



Medical Policy

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Code(s):	HCPCS E1810, E1811, L1810, L1820, L1830, L1831, L1832, L1834, L1836, L1840, L1843, L1844, L1845, L1846, L1847, L1850 and L1860	Annual Review Date:	10/24/2012
SUBJECT:	Knee Braces - Functional (prefabricated and custom fabricated) knee braces - Prophylactic knee braces - Rehabilitation knee braces - Unloader knee braces	Last Revised Date:	04/24/2013

Prior approval is required for some or all procedure codes listed in this Corporate Medical Policy.

Definition: Knee braces are utilized to resist abnormal joint motion, increase mechanical stability of a normal knee and assist in restoration of natural mechanical stability in an injured or rehabilitating knee. Knee braces are available in a variety of materials, such as elastic, foam, metal, plastic or straps and typically consist of a superstructure (usually a rigid shell), a hinge and a strap system. The superstructure extends proximally and distally from a hinge centered around the knee axis of motion. The strapping system secures the brace to the limb.

Knee braces can be divided into one of four categories based upon the intended use:

- **Functional knee braces:** Functional braces (derotational) are designed to enhance knee stability following injury to the anterior cruciate and/or posterior cruciate ligament(s) and to decrease future rotational injuries. The brace is generally made from a metallic plastic composite and vertical hinges with range of motion stops and straps with a fitted shell or cuff. Functional braces may be beneficial when an individual is awaiting anterior cruciate and/or posterior cruciate ligament reconstruction or is not a candidate for surgical reconstruction. Functional knee braces may be either prefabricated “off-the-shelf” (or then custom-fit by an orthotist) or custom-fabricated.
- **Prophylactic braces:** Prophylactic braces are generally utilized in high contact sports to prevent or reduce the severity of knee (meniscus or ligament) injuries.



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- **Rehabilitation braces:** Rehabilitation (postoperative) braces are generally utilized to protect ligaments and control knee flexion and extension angles after acute injury or surgery.
- **Unloader braces:** Unloader (valgus) braces are intended to reduce pain and disability associated with osteoarthritis of the medial or lateral compartment of the knee.

Medical Necessity:

I. Functional knee braces:

- A. **Prefabricated knee braces:** The Company considers prefabricated knee braces (HCPCS Codes E1810, E1811, L1810, L1820, L1830, L1831, L1832, L1836, L1843, L1845, L1847 and L1850) **medically necessary** and eligible for reimbursement providing that *at least one* of the following medical criteria is met:

- Treatment of anterior cruciate ligament or posterior cruciate ligament injury, repair or reconstruction; or
- Knee instability due to injury; or
- Moderate to severe osteoarthritis of the medial and/or lateral compartment of the knee with persistent pain;

AND

- *At least one* of the following:
 1. Knee orthosis immobilizer; or
 2. Knee brace with adjustable knee joints; or
 3. Knee brace, Swedish type, prefabricated;

OR

- **Flexion/extension devices:** The Company considers flexion/extension devices (HCPCS Codes E1810, E1811, L1810 and L1820) **medically necessary** and eligible for reimbursement providing that *at least one* of the following medical criteria is met:
 1. Extension deficit $>4^{\circ}$ or flexion $<90^{\circ}$ following physical rehabilitation or manipulation of the knee; or
 2. Device will be utilized in the acute postoperative period following surgery to improve range of motion of a previously affected joint; or



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3. Device will be utilized as part of a structured rehabilitative program for persistent joint stiffness in a subacute injury or following surgery;

AND

At least one of the following clinical conditions is present:

- Multiple sclerosis
- Hemiplegia, unspecified
- Quadriplegia and quadriplegia, C₁-C₄ complete
- Mononeuritis of lower limb, lesion of sciatic nerve
- other lesion of femoral nerve
- Rheumatoid arthritis and other inflammatory polyarthropathies
- Osteoarthritis, localized, primary
- Osteoarthritis, localized, secondary
- Osteoarthritis, localized, not specified whether primary or secondary
- Unspecified internal derangement of knee
- Internal derangement of knee
- Rupture of tendon, nontraumatic-quadriceps tendon
- Pathologic fracture of femur
- Pathologic fracture of tibia or fibula
- Aseptic necrosis of tibia or fibula
- Congenital deformity of knee (joint)
- Shaft or unspecified part, lower end, closed
- Shaft or unspecified parts, lower end, open
- Fracture of patella, closed
- Fracture of patella, open
- Fracture of tibia and fibula
- upper end closed
- shaft, closed
- shaft open
- torus fracture
- Dislocation of knee
- Sprains and strains of knee and leg
- medial collateral ligament of knee
- cruciate ligament of knee



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- Sprain and strain, other specified sites of knee and leg
- Mechanical complication of internal orthopedic device, implant, and graft
- Infection and inflammatory reaction due to other internal prosthetic device, implant, and graft
- Other complications of internal (biological) (synthetic) prosthetic device, implant, and graft, due to internal joint prosthesis
- Organ or tissue replaced by other means, joint, knee

B. Custom-fabricated knee braces: The Company considers custom-fabricated knee braces (HCPCS Codes L1834, L1840, L1844, L1846 and L1860) **medically necessary** and eligible for reimbursement providing that **at least one** of the following medical criteria is met:

- Documented physical characteristic including leg measurements that requires the use of a custom fabricated braces, due to but not limited to:
 1. Deformity of the leg or knee; or
 2. Size of the thigh or calf cannot be accommodated by a prefabricated knee brace; or
 3. Insufficient muscle mass upon which to suspend the brace; or
 4. Unable to be fitted with an “off the shelf” model trialed from at least two brace manufacturers;

AND

- **Custom-fabricated knee immobilizer without joints:** The Company considers custom-fabricated knee immobilizer without joints (HCPCS Codes L1834) **medically necessary** and eligible for reimbursement providing that the following medical criterion is met:
 1. Criteria listed for custom-fabricated knee braces are met and **at least one** of the following:
 - a. Recent[†] surgical procedure or injury; or
 - b. Instability due to ligament insufficiency;

AND



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At least one of the following clinical conditions is present:

- Rheumatoid arthritis and other inflammatory
 - polyarthropathies
- 714.1 Rheumatoid arthritis
- 714.3 Felty's syndrome
- 714.4 Chronic postrheumatic arthropathy
- 715.16 Osteoarthritis, localized, primary, lower leg
- 715.26 Osteoarthritis, localized, secondary, lower leg
- 715.3 Osteoarthritis, localized, not specified whether primary or secondary
- 715.96 Osteoarthritis, unspecified whether generalized or localized, lower leg
- 717.0 Internal derangement of knee, old bucket handle tear of medial meniscus
- 717.1 Derangement of anterior horn of medial meniscus
- 717.2 Derangement of posterior horn of medial meniscus
- 717.3 Other and unspecified derangement of medial meniscus
- 717.4 Derangement of lateral meniscus
- 717.5 Derangement of meniscus, not elsewhere classified
- 717.7 Chondromalacia of patella
- 717.8* Other internal derangement of knee
- 717.9* Unspecified internal derangement of knee
- 727.65 Rupture of tendon, nontraumatic, quadriceps tendon
- 733.15 Pathologic fracture, other specified part of femur
- 733.16 Pathologic fracture, of tibia or fibula
- 733.49 Aseptic necrosis of bone
- 733.93 Other unspecified disorders of bone and cartilage, stress fracture of tibia or fibula
- 755.64 Congenital deformity of knee (joint)
- 821.2 Shaft or unspecified part, lower end, closed
- 821.3 Shaft or unspecified parts, lower end, open
- 822.0 Fracture of patella, closed



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- 822.1 Fracture of patella, open
- 823.0 Fracture of tibia and fibula
- 823.1 upper end closed
- 823.3 shaft open
- 823.42 torus fracture
- 836.0* Dislocation of knee
- 844.0 Sprains and strains of knee and leg
- 844.1 medial collateral ligament of knee
- 844.2 cruciate ligament of knee
- 844.8 Sprain of other specified sites of knee and leg
- 996.4* Mechanical complication of internal orthopedic device, implant, and graft
- 996.66 Infection and inflammatory reaction due to other internal prosthetic device, implant, and graft
- 996.67 Infection and inflammatory reaction due to internal
 - orthopedic device, implant, and graft
- 996.77 Other complications of internal (biological) (synthetic)
 - prosthetic device, implant, and graft due to internal joint prosthesis
- V43.65 Organ or tissue replaced by other means, joint, knee

*Includes all diagnosis codes listed in this four digit category.

OR

- **Custom fabricated derotation knee brace:** The Company considers custom-fabricated derotation knee brace (**HCPSC Codes L1840**) **medically necessary** and eligible for reimbursement providing that the following medical criterion is met:
 1. Knee instability due to internal ligamentous disruption;

AND



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At least one of the following clinical conditions is present:

- Other internal derangement of knee
- Unspecified internal derangement of knee

OR

- **Custom fabricated knee orthosis with an adjustable flexion and extension joint:** The Company considers custom-fabricated knee orthosis with an adjustable flexion and extension joint (**HCPCS Codes L1844 and L1846**) **medically necessary** and eligible for reimbursement providing that *at least one* of following medical criteria is met:
 1. Criteria listed for custom-fabricated knee braces are met and *at least one* of the following:
 - a. Recent[†] surgical procedure or injury; or
 - b. Instability due ligament insufficiency;

AND

At least one of the following clinical conditions is present:

- Multiple sclerosis
- Hemiplegia, unspecified
- Infantile cerebral palsy, unspecified
- Paraplegia
- Mononeuritis of lower limb
- other lesion of femoral nerve
- Rheumatoid arthritis-chronic postrheumatic arthropathy
- Rheumatoid arthritis
- Felty's syndrome
- Chronic post rheumatic arthropathy
- Osteoarthritis, localized, primary, lower leg
- Osteoarthritis, localized, secondary, lower leg
- Osteoarthritis, localized, not specified whether primary or secondary



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- Osteoarthritis, unspecified whether generalized or localized, lower leg
- Internal derangement of knee, old bucket handle tear of medial meniscus
- Derangement of anterior horn of medial meniscus
- Derangement of posterior horn of medial meniscus
- Other and unspecified derangement of medial meniscus
- Derangement of lateral meniscus
- Derangement of meniscus, not elsewhere classified
- Chondromalacia of patella
- Other internal derangement of knee
- Rupture of tendon, nontraumatic, quadriceps tendon
- Pathologic fracture, other specified part of femur
- Pathologic fracture, of tibia or fibula
- Aseptic necrosis of bone
- Other unspecified disorders of bone and cartilage, stress fracture of tibia or fibula
- Congenital deformity of knee (joint)
- Shaft or unspecified part, lower end, closed
- Shaft or unspecified parts, lower end, open
- Fracture of patella, closed
- Fracture of patella, open
- Fracture of tibia and fibula
 - upper end closed
 - shaft open
 - torus fracture
- Dislocation of knee
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 - medial collateral ligament of knee
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- Infection and inflammatory reaction due to internal orthopedic device, implant, and graft



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- Other complications of internal (biological) (synthetic) prosthetic device, implant, and graft due to internal joint prosthesis
- Organ or tissue replaced by other means, joint, knee

OR

- **Custom fabricated knee brace with a modified supracondylar prosthetic socket:** The Company considers a custom fabricated knee brace with a modified supracondylar prosthetic socket (**HCPCS Codes L1860**) **medically necessary** and eligible for reimbursement providing that *all* of the following medical criteria are met:
 1. Criteria listed for custom-fabricated knee braces are met; and
 2. Ambulatory and knee instability due to genu recurvatum – hyperextended knee;

AND

The following clinical condition is present:

- Genu recurvatum (acquired)

- II. **Prophylactic braces:** Based upon our findings, the Company has determined prophylactic knee braces to be **not medically necessary** and **not** eligible for reimbursement.
- III. **Rehabilitation braces:** The Company considers rehabilitation braces (**HCPCS Codes L1815, L1830 and L1832**) **medically necessary** and eligible for reimbursement providing that the following medical criterion is met:
- Brace will be utilized in the management of an acutely injured knee following anterior cruciate ligament, posterior cruciate ligament, medial collateral ligament, lateral collateral ligament or meniscus repair or reconstruction.



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- IV. **Unloader braces:** The Company considers unloader braces (HCPCS Codes L1843, L1844 and L1845) **medically necessary** and eligible for reimbursement providing that **all** of the following medical criteria are met:
- Moderate to severe osteoarthritis of the medial or internal compartment of the knee with persistent pain and **all** of the following:
 1. Individual has failed to respond to conventional medical therapy (e.g., non-steroidal anti-inflammatory drugs, etc.) and knee bracing with a neoprene sleeve; and
 2. Progressive limitations in activities of daily living (ADLs); and
 3. **None** of the following are present:
 - a. Knee surgery within the previous six months; or
 - b. Symptomatic disease of the hip, ankle or foot; or
 - c. Medical disorder that precludes the use of a brace (e.g., skin disease, peripheral vascular disease or varicose veins); or
 - d. Paresis, or other medical condition that precludes ambulation; or
 - e. Inability to apply the brace because of physical limitations such as arthritis of the hands or inability to bend over.

NOTE: The Company considers custom-made functional knee braces for all other uses, including those designed specifically for participation in elective sports, not medically necessary and not eligible for reimbursement.

Recent surgical procedure or injury: The Company defines recent surgical procedure or injury that occurs within six weeks prior to brace application.

Documentation Requirements:

The Company reserves the right to request additional documentation as part of its coverage determination process. The Company may deny reimbursement when it has determined that the services performed were not medically necessary, investigational or experimental, not within the scope of benefits afforded to the member and/or a pattern of billing or other practice has been found to be either inappropriate or excessive. Additional documentation supporting medical necessity for the services provided must be made available upon request to the Company. Documentation requested may include patient records, test results and/or credentials of the provider ordering or performing a service. The Company also reserves the right to modify, revise, change, apply and interpret this policy at its sole discretion, and the exercise of this discretion shall be final and binding. **Prior approval is required for HCPCS Codes E1810, E1811, L1844, L1846 and L1860.**



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Source of Information:

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- Martin, T. J. (2001). Committee on Sports Medicine and Fitness. American Academy of Pediatrics: technical report: knee brace use in the young athlete. *Pediatrics*, 108(2), 503-507.
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