**Medical Coverage Policy |** Myoelectric Prosthetic and Orthotic Components for the Upper Limb

**EFFECTIVE DATE:** 08|01|2026
**POLICY LAST UPDATED:** 04|15|2026

## OVERVIEW

Myoelectric orthotic devices use neurologic sensors, microprocessor units, and electric motors to provide self-initiated movement. Myoelectric prostheses are powered by electric motors with an external power source. The joint movement of an upper-limb prosthesis or orthosis (eg, hand, wrist, and/or elbow) is driven by microchip-processed electrical activity in the muscles of the remaining limb or limb stump.

## MEDICAL CRITERIA

Not applicable

## PRIOR AUTHORIZATION

Not applicable

## POLICY STATEMENT

**Medicare Advantage Plans and Commercial Products**

The following are considered not covered for Medicare Advantage Plans and not medically necessary for Commercial Products as the evidence is insufficient to determine that the technology results in an improvement in the net health outcome:

- Myoelectric controlled upper-limb orthoses
- Advanced upper-limb prosthetic components with both sensor and myoelectric control (e.g., LUKE Arm)

## COVERAGE

Benefits may vary between groups and contracts. Please refer to the appropriate Benefit Booklet, Evidence of Coverage or Subscriber Agreement for applicable not medically necessary/not covered benefits/coverage.

## BACKGROUND

**Myoelectric Orthoses**

A powered upper extremity range of motion assist device is intended to restore function to arms and hands of patients who have sustained an injury, or who suffer from cerebral palsy, neuromuscular disease, or stroke. It is a custom fabricated upper arm orthosis that has noninvasive sensors on the surface of the skin. The sensors read the nerve signals and activate small motors in the orthosis, allowing the patient to move their arm or hand. It consists of the custom fabricated orthosis; noninvasive sensors, motors, and electronics that amplify and process the nerve signals; and batteries.

**MyoPro (Myomo)**

The MyoPro (Myomo) is a myoelectric powered upper-extremity orthotic. This orthotic device weighs about 1.8 kilograms (4 pounds), has manual wrist articulation, and myoelectric initiated bi-directional elbow movement. The MyoPro detects weak muscle activity from the affected muscle groups. A therapist or prosthetist/orthoptist can adjust the gain (amount of assistance), signal boost, thresholds, and range of motion. Potential users include patients with traumatic brain injury, spinal cord injury, brachial plexus injury, amyotrophic lateral sclerosis, and multiple sclerosis. Use of robotic devices for therapy has been reported. The MyoPro is the first myoelectric orthotic available for home use.

**Intent Decoding Modules by Coapt, LLC**

Intent Decoding Modules (IDM) uses pattern-recognition-based approaches from three or more electromyographic (EMG) signals to decode complex EMG patterns in determining an individual's real-time movement intent and translate it into command signals for the prosthesis. IDMs use academically developed algorithms with an array of three or more EMG sensors to decode the individual's muscle activity patterns. This module technology enables more intuitive and precise operation of the prosthetic upper limb, allowing individuals to perform a wide range of activities of daily living with greater ease and efficiency. IDMs eliminate the need for mode switching and can use at-home calibration to accommodate muscle signal changes associated with muscle fatigue, co-activity, or electrode impedance changes.

The MyoPro by Myomo is a powered arm and hand orthosis designed to assist individuals with paralyzed or weakened upper extremities. It uses myoelectric technology to amplify weak muscle signals, enabling users to regain control over their movements for rehabilitation and daily activities. On the other hand, Coapt's Intent Decoding Modules are advanced pattern recognition systems that decode natural muscle signal patterns to provide intuitive control for upper limb prostheses. This technology enhances the functionality of prosthetic devices, making them feel more like a natural extension of the user's body. While MyoPro focuses on amplifying existing muscle signals for rehabilitation, Coapt's modules emphasize intuitive control and integration with prosthetic limbs.

The Carbonhand by Bioservo is an assistive device in the form of a grip-strengthening glove, with pressure sensors that detect when the user initiates a grip and then applies the power needed to ensure a firm grip. The more force the user applies, the more Carbonhand enhances it. By compensating for the loss of grip strength and hand function, the user can perform daily activities that they find difficult to perform or cannot do without the glove. Artificial tendons and electric motors add power to the glove, intuitively and completely dynamically. Carbonhand ensures a firm grip and endurance for people with impaired hand function. This enables activities of daily living, at work or during rehabilitation.

For individuals with upper-extremity weakness or paresis who receive a myoelectric powered upper-limb orthosis, the evidence includes a small within-subject study. Relevant outcomes are functional outcomes and quality of life. The largest study (N=18) identified tested participants with and without the orthosis but did not provide any training with the device. Performance on the tests was inconsistent. Studies are needed that show consistent improvements in relevant outcome measures. Results should also be replicated in a larger number of patients. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome the effects of the technology on health outcomes.

For individuals who have a missing limb at the wrist or higher who receive sensor and myoelectric controlled upper-limb prosthetic components, the evidence includes a series of publications from a 12-week home study. Relevant outcomes are functional outcomes and quality of life. The prototypes for the advanced prosthesis were evaluated by the U.S. military and Veterans Administration. Demonstration of improvement in function has been mixed. After several months of home use, activity speed was shown to be similar to the conventional prosthesis, and there were improvements in the performance of some activities, but not all. There were no differences between the prototype and the participants' prostheses for outcomes of dexterity, prosthetic skill, spontaneity, pain, community integration, or quality of life. Study of the current generation of the sensor and myoelectric controlled prosthesis is needed to determine whether newer models of this advanced prosthesis lead to consistent improvements in function and quality of life. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

## CODING

### Medicare Advantage Plans and Commercial Products

The following HCPCS code(s) are not covered for Medicare Advantage Plans and not medically necessary for Commercial Products:

**A8005** Powered, cable driven grip assist glove, hand, finger, includes microprocessor, pressure sensors, all components and accessories, custom fitted (New Code Effective 4/1/2026)

**A8006** Powered, cable driven grip assist glove, hand, finger, includes pressure sensors, glove replacement only (New Code Effective 4/1/2026)

**L6700** Upper extremity addition, external powered feature, myoelectronic control module, additional EMG inputs, pattern-recognition decoding intent movement

**L8701** Powered upper extremity range of motion assist device, elbow, wrist, hand with single or double upright(s), includes microprocessor, sensors, all components and accessories, custom fabricated

**L8702** Powered upper extremity range of motion assist device, elbow, wrist, hand, finger, single or double upright(s), includes microprocessor, sensors, all components and accessories, custom fabricated

## RELATED POLICIES

Not applicable

## PUBLISHED

Provider Update, June 2026
Provider Update, September 2025
Provider Update, August 2024
Provider Update, May 2023
Provider Update, November 2022

## REFERENCES


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