



POWER KNEE™

Coding, Coverage and
Reimbursement Guide

MATCHING THE PATIENT & PRODUCT

Every patient has unique clinical needs. And every product offers unique clinical outcomes. Making sure that you map the two to each other is essential if you want (a) a happy and functional patient, and (b) to process your claim successfully. The next checklist maps Power Knee's functional benefits to your patient's clinical needs, helping ensure that they're aligned.

PATIENT TO PRODUCT CHECKLIST	
Patient clinical issue	Power Knee function
<p>Comorbidity of spine or sound limb that:</p> <ul style="list-style-type: none"> Impairs hip extension, or Impairs quadriceps function <p>NOTE: You must be able to show 1 or both of the above for any medicare claim (see LCD for lower limb prostheses)</p> <ul style="list-style-type: none"> Impairs knee function/causes pain Impairs ankle function/causes pain Impairs foot function/causes pain Causes spinal pain/impairs ROM <p>Comorbidity of upper body that impairs:</p> <ul style="list-style-type: none"> Arm function/causes pain Shoulder function/causes pain 	<p>Motor-powered flexion and extension:</p> <ul style="list-style-type: none"> • allow users with impaired hip or sound side quad/knee/ankle or foot function to walk more symmetrically. • decrease need to aggressively walk over toe of prosthetic foot to initiate knee flexion. • allow users with upper-body impairments to exit chairs without having to rely on their arms and shoulders as much as passive devices.
<p>Documented fall history</p>	<p>Motor-powered stance phase stability actively supports user's body weight.</p> <p>Motor-powered swing phase pushes prosthetic foot through obstacles (e.g., rugs, grass, sand, snow) and prevents prosthetic toe from "catching" on underlying terrain, something that passive MPKs and mechanical knees can't.</p>
<p>Inability to walk far enough without stopping</p>	<p>Motor-powered flexion and extension reduce the amount of force and energy required by passive MPK's and mechanical knees to activate appropriate knee function.</p>
<p>Difficulty walking up and down inclines</p>	<p>Motor-powered extension permits users to ascend ramps more easily, as the user doesn't have to physically generate extension momentum in order for the knee to swing through to full extension, something that passive MPKs and mechanical knees can't do.</p> <p>Motor-powered flexion permits users to descend ramps in a controlled, safe manner.</p>
<p>Gait deviations</p> <ul style="list-style-type: none"> Circumduction/little-no prosthetic knee bend Vaulting Exaggerated hip movement during knee extension (i.e. kicking prosthetic foot forward) 	<p>Motor initiates knee flexion and extension, preventing "stiff leg" walking, to obtain adequate foot-ground clearance.</p> <p>Motor-powered knee extension decreases need for user to kick prosthesis forward in order to obtain full extension, promoting more symmetrical gait.</p>
<p>Inability to get out of chair independently</p>	<p>Motor generates force that can actively lift users with arm and/or shoulder deficits out of chair.</p>

CODING AND COVERAGE

CODING

The Power Knee has been PDAC approved for the following HCPCS codes:

- L5856 - Addition to lower extremity prosthesis, endoskeletal knee-shin system, microprocessor control feature, swing and stance phase, includes electronic sensor(s), any type
- L5828 - Addition, endoskeletal knee-shin system, single axis, fluid swing and stance phase control
- L5845 - Addition, endoskeletal, knee-shin system, stance flexion feature, adjustable
- L5848 - Addition to endoskeletal knee-shin system, fluid stance extension, dampening feature, with or without adjustability
- L5859 - Addition to lower extremity prosthesis, endoskeletal knee-shin system, powered and programmable flexion/extension assist control, includes any type motor(s)

COVERAGE

Medicare - local coverage determination

L5859 - (Addition to lower extremity prosthesis, endoskeletal knee-shin system, powered and programmable flexion/extension assist control, includes any type motor(s)) is only covered when the beneficiary meets all of the criteria below:

1. Has a microprocessor (swing and stance phase type (L5856)) controlled (electronic) knee
2. K3 functional level only
3. Has a documented comorbidity of the spine and/or sound limb affecting hip extension and/or quadriceps function that impairs K-3 level function with the use of a microprocessor-controlled knee alone
4. Is able to make use of a product that requires daily charging
5. Is able to understand and respond to error alerts and alarms indicating problems with the function of the unit

If these coverage criteria for the knee component are not met, L5859 will be denied as not reasonable and necessary.

SAMPLE PHYSICIAN DOCUMENTATION

Provider: Dr. Jane Smith

Encounter Date: 01/12/2021

Patient: Rose, David

Sex: male

DOB: 7/2/1983

Address: 123 Rose Bud Motel, Los Angeles, California 90210

Phone (home): 310-974-8543

Insurance(s): BCBS

Compliant/HPI: Right Transfemoral Amputee

Patient is a 37 year old male who am evaluating for the first time for is continued prosthetic rehabilitation. He is in need of a replacement prosthesis as his existing prosthesis is several years old and exhibits multiple issues including safety. Mr. Rose reports a history of lumbar spondylolysis and subsequent chronic low back pain that he has managed with home exercises and over the counter meds for pain management when needed. He reports that his low back pain has become more frequent recently due to his poor/fitting functioning prosthesis which requires him to exhibit compensatory mechanisms such as vaulting. He is inquiring about a replacement prosthesis to help minimize some of the stress on his right hip as well as his lower lumbar spine as he is very active. He now presents to clinic today for prosthetic evaluation as he feels as though his current prosthesis is not fitting and causing additional strain on his back and his right hip.

Medical History: Right AKA

Family History: CAD

Medications: OTC pain reliver as needed.

Allergy: No Known Drug Allergies

REVIEW OF SYSTEMS:

General: No recent weight loss/gain.

HEENT: No headaches or migraines.

Pulmonary: No SOB.

Cardiovascular: No chest pain.

Gastrointestinal: No constipation or diarrhea.

Genitourinary: No bladder dysfunction.

MSK: Positive for back pain. Denies neck pain.

Neurologic: No seizures or syncopal episodes.

Psychologic: No mood disorders reported.

DERM: No rashes.

Social History:

Alcohol: Patient drinks alcoholic beverages occasionally.

Smoking: He does not smoke.

Recreational Drug Use: He denies recreational drug use.

Works in a Veterinary office.

Examination:

On exam I find a 37 year old male who is well-developed, well-nourished, no distress.

He is alert and oriented X3.

Speech intact.

No respiratory distress noted.

Strength is 5/5 throughout his upper extremities and lower extremities.

No reported open sores noted on his residuum however redness and skin irritation were observed.

No sensory deficits reported at this time.

He is ambulating in his current prosthesis.

Diagnosis:

R26.81 Unsteadiness on feet

Z89.611 Acquired absence of right leg above knee

M54.5 Low back pain

M79.604 Pain in right leg

Right AKA

Lumbar spondylolysis

Right hip pain

PLAN:**Patient has presented to clinic today for:**

Evaluation of existing prosthesis to determine if a replacement prosthesis is medically necessary.

Discussion of current limitations as a result of a poor fitting/functioning prosthesis.

After a long discussion and observation of the patient's current ambulatory status, it was determined that a replacement prosthesis is medically necessary for the following reasons:

The patient would like to remain as independent as possible with regards to activities of daily living including but not limited to dressing, bathing and household activities. He is a homeowner who completes a multitude of activities including home and lawn maintenance which requires him to traverse uneven terrain.

The patient has the ability to maintain a high K3 to low K4 level of ambulation.

The patient will also benefit from a powered knee, dynamic response foot and a direct lamination socket that incorporates a flexible portion to allow him to ambulate more comfortably throughout the day. He is required to ambulate approximately 2 to 5 miles daily and often must kneel, squat and maneuver tight spacing with animals. He is required to lift up to 100 pounds and ascend/descend stairs and ramps. He ambulates over uneven terrain at his occupation and at his home. He also climbs ladders to perform home maintenance.

The above stated prosthesis would help decrease strain on his lumbar spine as well as his right hip. This would allow a more symmetrical gait pattern reducing stress on his joints. This would allow him to sit/stand from chairs without relying on his arms and shoulder subsequently preventing excessive wear and over use syndrome. The power knee will prevent him from catching his toe through swing phase and reduce the need for compensatory mechanisms to assist with clearance. With the power knee he will be able to ambulate for longer periods of time with reduced energy expenditure. In a trial, Mr. Rose reported being able to ambulate down ramps in a controlled and safe manner. He is quite active as stated above and maintains a rigorous occupational schedule of 50 plus hours.

With regards to phantom pain and stump/wound management:

No action was taken today as the patient is without complaints with regards to these.

With regards to physical therapy:

No formal therapy was written today as the patient should be to baseline once his prosthetic needs are met.

However we may initiate a few sessions to allow him to maximize the use of the new technology.

I would like to see the patient back in follow up visit after he is fit with his new prosthesis.

The visit note was electronically signed off by Dr. Jane Smith on 1/13/2021 at 11:07 am.

SAMPLE PROSTHETIST DOCUMENTATION

SUBJECTIVE:

General. Mr. Rose was seen today, 1/18/2021, for a lower extremity amputee initial evaluation for a right transfemoral definitive prosthesis. Patient does currently have a prosthesis. Patient has been referred by Jane Smith, DO.

Comorbidities. Comorbidities and patient-stated symptoms that could affect ambulation or rehabilitation potential include the following:

spondylolysis, L4/L5 disc bulge

R shoulder pain

Medications. Patient stated that he has no known side effects from medications that could affect ambulation or rehabilitation potential.

Surgeries. Surgeries and patient-stated symptoms that could affect ambulation or rehabilitation potential include:

none

As for smoking, patient is non-smoker.

Living Arrangements. Mr. Rose resides in a single story home with his wife and three children. There is one step to enter the home and level surfaces within the home. The house is positioned on sloped terrain, affecting the yard, driveway and sidewalks.

Current Functions. Mr. Rose uses his current prosthesis full time for ambulation. He is employed as a veterinary technician, which requires him to ambulate in a crowded clinic environment and laboratory. He must sit, bend over, and stoop while working with various animals. The laboratory portion of the clinic contains machinery, water/fluids, kennels, floor mats and other obstacles, making ambulation more difficult and increasing the severity of a fall event if one occurs. He last fell at work 2 weeks ago and reports tripping or catching his toe regularly. He lifts upwards of 100 lbs at work and often walks throughout the office while carrying objects. He is also vocationally required to visit animals in a barn style setting. This requires long distance ambulation in and out of the barn, and forces him to encounter a variety of environmental barriers including ramps, curbs, steps, and stairs. Mr. Rose stays very busy at home with his three children. He also participates in cooking, cleaning, household chores, yard work, and gardening. He routinely performs household maintenance, including in his attic where he must scale a ladder using his prosthesis. Mr. Rose reports doing home improvement projects regularly, and that he recently remodeled a bathroom by himself. He is very active in the community including at his church where he volunteers regularly.

Outcomes testing was performed on Mr. Rose today. He posted a TUG time of 8.87 seconds and scored a 45 on the AmPro test, indicating a K4 level of function.

Medical/Physical:

General physical condition is reported as Excellent.

Patient reports his stability without the prosthesis is Stable and his stability with the prosthesis is Stable.

Patient is motivated to walk to maintain high level of function at work and home.

Patient's sensation was reported as Unimpaired.

Patient's balance was reported as Unimpaired.

Patient's cognition was reported as Unimpaired.

OBJECTIVE:

David Rose is a 37 year old White male born on 07/2/1983.

The patient's last documented weight today was 175 lbs.

Amputation and Prosthetic History:

The patient has a right transfemoral amputation. The cause of amputation is acquired and was reported as Trauma.

The date of amputation was 03/09/2003.

Additional surgery details: Mr. Rose underwent transfemoral amputation secondary to a skiing accident.

Current Prosthesis:

Patient has the following prosthesis:

An endoskeletal definitive prosthesis with an IC Narrow M/L socket, a Suction suspension, and a prefab, cushion seal-in, Össur X5 TF liner was used. The ankle was a Hydraulic ankle. The foot type was a Freedom Kinterra foot. The knee was an Ottobock C leg knee. Patient received prosthesis 5 years ago. The following problems, concerns, and significant adjustments were reported: Mr. Rose's current prosthesis is ill fitting due to volume loss in his residual limb and is worn from heavily daily use and age. He reports frequent loss of suspension due to looseness in the socket, and instability during ambulation. Patient reports losing 15lbs recently. He has some skin breakdown on his limb secondary to socket fit. His C leg microprocessor knee has significant play, or looseness, in the hydraulic unit. His prosthetic foot is worn from heavy daily use and is at risk of failure. Both his microprocessor knee and prosthetic foot are no longer covered under the manufacturer's warranty and cannot be repaired. Mr. Rose is at increased fall risk while ambulating on these damaged components. In addition, he would greatly benefit from new technology, particularly the features provided by a knee with active power assistance.

Residual Limb Evaluation:

Adherent scars were documented at anterior/lateral aspect of limb to distal femur.

Abrasions/Blisters were documented.

Patient has a hip flexion contracture of 15 degrees.

Contralateral Limb Evaluation:

The contralateral limb is intact.

Patient reports the following pain:

- Back pain
- Shoulder pain

Gait Evaluation:

Assistive devices were not used.

The patient's gait was assessed observationally without any instrumentation.

Prosthetic gait deviations were observed as follows:

Trendelenburg and vaulting

Assessment:

Mr. Rose presented in clinic today wearing his current prosthesis and was ambulating unassisted. He was fit with a size 36 conical X5 seal-in liner. Measurements and a cast were obtained of his residual limb over the liner.

Outcomes testing was performed on Mr. Rose. He posted a 45 on the AmPro test, indicative of K4 level of function.

The patient's activity level is reported as Highly Active(K4). The patient has the ability or potential for prosthetic ambulation that exceeds basic ambulation skills, exhibiting high impact, stress, or energy levels. Typical of the prosthetic demands of the child, active adult, or athlete.

RECOMMENDATION:

Primary Prosthesis Recommendations:

An endoskeletal definitive prosthesis with an direct lamination socket, a suction (seal-in liner) suspension, and an Össur Seal-in X5 TF prefab cushion seal-in liner will be used of type Össur Seal-In X5 TF.

The foot will be an Össur Pro-flex foot.

The knee will be an Össur Power Knee knee.

Prosthetic Design:

Patient is indicated for a new prosthesis.

Rationale for Recommendations Include:

residual limb changes;
irreparable damage; and
normal wear and tear.

A microprocessor knee is medically necessary for Mr. Rose due to his ADLs and functional level. The microprocessor knee will offer varied resistance based on his cadence and will continually monitor his gait pattern for appropriate response. The knee will offer enhanced stability and stumble control in event that he trips or loses balance while ambulating. This significantly decreases his fall risk and will increase his confidence while ambulating. These features will ensure his safety when ambulating in crowded or confined areas.

The powered flexion and extension assist control feature of the Össur Power Knee allows users with spine comorbidities or impaired hip or sound side quad/knee/ankle or foot function to walk more symmetrically, reducing additional stress on sound limb resulting from asymmetrical gait. This feature also decreases the need to aggressively walk over the toe of a prosthetic foot to initiate knee flexion, decreasing hyperlordosis commonly seen in above knee amputees. It allows users with upper-body impairments to exit chairs without having to rely on their arms and shoulders as much as passive devices, reducing cumulative trauma to the upper body. The motor powered stance phase stability actively supports the user's body weight, and reduces the force and energy required to operate the prosthesis, enabling the patient to walk farther without fatigue. Motor-powered swing phase increases toe clearance and can push through obstacles such as rugs, grass, etc that would otherwise cause a patient to fall. This knee feature is medically necessary for Mr. Rose due to his history of spondylolysis, injured shoulder, fatigue during long distance ambulation, and fall history. Mr. Rose has adequate cardiovascular reserve and cognitive learning ability to master this higher level technology and has history of microprocessor knee use. He has the need for daily long distance ambulation of 400 yards or greater at variably rates when providing treatment to animals in a barn setting, and will encounter uneven terrain and stairs in these environments.

The microprocessor controlled ankle feature (1) detects toe off, triggering dorsiflexion during swing phase to safely clear the ground, curbs, steps and other irregularities in the terrain, and (2) senses and responds rapidly to changes in ground level gradient, automatically adjusting ankle angulation by up to 10 degrees of dorsiflexion and 18 degrees of plantar flexion, making slopes safer and easier to navigate, (3) can enter 'relaxed mode' in which the ankle plantar flexes for improved comfort when sitting, and (4) can enter 'chair exit mode' in which the ankle dorsiflexes to make standing up easier.

Medically necessary to improve kinematics and kinetics of the lower limbs for Mr. Rose as he frequently traverses uneven terrain, obstacles, and ramps. Medically necessary to improve knee kinematics and kinetics of his involved side during stair ambulation. Medically necessary to reduce plantar flexion bending moments at the distal interface of the socket to improve comfort and stability for Mr. Rose, as he presents with back and/or joint pain and to diminish the risk of degenerative joint disease and other long-term complications. Medically necessary to reduce loads and stress on Mr. Rose's residual limb to prevent pressure related injuries as he has a history of skin breakdown and has fragile skin. Medically necessary to improve kinematics and kinetics of the lower limbs which will improve Mr. Rose's confidence, as he has a high risk of falls.

Reviewed and electronically signed by Ted Mullens CPO, LPO on 1/19/2021 at 10:06:33 AM.

FOLLOW ÖSSUR ON



USA (800) 233-6263
WWW.ÖSSUR.COM

CANADA (800) 663-5982
WWW.ÖSSUR.CA

