

## MYOMO “My Own Motion”

MYOMO is a myoelectric brace for those who suffer from arm paralysis post-stroke or neuro-muscular injury. It assists the user with flexion and extension at the elbow to help with lifting, eating or other activities. This neuro-robotic orthosis is driven by the user’s EMG signal; there is not electrical stimulation in the device.

HHVNA has 2 full sets of this equipment which was purchased through grant funding from the George C. Wadleigh Foundation and many of our therapists have become MYOMO Certified Clinicians. This device is available to our home care clients as part of an appropriate care plan to:

- Enhance and Increase Voluntary Arm Movement
- Regain Range of Motion in an Impaired Arm
- Reclaim Ability to Perform Activities of Daily Living

### **Appropriate Candidates include:**

- Arm weakness or paralysis due to CVA, TBI, SCI, other CNS impairment
- Full Passive Range of Motion
- Some Active Range of Motion
- May have mild to moderate tone
- May have some shoulder subluxation
- Able to cognitively participate in therapy activities

### **Contraindications for MYOMO Use:**

- Shoulder dislocation or subluxation of 3 fingers
- Severe pain in shoulder or arm
- Elbow Contracture or acute injury in the arm
- Unable to cognitively participate in therapy activity
- Flexor tone greater than 3 on the Modified Ashworth Scale

Appropriate candidates should be screened by one of our certified clinicians to evaluate the potential for use. Please speak with your clinical manager or therapy program manager to discuss client’s who may benefit from a trial and to make the appropriate referral to our certified team.

## Instructions for Certified MYOMO Clinicians:

### **How do I get the device?**

- ✓ Put in a facilities request by email (Mindy Janackas) or voice mail (978-552-4189) to our Facilities Assistant and let her know what you need (ie: Right vs Left, Battery Charger, Tablet and charger)
- ✓ The devices are stored and tracked out of the Lawrence office, if you need to have the device sent to another branch, request it be sent via courier and the date which you would need it.

### **Before and After Use:**

- ✓ Check to make sure the MYOMO device is properly charged before use with patients and that you have the necessary equipment (tablet, charger, sensor pads) for the appointment. Be sure device is cleaned and well stocked for the next use.

### **Contact Information:**

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Following a home care episode, the client has a couple of options to pursue if they choose to do so. Clients can continue their therapy with an outpatient provider at one of the Myomo Clinical Partner sites or they can pursue custom bracing. Custom Bracing Options are now available with the MyoPro Brace. Visit [www.myopro.com](http://www.myopro.com) for more information about our O&P partners and the MyoPro. For more information about how you can refer your patients for their own device, contact: [info@myopro.com](mailto:info@myopro.com)

The MyoPro brace is the custom myoelectric limb orthosis that is available to clients. Orthotics and Prosthetics vendors can bill insurance directly and get reimbursement for this device. There is a new hand component for positioning that has the ability to add adaptive equipment such as utensils for grooming and feeding. The custom device has increased comfort and fit with less slippage and built in sensors for easier donning and doffing.

Your role in the home setting is to introduce and trial the off the shelf version as a modality within your patient centered plan of care and to evaluate the efficacy of the device. If the device is effective and the client wishes to pursue their own device, you can provide information to clients regarding this custom option and connect them with an O & P provider. The O & P provider will then assist them with options for obtaining their own device.

## HHVNA Documentation Requirements:

### ***Initial Evaluation should include assessment of the following areas:***

Pain Level

AROM and PROM of affected UE

Strength Assessment (biceps and triceps, could include shoulder/hand as applicable)

Sensation: Light touch, Sharp/Dull, Proprioception (intact, diminished, absent)

Functional Assessment

Any standardized assessment you deem appropriate ie (Quick DASH, outcome measure)

[http://www.dash.iwh.on.ca/system/files/quickdash\\_info\\_2010.pdf](http://www.dash.iwh.on.ca/system/files/quickdash_info_2010.pdf)

Modified Ashworth Scale (elbow, shoulder and wrist or combined assessment):

The MAS Grading Scale for hypertonia

- 0 –No increase in muscle tone
- 1 – Slight increase in muscle tone, manifested by a catch and release or by minimal resistance at the end of the range of motion when the affected part is moved in flexion or extension
- 1+ -Slight increase in muscle tone, manifested by a catch, followed by minimal resistance throughout the remainder (less than half) of the ROM
- 2 –More marked increase in muscle tone through most of the ROM, but affected part moves easily
- 3 –Considerable increase in muscle tone, passive movement difficult
- 4 – Affected part rigid in flexion or extension

### ***Orders must be obtained from MD***

Obtain verbal orders, document it in a call log and add it to your plan of care

If orders come over on the referral, they must be added to your plan of care

### ***Intervention:***

MYOMO must be documented as an intervention in your POC, you should use the General intervention and free text. Example: G1: MYOMO Application to LUE for tone management and muscle re-education x 10-14 treatments.

### ***Goals:***

Well-written goals that are measurable and meaningful should be written, regardless of your decision to use the modality. Some examples may be:

- Pt will demonstrate the ability to decrease biceps tone with use of biofeedback to prepare for functional use of the affected upper extremity during ADL activities.
- Pt will demonstrate ability to drink from a cup with the left upper extremity with minimal assistance to improve functional use of the affected arm.
- Pt will use left upper extremity as a functional stabilizer during writing tasks to facilitate independence with writing.
- Pt will demonstrate the ability to lift a basket with both arms with moderate verbal and tactile cueing to facilitate resumption of assisting with laundry tasks.
- Pt will complete sit to stand transfers independently pushing up from the armrests with bilateral upper extremities to steady self in preparation for ambulation.

**Documentation within your visit note:**

Document under the “Modalities” section of the OT note and documentation should include:

Modality=MYOMO

- ✓ Body part= LUE and Mode:bicep/ tricep/ dual mode
- ✓ Intensity=Settings: Bicep\_\_\_Tricep\_\_\_ (this would be a number rating shown on the device or tablet)
- ✓ Duration=of time used during the session (15 minutes)
- ✓ Response=Patient tolerance (tolerated treatment well with no complaints of pain or discomfort)
- ✓ Comment Box= Type of activity performed (Practice volitional flexion & relaxation-sitting, Bilateral flexion, Basket Lift, Drinking Task, Cane Push, Standing Table Push, Sit to Stand-One hand): Use the examples provided in your Myomo manual in exercise levels 1 and 2 for guidance and progression. You can also include any teaching in this box or in the teaching section of your clinical note ( donning the device, repetition, neural plasticity, mental imagery, etc.)

**Reassessment documentation:**

- ✓ Reassess the objective areas that were assessed on initial evaluation and document the changes that have occurred
- ✓ Be certain that your documentation supports the effectiveness of therapy interventions
- ✓ Address the goals and discharge or update as indicated
- ✓ Document any treatment plan changes that you feel are indicated (interventions, frequency)
- ✓ Include a clinical judgment statement that supports continued treatment, how the patient is responding to therapy and include a reasonable and predictable end point to achieve stated goals ie. ( Mrs. Jones is making excellent progress, has demonstrated decreased tone, increased strength and has begun using her arm as a stabilizer to assist with functional tasks. She will benefit from continued skilled OT interventions x 3 weeks to achieve her stated goals).