needs of the patient. We use this in the student and open gym programs to serve a wider variety of our patient population. Here we will show that there is more potential of the device other than the defined use cases suggested by the company by adapting the tool/environment to fit the needs of the patient. Some of this may be off label but a benefit for the patient.

### Abstract

At Barrow Neurological Institute's Rehabilitation Services, we focus on clinical utilization of rehabilitation technology and robotics to provide our patients with a diverse opportunity to benefit from the advancements in delivery of therapy services.

Clinically implementing a robotics program throughout a rehabilitation continuum requires a team approach. We have developed a program called the Barrow Assistive Technology (BAT) Committee. to research potential devices, assess their utility across the continuum and operationalize the use of the devices to ensure our patients have the accessibility and opportunity to benefit from their use.

We continue to look for innovative ways to provide increased accessibility and utility of the devices. We have developed an open gym concept in our outpatient services through a "membership" to allow more opportunities outside the traditional program to access the devices. More recently we have piloted a proof of concept program in our IRF in association with a local Occupational Therapy University to give the students an opportunity to work with patients in a supervised setting using robotics and technology. We look to find as many ways to use the device or integrate the device with other therapy techniques to optimize the utility of the device. The benefits of this program are multifold;

1. It allows the patients more access to the devices and increases the amount of therapy they can obtain in our program.

2. Expose the students to the devices that are in the market and show them the benefits that these devices can provide. This helps to grow the knowledge of robotics/technology in the therapy community.
3. Provide the students with another opportunity for direct patient care and give them a higher level educational experience which we hope will lead to more well rounded therapists
4. Potential for increased outcomes

