

## PA.012.MPC- Microprocessor Controlled Knee Prostheses

Maryland Physicians Care considers a **Microprocessor Controlled Knee Prosthesis** medically necessary for the following indications:

1. The member will reach or maintain a defined functional state within a reasonable period of time.
2. The member is motivated to ambulate.
3. The member's weight must be less than 125 kg (275.5 lbs) or be within the recommended weight as determined by product manufacturer.
4. Have a functional level of 3 or higher.

### **Bilateral Transfemoral Amputees**

In instances where above criteria are met, the member needs to demonstrate unique activity requirements which can only be accomplished with microprocessor knee prostheses.

### **Component Additions to the Prosthesis**

In addition to the above, components (i.e. adaptors allowing for additional leg rotation) additions to the prosthesis are based on the member's potential functional abilities. Potential functional ability is based on the reasonable expectations of the prosthetist, and treating physician, considering factors including:

1. The member's past history (including prior prosthetic use if applicable) and
2. The member's current condition including the status of the residual limb and the nature of other medical problems.

Requests for microprocessor controlled knee prosthesis will be evaluated on a case by case basis with special consideration given to the information provided by the prescribing physician in the decision.

**Limitations** - The C-leg or Rheo microprocessor knees are not covered under the following conditions:

1. Members who are not motivated to ambulate or who are not expected to reach or maintain a defined functional state within a reasonable period of time.
2. When the sole purpose of the device is to enhance the member's athletic capabilities for competitive sporting events.

### **Adjustments, Repairs, and Component Replacement**

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Routine periodic servicing, such as testing, cleaning, and checking of the prosthesis is not covered. Adjustments to a prosthesis required by wear or a change in the member's condition are covered under the initial physician's order for the prosthesis for the life of the prosthesis.

Repairs to a prosthesis are covered when necessary to make the prosthesis functional.

If the expense for repairs exceeds the estimated expense of purchasing another entire prosthesis, no payment can be made for the excess. Maintenance which may be necessitated by manufacturer's recommendations or the construction of the prosthesis and must be performed by the prosthetist is covered as a repair.

Replacement of a prosthesis or prosthesis component is covered if the treating physician orders a replacement device or part because of any of the following:

1. A change in the physiological condition of the member; or
2. Irreparable wear of the device or a part of the device; or
3. The condition of the device, or part of the device, requires repairs and the cost of such repairs would be more than 60% of the cost of a replacement device, or of the part being replaced.

### See Also:

PA-010 Durable medical Equipment, Corrective Appliances and Other Devices

### Background

The choice of the most appropriate design for a prosthetic knee from the many different devices available depends on the member's underlying activity level.

In general, key elements of a prosthetic design involve providing stability during both the stance and swing phase of the gait. Prosthetic knees also vary in their ability to alter the cadence of the gait, or the ability to walk on rough or uneven surfaces. The mechanical complexity of these devices allows engineers to optimize selected stance and swing phase features.

Microprocessor-controlled prosthetic knees have become available, including the Intelligent Prosthesis (Blatchford, United Kingdom) C-LEG® (Otto Bock Orthopedic Industry, Minneapolis, MN) and Rheo® (Ossur, Iceland). These devices are equipped with a sensor that detects when the knee is in full extension allowing for early-stance knee flexion and smooth swing phase kinematics.

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Relevant outcomes for microprocessor-controlled knee prostheses may include the patient's perceptions of subjective improvement attributable to the prosthesis and level of activity/function. In addition, the energy costs of walking or gait analysis may be a more objective measure of the clinical benefit of the microprocessor-controlled prosthesis.

### Codes:

CPT Codes / HCPCS Codes / ICD-10 Codes	
Code	Description
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

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