MEDICAL POLICY

POLICY TITLE	UPPER LIMB PROSTHESES
POLICY NUMBER	MP 6.052

CLINICAL BENEFIT	☐ MINIMIZE SAFETY RISK OR CONCERN. ☒ MINIMIZE HARMFUL OR INEFFECTIVE INTERVENTIONS. ☐ ASSURE APPROPRIATE LEVEL OF CARE. ☐ ASSURE APPROPRIATE DURATION OF SERVICE FOR INTERVENTIONS. ☒ ASSURE THAT RECOMMENDED MEDICAL PREREQUISITES HAVE BEEN MET. ☐ ASSURE APPROPRIATE SITE OF TREATMENT OR SERVICE.
Effective Date:	**4/1/2026**

POLICY

Preparatory Prosthesis

A preparatory prosthesis may be considered **medically necessary** after surgery to prevent edema of the residual limb. Additions are **investigational** for preparatory prosthesis since these have all initial components.

All other uses of preparatory prosthesis are considered **investigational** as there is insufficient evidence to support a general conclusion supporting the health outcomes or benefits associated with this item.

Passive Functional

Passive functional prosthesis does not include any mechanical working parts. The passive prosthesis relies on manual repositioning, typically using the opposite arm, and cannot restore function. A passive functional prosthesis may be considered **medically necessary** only when there is clear documentation that the requested prosthesis is required to perform activities of daily living (ADL's).

All other uses of passive functional prosthesis are considered **investigational** as there is insufficient evidence to support a general conclusion supporting the health outcomes or benefits associated with this item.

Body-Powered Prostheses

A body-powered prostheses will consist of a socket or interface, suspension system, harness, wrist unit, terminal device (such as a hook or hand), and possibly a triceps cuff (below elbow), hinges (below elbow), elbow (above elbow) and a shoulder (if a shoulder disarticulation or higher).

Body-powered upper extremity prostheses may be considered **medically necessary** when ALL the following are met:

- The member has history of upper limb amputation or absence of upper limb(s);
- A certified prosthetist determines a body-powered upper extremity prostheses is appropriate to meet the member's functional needs.

Sockets and Suspension Systems:

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No more than two test (diagnostic) sockets may be considered **medically necessary** for an individual prosthesis without additional documentation of medical necessity. No more than two of the same socket inserts are allowed at the same time. Socket and socket insert replacements may be considered **medically necessary** if there is documentation of functional and/or physiological need. Explanation to include but is not limited to:

- Changes in residual limb
- Functional need changes
- Irreparable damage due to wear and tear
- Wear and tear due to excessive weight
- Prosthetic demands of a very active amputee

Terminal Devices (Above and Below Elbow, Shoulder, Hand)

Terminal devices may be considered **medically necessary** for work and when essential to ADLs. Terminal devices are considered **investigational** when used solely for activities related to sports or recreation.

All other uses of body-powered prostheses are considered **investigational** as there is insufficient evidence to support a general conclusion supporting the health outcomes or benefits associated with this item.

Electric/ Myoelectric Prostheses

Electric and Myoelectric upper limb prosthetic components may be considered **medically necessary** when the following conditions are met:

- The individual has an amputation or missing limb at the wrist or above (forearm, elbow, etc.); and
- Standard body-powered prosthetic devices cannot be used or are insufficient to meet the functional needs of the individual in performing ADLs; and
- The remaining musculature of the arm(s) contains the minimum microvolt threshold to allow operation of a myoelectric prosthetic device; and
- The individual has demonstrated neurological and cognitive function to operate the prosthesis effectively; and
- The individual is free of co-morbidities that could interfere with function of the prosthesis (neuromuscular disease, etc.); and
- Functional evaluation indicates that with training, use of a myoelectric prosthesis is likely to meet the functional needs of the individual (e.g., gripping, releasing, holding, and coordinating movement of the prosthesis) when performing ADLs. This evaluation should consider the individual needs for control, durability (maintenance), function (speed, work capability), and usability.

A prosthesis with individually powered digits, including but not limited to, a partial hand prosthesis, is considered **investigational**. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with these item(s).

Myoelectric upper limb prosthetic components are considered **investigational** under all other conditions, as there is insufficient evidence to support a general conclusion supporting the health outcomes or benefits associated with this item.

Additions and Accessories

Accessories such as sheaths, socks, hinges, switches, extensions, adaptors, cables for residual limbs, etc. may be considered **medically necessary** when these appliances aid in or are essential to the effective use of the prosthetic limb. Additions should be billed on the same claim as the base procedure when supplied at the same time as the base procedure.

Adjustments

Adjustments and/or modifications to the prosthesis required by wear and tear or due to a change in individual's condition (such as growth in a child) or to improve the function may be considered **medically necessary**.

Repairs

Repairs necessary to make the prosthetic functional may be considered **medically necessary**. The expense for repairs may not exceed the estimated expense of purchasing another prosthesis.

Replacement

The life of a prosthesis is approximately 5-years. A replacement prosthesis may be considered **medically necessary** only if the previous prosthesis is no longer functional. Requests for upgrades/newer technology will be reviewed for medical necessity.

Cross-Reference:
MP 6.042 Lower Limb Prostheses

PRODUCT VARIATIONS

This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations. Please see additional information below.

FEP PPO - Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at: https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies

DESCRIPTION/BACKGROUND

Upper-Limb Amputation

The need for a prosthesis can occur for a number of reasons, including trauma, surgery, or congenital anomalies.

Treatment

The primary goals of the upper-limb prostheses are to restore function and natural appearance. Achieving these goals also requires sufficient comfort and ease of use for continued acceptance by the wearer. The difficulty of achieving these diverse goals with an upper-limb prosthesis increases with the level of amputation (digits, hand, wrist, elbow, shoulder), and thus the complexity of joint movement increases.

Upper-limb prostheses are classified into 3 categories depending on the means of generating movement at the joints: passive, body-powered, and electrically powered movement. All 3 types of prostheses have been in use for more than 30 years; each possesses unique advantages and disadvantages.

Passive Prostheses

The passive prostheses rely on manual repositioning, typically using the opposite arm, and cannot restore function. This unit is the lightest of the 3 prosthetic types and is thus generally the most comfortable.

Body-Powered Prostheses

The body-powered prostheses use a body harness and cable system to provide functional manipulation of the elbow and hand. Voluntary movement of the shoulder and/or limb stump extends the cable and transmits the force to the terminal device. Prosthetic hand attachments, which may be claw-like devices that allow good grip strength and visual control of objects, or latex-gloved devices that provide a more natural appearance at the expense of control, can be opened and closed by the cable system. Patient complaints with body-powered prostheses include harness discomfort, particularly the wear temperature, wire failure, and the unattractive appearance.

Myoelectric Prostheses

Myoelectric prostheses are powered by electric motors with an external power source. The joint movement of an upper limb prosthesis (e.g., hand, wrist, and/or elbow) is driven by microchip-processed electrical activity in the muscles of the remaining limb stump.

- Myoelectric prostheses use muscle activity from the remaining limb for the control of joint movement. Electromyographic (EMG) signals from the limb stump are detected by surface electrodes, amplified, and then processed by a controller to drive battery-powered motors that move the hand, wrist, or elbow. Although upper arm movement may be slow and limited to 1 joint at a time, myoelectric control of movement may be considered the most physiologically natural. Patient dissatisfaction with myoelectric prostheses includes the increased cost, maintenance (particularly for the glove), and weight.

- Myoelectric hand attachments are similar in form to those offered with the body-powered prosthesis but are battery-powered. Commercially available examples are listed in the Regulatory Status section.
- A hybrid system, a combination of body-powered and myoelectric components, may be used for high-level amputations (at or above the elbow). Hybrid systems allow control of two joints at once (i.e., one body-powered and one myoelectric) and are generally lighter and less expensive than a prosthesis composed entirely of myoelectric components.

Technology in this area is rapidly changing, driven by advances in biomedical engineering and by the U.S. Department of Defense Advanced Research Projects Agency (DARPA), which is funding a public and private collaborative effort on prosthetic research and development. Areas of development include the use of skin-like silicone elastomer gloves, “artificial muscles,” and sensory feedback. Smaller motors, microcontrollers, implantable myoelectric sensors, and re-innervation of remaining muscle fibers are being developed to allow fine movement control. Lighter batteries and newer materials are being incorporated into myoelectric prostheses to improve comfort.

The LUKE Arm (previously known as the DEKA Arm System) was developed in a joint effort between DEKA Research and Development and U.S. DARPA, which is funding a public and private collaborative effort on prosthetic research and development. It is the first commercially available myoelectric upper limb that can perform complex tasks with multiple simultaneous powered movements (e.g., movement of the elbow, wrist, and hand at the same time). In addition to the electromyographic electrodes, the LUKE Arm contains a combination of mechanisms, including switches, movement sensors, and force sensors. The primary control resides with inertial measurement sensors on top of the feet. The prosthesis includes vibration pressure and grip sensors.

RATIONALE

Summary of Evidence

For individuals who have a missing limb at the wrist or above who receive myoelectric upper limb prosthesis components at the wrist or proximal to the wrist, the evidence includes a systematic review and comparative studies. Relevant outcomes are functional outcomes and quality of life. The goals of upper-limb prostheses relate to restoration of both appearance and function while maintaining sufficient comfort for continued use. The identified literature focuses primarily on patient acceptance and rejection; data are limited or lacking in the areas of function and functional status. The limited evidence suggests that, compared with body-powered prostheses, myoelectric possess the similar capability to perform light work; however, myoelectric components could also suffer a reduction in performance when operating under heavy working conditions. The literature also indicates that the percentage of amputees who accept use of a myoelectric prosthesis is approximately the same as those who prefer to use a body-powered prosthesis, and that self-selected use depends at least in part on the individual’s activities of daily living. Appearance is most frequently cited as an advantage of myoelectric prostheses, and for patients who desire a restorative appearance, the myoelectric prosthesis can provide greater function than a passive prosthesis, with equivalent function to a body-

powered prosthesis for light work. Because of the differing advantages and disadvantages of currently available prostheses, myoelectric components for persons with an amputation at the wrist or above may be considered when passive or body-powered prostheses cannot be used or are insufficient to meet the functional needs of the patient in activities of daily living. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

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.

No peer-reviewed publications were identified for individuals who have a missing limb distal to the wrist who receive a myoelectric prosthesis with individually powered digits. The evidence is insufficient to determine the effects of the technology on health outcomes.

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.

DEFINITIONS

NA

DISCLAIMER

Capital Blue Cross' medical policies are used to determine coverage for specific medical technologies, procedures, equipment, and services. These medical policies do not constitute medical advice and are subject to change as permitted by law or applicable clinical evidence from independent treatment guidelines. Treating providers are solely responsible for medical advice and treatment of members. These policies are not a guarantee of coverage or payment. Payment of claims is subject to a determination regarding the member's benefit program and

eligibility on the date of service, and a determination that the services are medically necessary and appropriate. Final processing of a claim is based upon the terms of contract that applies to the members' benefit program, including benefit limitations and exclusions. If a provider or a member has a question concerning this medical policy, please contact Capital Blue Cross' Provider Services or Member Services.

CODING INFORMATION

Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Covered when medically necessary:

Procedure Codes							
L6000	L6028	L6029	L6030	L6031	L6032	L6033	L6037
L6050	L6055	L6100	L6110	L6120	L6130	L6200	L6205
L6250	L6300	L6310	L6320	L6350	L6360	L6370	L6400
L6450	L6500	L6550	L6570	L6580	L6582	L6584	L6586
L6588	L6590	L6600	L6605	L6610	L6611	L6615	L6616
L6620	L6621	L6623	L6624	L6625	L6628	L6629	L6630
L6632	L6635	L6637	L6638	L6640	L6641	L6642	L6645
L6646	L6647	L6648	L6650	L6655	L6660	L6665	L6670
L6672	L6675	L6676	L6677	L6680	L6682	L6684	L6686
L6687	L6688	L6689	L6690	L6691	L6692	L6693	L6694
L6695	L6696	L6697	L6698	L6700	L6703	L6704	L6706
L6707	L6708	L6709	L6711	L6712	L6713	L6714	L6721
L6722	L6805	L6810	L6881	L6882	L6883	L6884	L6885
L6890	L6895	L6900	L6905	L6910	L6915	L6920	L6925
L6930	L6935	L6940	L6945	L6950	L6955	L6960	L6965
L6970	L6975	L7007	L7008	L7009	L7040	L7045	L7170
L7180	L7181	L7185	L7186	L7190	L7191	L7259	L7360
L7362	L7364	L7366	L7400	L7401	L7402	L7403	L7404
L7405	L7406	L7499	L8415	L8435	L8465	L8485	L6034

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Procedure Codes							
L6034	L6036	L6038	L6039				

Investigational; **there is insufficient evidence to support a conclusion concerning the health outcomes or benefits associated with these item(s).**

Procedure Codes							
L6026	L6715	L6880					

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POLICY HISTORY

MP 6.052	**03/18/2020 Consensus Review**. Policy statement unchanged. References updated. HCPC coding tables inserted.
	06/10/2021 Consensus Review. Policy statement unchanged. Description/background, regulatory status, and references updated.
	06/01/2022 Consensus review. No change to policy statement. Coding table format updated. References reviewed. FEP language updated. Procedure code L7499 added to policy.
	06/13/2023 Consensus Review. No change to policy statement. Updated background and rationale. No coding changes.
	10/09/2024 Consensus Review. Policy intent unchanged, Summary, References and Coding reviewed and updated.
	3/12/2025 Administrative Update. Added codes L6028-L6033, L6037, L6700, L7406. Effective 04/01/2025.
	06/12/2025 Consensus Review. No change to policy intent. Updated references.
	09/09/2025 Administrative Update. Added codes L6034-6, L6038, L6039. Eff 10/01/2025.
	03/16/2026 Administrative update. Removed codes L6010 and L6020 effective 04/01/2026.

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