

## **Powered Knee, Powered Ankle-Foot, Microprocessor-Controlled Ankle-Foot and Microprocessor-Controlled Knee Prostheses**

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### **IMPORTANT REMINDER**

*The Medicare Advantage Medical Policy manual is not intended to override the member Evidence of Coverage (EOC), which defines the insured's benefits, nor is it intended to dictate how providers are to practice medicine. Physicians and other health care providers are expected to exercise their medical judgment in providing the most appropriate care for the individual member.*

*The Medicare Advantage Medical Policies are designed to provide guidance regarding the decision-making process for the coverage or non-coverage of services or procedures in accordance with the member EOC and the Centers of Medicare and Medicaid Services (CMS) policies, when available. In the event of a conflict, applicable CMS policy or EOC language will take precedence over the Medicare Advantage Medical Policy. In the absence of CMS guidance for a requested service or procedure, the health plan may apply their Medical Policy Manual or MCG™ criteria, both of which are developed with an objective, evidence-based process using scientific evidence, current generally accepted standards of medical practice, and authoritative clinical practice guidelines.*

*Medicare and EOCs exclude from coverage, among other things, services or procedures considered to be investigational, cosmetic, or not medically necessary, and in some cases, providers may bill members for these non-covered services or procedures. Providers are encouraged to inform members in advance when they may be financially responsible for the cost of non-covered or excluded services.*

## **DESCRIPTION**

Several microprocessor-controlled prosthetic knees have been developed, equipped with a sensor that detects when the knee is in full extension and adjusts the swing phase automatically, permitting a more natural walking pattern of varying speeds. In addition to knee prosthetics, microprocessor-controlled ankle-foot prostheses have been developed for transtibial amputees. These prosthetics are built with sensors in the feet that determine the direction and speed of the foot's movement, which controls the flexion angle of the ankle, allowing the foot to lift during the swing phase and potentially adjust to changes in force, speed, and terrain during the step phase. The intent of the technology is to make ambulation more efficient and prevent falls in patients ranging from the young active amputee to the elderly diabetic patient. Finally, there are also in development lower-limb prostheses designed to replace muscle activity in order to bend and straighten the prosthetic joint, some of which are designed with the potential to reduce hip and back problems arising from an unnatural gait than can occur with the use of passive prosthesis.

## MEDICARE ADVANTAGE POLICY CRITERIA

<b>CMS Coverage Manuals*</b>	None
<b>National Coverage Determinations (NCDs)*</b>	None
<b>Noridian Healthcare Solutions (Noridian) Local Coverage Determinations (LCDs) and Articles (LCAs)*</b>	Lower Limb Prostheses ( <a href="#">L33787</a> )  **Scroll to the “Public Version(s)” section at the bottom of the LCD for links to prior versions if necessary.

## POLICY GUIDELINES

### REQUIRED DOCUMENTATION

The information below **must** be submitted for review to determine whether policy criteria are met. If any of these items are not submitted, it could impact our review and decision outcome:

- Past medical history, including prior prosthetic use, if applicable;
- Current functional level and expected functional potential, including an explanation for the difference, if one exists (note, an exception to this requirement may be made for bilateral amputees as they often cannot be bound by functional level classifications);
- For requests for HCPCS code L5859, the medical records should describe the nature and extent of the comorbidity of the spine or the sound limb which is what is limiting this beneficiary to a household ambulator, and clearly document how this feature will enable the beneficiary to function as a community ambulator. Also include documentation that supports the clinical criteria from LCD L33787 specific to HCPCS code L5859.

### REGULATORY STATUS

Microprocessor-controlled prostheses are categorized as class I, exempt devices. Manufacturers must register prostheses with the restorative devices branch of FDA and keep a record of any complaints but are not required to undergo a full review by the U.S. Food and Drug Administration (FDA). Some examples include, but are not limited to, the following devices:

- Intelligent Prosthesis (IP) (Blatchford, England);
- The Adaptive (Endolite, England);
- Rheo Knee® (Össur, Iceland);
- CLeg®, the Genium™ Bionic Prosthetic System, and the X2 and X3 prostheses (Otto Bock Orthopedic Industry, Minneapolis, MN);
- Seattle Power Knees (3 models include Single Axis, 4-bar and Fusion, from Seattle Systems).

- Proprio Foot® (Össur)
- iPED (developed by Martin Bionics and licensed to College Park Industries),
- Elan Foot (Endolite);
- PowerFoot BiOM®, developed at the Massachusetts Institute of Technology and licensed to iWall)
- The Power Knee™, by Össur.

## CROSS REFERENCES

[Myoelectric Prosthetic and Orthotic Components for the Upper Limb](#), DME, Policy No. M-80

## REFERENCES

1. Medicare Claims Processing Manual, Chapter 20 - Durable Medical Equipment, Prosthetics, Orthotics, and Supplies (DMEPOS), [§10.1.3 – Prosthetics and Orthotics \(Leg, Arm, Back, and Neck Braces, Trusses, and Artificial Legs, Arms, and Eyes\) - Coverage Definition](#)
2. Lower Limb Prostheses - Policy Article ([A52496](#))
3. Medicare PDAC Website for "[CODING INSTRUCTIONS - MICROPROCESSOR CONTROLLED KNEE PROSTHESES](#)"

## CODING

**NOTE:** Most prosthetics described in this policy will **not** use the miscellaneous code L5999. If there is uncertainty regarding what code is appropriate, see the Medicare Pricing, Data Analysis and Coding (PDAC) Contractor's (Palmetto GBA) [Product Classification List](#) (select the "Product Classification List" button if not already selected) to determine appropriate HCPCS coding for a specific prosthetic.

Codes	Number	Description
<b>CPT</b>	None	
	L5856	Addition to lower extremity prosthesis, endoskeletal knee-shin system, microprocessor control feature, swing and stance phase, includes electronic sensor(s), any type
	L5857	Addition to lower extremity prosthesis, endoskeletal knee-shin system, microprocessor control feature, swing phase only, includes electronic sensor(s), any type
	L5858	Addition to lower extremity prosthesis, endoskeletal knee-shin system, microprocessor control feature, stance phase only, includes electronic sensor(s), any type
	L5859	Addition to lower extremity prosthesis, endoskeletal knee-shin system, powered
	L5969	Addition, endoskeletal ankle-foot or ankle system, power assist, includes any type motor(s)
	L5973	Endoskeletal ankle foot system, microprocessor controlled feature, dorsiflexion and/or plantar flexion control, include power source

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<b>Codes</b>	<b>Number</b>	<b>Description</b>
	L5999	Lower extremity prosthesis, not otherwise specified

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**\*IMPORTANT NOTE:** Medicare Advantage medical policies use the most current Medicare references available at the time the policy was developed. Links to Medicare references will take viewers to external websites outside of the health plan's web control as these sites are not maintained by the health plan.