Knee Cartilage Disorders

Clinical Guidelines for Medical Necessity Review

Version: 4.0
Effective Date: December 29, 2022

Important Notices

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Other Notices:

Guideline Information:

Specialty Area: Diseases & Disorders of the Musculoskeletal System (M00-M99)
Care Path Group: Knees
Care Path Name: Arthritis of Knee
Type: [**X**] Adult (18+ yo) | [_] Pediatric (0-17yo)

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Care Path Clinical Discussion

The knee joint contains two types of cartilage: articular and meniscus. Articular cartilage forms the smooth layer of the joint that covers the ends of bones while the meniscus acts as a shock absorber between bones. The meniscus is not attached to the bone like articular cartilage. Instead, it sits between the femur and the tibia to cushion the joint.[1]

Both types of cartilage protect the knee joint by keeping the bones from rubbing together. They also help the knee move smoothly.

Cartilage injuries and knee defects can cause pain, and they have a limited ability to heal on their own.[2,3] There are more than 300,000 cartilage surgeries performed each year in the United States.[2,4,5]

There are two main types of injury: acute and degenerative. Acute injuries commonly occur in trauma, sports, or activities that can confer rotational, compressive, and shear forces through the knee.[6,7] Degenerative injuries may present acutely or may develop with minimal trauma. They are common in middle-aged and older individuals.[6,7] Cartilage injuries present with a varying degree of pain and disability.

The degree of clinical suspicion of cartilage injury can appropriately direct the next steps of the patient's journey. Radiography can be helpful, especially in the event of injury, trauma, or suspicion of osteoarthritis (OA). Magnetic resonance imaging (MRI) can confirm the presence of a cartilage injury but is only necessary if surgery is a consideration or if there is suspicion of other intra-articular pathology.[8,9] Degenerative changes are commonly found incidentally on MRI in the general population and occur naturally with increasing age.[8]

For meniscus injuries, treatment includes conservative (nonoperative) management, meniscus repair, or meniscectomy. The decision to repair a meniscal tear depends on factors such as 1) patient age and activity level, 2) the degree, type, and location of the tear, and 3) existing OA or risk of OA development.[10-12] Repair is preferred over meniscectomy when possible, as meniscus-deficient knees are at higher risk for osteoarthritis. As of 2021, the American Academy of Orthopaedic Surgeons (AAOS) did not recommend for or against arthroscopic partial meniscectomy for patients with meniscus tear and osteoarthritis.[13] Recent clinical studies have generated controversy around the appropriate treatment for degenerative meniscal tears;[14-16] there is now more evidence supporting conservative management before (and in lieu of) surgical intervention.[17-20] As such, the 2016 ESSKA consensus is that this procedure should not be a first-line treatment for degenerative tears.[21]

A radiograph of a cartilage injury may appear normal in some articular cartilage injuries. MRI can reveal softened cartilage. The first line of treatment is typically medication to treat the symptoms. Surgical management includes debridement to decrease friction and pain, microfracture to encourage new cartilage growth, and procedures like osteochondral autograft and autologous chondrocyte implantation to replace cartilage.[22]

The information contained herein gives a general overview of the pathway of cartilage disorders, beginning with initial presentation, recommended assessments, and treatment options as supported by the medical literature and existing guidelines. It should be noted that the care of musculoskeletal injuries can be complex. The information below is meant to support clinical decision-making in adult patients. It is not necessarily applicable to every case, as the entire clinical picture (including comorbidities, history, etc.) should be considered.

Key Information

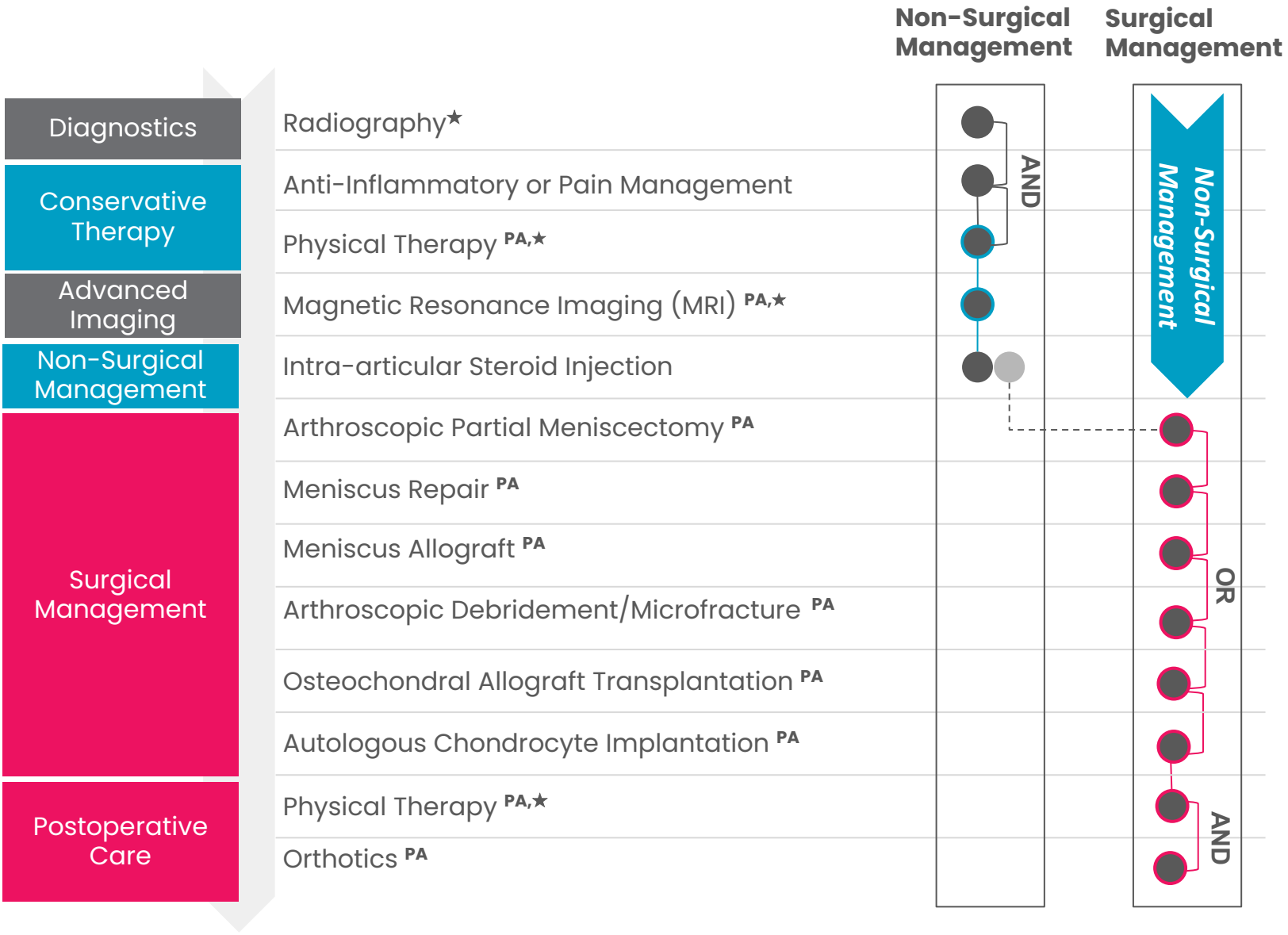
- ➢ Patients typically present with symptoms to their primary care provider before seeing an orthopedic surgeon.
- ➢ The annual incidence of meniscus injury is approximately 0.6-0.7 per 1000 persons in the United States, and medial meniscus tears are more common than lateral ones.[6] In a study of 30,000 arthroscopic procedures, 60% of patients had cartilage defects.[23,24]
- ➢ Arthroscopic treatments are not effective for long-term management of degenerative meniscal tears in patients with osteoarthritis.[25]
- ➢ In patients with osteoarthritis, MRI may reveal meniscal degeneration but may not alter the treatment plan. Up to two-thirds of patients over the age of 65 may have asymptomatic degenerative meniscal tears.
- ➢ A partial meniscectomy is the most common treatment for a meniscus injury. An osteochondral allograft is a preferred treatment for a large articular cartilage injury.

Definitions

None.

Knee Cartilage Disorders

What is a "Cohere Care Path"?
These Care Paths organize the services typically considered most clinically optimal and likely to be automatically approved. These service recommendations also include the suggested sequencing and quantity or frequency determined clinically appropriate and medically necessary for the management of most patient care scenarios in this Care Path's diagnostic cohort.



Key

PA = Service may require prior authorization
★ = Denotes preferred service
AND = Services completed concurrently
OR = Services generally mutually exclusive

= Non-surgical management prior authorization group of services
= Surgical management prior authorization group of services
= Subsequent service
= Management path moves to a different management path

Care Path Diagnostic Criteria

Disease Classification

Knee Cartilage Disorders

ICD-10 Codes Associated with Classification

ICD-10 Code	Code Description/Definition
M23.000	Cystic meniscus, unspecified lateral meniscus, right knee
M23.001	Cystic meniscus, unspecified lateral meniscus, left knee
M23.002	Cystic meniscus, unspecified lateral meniscus, unspecified knee
M23.003	Cystic meniscus, unspecified medial meniscus, right knee
M23.004	Cystic meniscus, unspecified medial meniscus, left knee
M23.005	Cystic meniscus, unspecified medial meniscus, unspecified knee
M23.006	Cystic meniscus, unspecified meniscus, right knee
M23.007	Cystic meniscus, unspecified meniscus, left knee
M23.009	Cystic meniscus, unspecified meniscus, unspecified knee
M23.011	Cystic meniscus, anterior horn of medial meniscus, right knee
M23.012	Cystic meniscus, anterior horn of medial meniscus, left knee
M23.019	Cystic meniscus, anterior horn of medial meniscus, unspecified knee
M23.021	Cystic meniscus, posterior horn of medial meniscus, right knee
M23.022	Cystic meniscus, posterior horn of medial meniscus, left knee
M23.029	Cystic meniscus, posterior horn of medial meniscus, unspecified knee
M23.031	Cystic meniscus, other medial meniscus, right knee

M23.032	Cystic meniscus, other medial meniscus, left knee
M23.039	Cystic meniscus, other medial meniscus, unspecified knee
M23.041	Cystic meniscus, anterior horn of lateral meniscus, right knee
M23.042	Cystic meniscus, anterior horn of lateral meniscus, left knee
M23.049	Cystic meniscus, anterior horn of lateral meniscus, unspecified knee
M23.051	Cystic meniscus, posterior horn of lateral meniscus, right knee
M23.052	Cystic meniscus, posterior horn of lateral meniscus, left knee
M23.059	Cystic meniscus, posterior horn of lateral meniscus, unspecified knee
M23.061	Cystic meniscus, other lateral meniscus, right knee
M23.062	Cystic meniscus, other lateral meniscus, left knee
M23.069	Cystic meniscus, other lateral meniscus, unspecified knee
M23.2	Derangement of meniscus due to old tear or injury
M23.20	Derangement of unspecified meniscus due to old tear or injury
M23.200	Derangement of unspecified lateral meniscus due to old tear or injury, right knee
M23.201	Derangement of unspecified lateral meniscus due to old tear or injury, left knee
M23.202	Derangement of unspecified lateral meniscus due to old tear or injury, unspecified knee
M23.203	Derangement of unspecified medial meniscus due to old tear or injury, right knee
M23.204	Derangement of unspecified medial meniscus due to old tear or injury, left knee
M23.205	Derangement of unspecified medial meniscus due to old tear or injury, unspecified knee

M23.206	Derangement of unspecified meniscus due to old tear or injury, right knee
M23.207	Derangement of unspecified meniscus due to old tear or injury, left knee
M23.209	Derangement of unspecified meniscus due to old tear or injury, unspecified knee
M23.21	Derangement of anterior horn of medial meniscus due to old tear or injury
M23.211	Derangement of anterior horn of medial meniscus due to old tear or injury, right knee
M23.212	Derangement of anterior horn of medial meniscus due to old tear or injury, left knee
M23.219	Derangement of anterior horn of medial meniscus due to old tear or injury, unspecified knee
M23.22	Derangement of posterior horn of medial meniscus due to old tear or injury
M23.221	Derangement of posterior horn of medial meniscus due to old tear or injury, right knee
M23.222	Derangement of posterior horn of medial meniscus due to old tear or injury, left knee
M23.229	Derangement of posterior horn of medial meniscus due to old tear or injury, unspecified knee
M23.23	Derangement of other medial meniscus due to old tear or injury
M23.231	Derangement of other medial meniscus due to old tear or injury, right knee
M23.232	Derangement of other medial meniscus due to old tear or injury, left knee
M23.239	Derangement of other medial meniscus due to old tear or injury, unspecified knee
M23.24	Derangement of anterior horn of lateral meniscus due to old tear or injury

M23.241	Derangement of anterior horn of lateral meniscus due to old tear or injury, right knee
M23.242	Derangement of anterior horn of lateral meniscus due to old tear or injury, left knee
M23.249	Derangement of anterior horn of lateral meniscus due to old tear or injury, unspecified knee
M23.25	Derangement of posterior horn of lateral meniscus due to old tear or injury
M23.251	Derangement of posterior horn of lateral meniscus due to old tear or injury, right knee
M23.252	Derangement of posterior horn of lateral meniscus due to old tear or injury, left knee
M23.259	Derangement of posterior horn of lateral meniscus due to old tear or injury, unspecified knee
M23.26	Derangement of other lateral meniscus due to old tear or injury
M23.261	Derangement of other lateral meniscus due to old tear or injury, right knee
M23.262	Derangement of other lateral meniscus due to old tear or injury, left knee
M23.269	Derangement of other lateral meniscus due to old tear or injury, unspecified knee
M23.3	Other meniscus derangements
M23.30	Other meniscus derangements, unspecified meniscus
M23.300	Other meniscus derangements, unspecified lateral meniscus, right knee
M23.301	Other meniscus derangements, unspecified lateral meniscus, left knee
M23.302	Other meniscus derangements, unspecified lateral meniscus, unspecified knee
M23.303	Other meniscus derangements, unspecified medial meniscus, right knee

M23.304	Other meniscus derangements, unspecified medial meniscus, left knee
M23.305	Other meniscus derangements, unspecified medial meniscus, unspecified knee
M23.306	Other meniscus derangements, unspecified meniscus, right knee
M23.307	Other meniscus derangements, unspecified meniscus, left knee
M23.309	Other meniscus derangements, unspecified meniscus, unspecified knee
M23.31	Other meniscus derangements, anterior horn of medial meniscus
M23.311	Other meniscus derangements, anterior horn of medial meniscus, right knee
M23.312	Other meniscus derangements, anterior horn of medial meniscus, left knee
M23.319	Other meniscus derangements, anterior horn of medial meniscus, unspecified knee
M23.32	Other meniscus derangements, posterior horn of medial meniscus
M23.321	Other meniscus derangements, posterior horn of medial meniscus, right knee
M23.322	Other meniscus derangements, posterior horn of medial meniscus, left knee
M23.329	Other meniscus derangements, posterior horn of medial meniscus, unspecified knee
M23.33	Other meniscus derangements, other medial meniscus
M23.331	Other meniscus derangements, other medial meniscus, right knee
M23.332	Other meniscus derangements, other medial meniscus, left knee
M23.339	Other meniscus derangements, other medial meniscus, unspecified knee

M23.34	Other meniscus derangements, anterior horn of lateral meniscus
M23.341	Other meniscus derangements, anterior horn of lateral meniscus, right knee
M23.342	Other meniscus derangements, anterior horn of lateral meniscus, left knee
M23.349	Other meniscus derangements, anterior horn of lateral meniscus, unspecified knee
M23.35	Other meniscus derangements, posterior horn of lateral meniscus
M23.351	Other meniscus derangements, posterior horn of lateral meniscus, right knee
M23.352	Other meniscus derangements, posterior horn of lateral meniscus, left knee
M23.359	Other meniscus derangements, posterior horn of lateral meniscus, unspecified knee
M23.36	Other meniscus derangements, other lateral meniscus
M23.361	Other meniscus derangements, other lateral meniscus, right knee
M23.362	Other meniscus derangements, other lateral meniscus, left knee
M23.369	Other meniscus derangements, other lateral meniscus, unspecified knee
M23.8	Other internal derangements of knee
M23.8X	Other internal derangements of knee
M23.8X1	Other internal derangements of right knee
M23.8X2	Other internal derangements of left knee
M23.8X9	Other internal derangements of unspecified knee
M23.9	Unspecified internal derangement of knee
M23.90	Unspecified internal derangement of unspecified knee
M23.91	Unspecified internal derangement of right knee
M23.92	Unspecified internal derangement of left knee

M24.1	Other articular cartilage disorders
M24.10	Other articular cartilage disorders, unspecified site
M24.561	Contracture, right knee
M24.662	Ankylosis, left knee
M25.362	Other instability, left knee
M25.561	Pain in right knee
M25.562	Pain in left knee
M25.569	Pain in unspecified knee
M79.661	Pain in right lower leg
M79.662	Pain in left lower leg
M79.669	Pain in unspecified lower leg
M94.261	Chondromalacia, right knee
M94.262	Chondromalacia, left knee
M94.269	Chondromalacia, unspecified knee
S83.2	Tear of meniscus, current injury
S83.20	Tear of unspecified meniscus, current injury
S83.200	Bucket-handle tear of unspecified meniscus, current injury, right knee
S83.201	Bucket-handle tear of unspecified meniscus, current injury, left knee
S83.202	Bucket-handle tear of unspecified meniscus, current injury, unspecified knee
S83.203	Other tear of unspecified meniscus, current injury, right knee
S83.204	Other tear of unspecified meniscus, current injury, left knee
S83.205	Other tear of unspecified meniscus, current injury, unspecified knee
S83.206	Unspecified tear of unspecified meniscus, current injury, right knee
S83.207	Unspecified tear of unspecified meniscus, current injury, left knee

S83.209	Unspecified tear of unspecified meniscus, current injury, unspecified knee
S83.21	Bucket-handle tear of medial meniscus, current injury
S83.211	Bucket-handle tear of medial meniscus, current injury, right knee
S83.212	Bucket-handle tear of medial meniscus, current injury, left knee
S83.219	Bucket-handle tear of medial meniscus, current injury, unspecified knee
S83.22	Peripheral tear of medial meniscus, current injury
S83.221	Peripheral tear of medial meniscus, current injury, right knee
S83.222	Peripheral tear of medial meniscus, current injury, left knee
S83.229	Peripheral tear of medial meniscus, current injury, unspecified knee
S83.23	Complex tear of medial meniscus, current injury
S83.231	Complex tear of medial meniscus, current injury, right knee
S83.232	Complex tear of medial meniscus, current injury, left knee
S83.239	Complex tear of medial meniscus, current injury, unspecified knee
S83.24	Other tear of medial meniscus, current injury
S83.241	Other tear of medial meniscus, current injury, right knee
S83.242	Other tear of medial meniscus, current injury, left knee
S83.249	Other tear of medial meniscus, current injury, unspecified knee
S83.25	Bucket-handle tear of lateral meniscus, current injury
S83.251	Bucket-handle tear of lateral meniscus, current injury, right knee
S83.252	Bucket-handle tear of lateral meniscus, current injury, left knee
S83.259	Bucket-handle tear of lateral meniscus, current injury, unspecified knee

S83.26	Peripheral tear of lateral meniscus, current injury
S83.261	Peripheral tear of lateral meniscus, current injury, right knee
S83.262	Peripheral tear of lateral meniscus, current injury, left knee
S83.269	Peripheral tear of lateral meniscus, current injury, unspecified knee
S83.27	Complex tear of lateral meniscus, current injury
S83.271	Complex tear of lateral meniscus, current injury, right knee
S83.272	Complex tear of lateral meniscus, current injury, left knee
S83.279	Complex tear of lateral meniscus, current injury, unspecified knee
S83.28	Other tear of lateral meniscus, current injury
S83.281	Other tear of lateral meniscus, current injury, right knee
S83.282	Other tear of lateral meniscus, current injury, left knee
S83.289	Other tear of lateral meniscus, current injury, unspecified knee
S83.3	Tear of articular cartilage of unspecified knee, current injury
S83.31	Tear of articular cartilage of right knee, current injury
S83.32	Tear of articular cartilage of left knee, current injury

Presentation and Etiology

Causes and Risk Factors

Risk factors for meniscus injury include[26]:

- Male gender
- Overweight
- Frequent squatting, kneeling, or stair climbing
- Sports involving contact or pivoting

Causes of cartilage injury include[22]:

- Twist on a bent knee
- Direct blow to the knee
- Minor injuries caused over time

Clinical Presentation

The clinical presentation of meniscus injury varies based on the type of injury.

Acute injury:

- Sudden onset of pain
- Pop or tearing sensation
- Swelling
- Pain with end range of motion (ROM)
- Exacerbated by weight bearing, twisting, or pivoting movement
- Catching or locking[27]
- Feeling of instability
- Inability to squat

Subacute or chronic injury:

- Knee pain with insidious onset
- Swelling
- Stiffness
- Pain with end range of motion
- Exacerbated by weight bearing, twisting, or pivoting movement
- Catching or locking[27]
- Feeling of instability
- Inability to squat

Articular cartilage injury may present with only intermittent swelling but could also include the following[27]:

- Pain
- Giving way
- Locking or catching
- Crepitus

Typical Physical Exam Findings

The following may be seen on physical examination of a patient with meniscus injury[26]:

- Antalgic gait
- Effusion[28-30]
- Limited active ROM compared with the contralateral knee, especially an inability to fully extend the knee.
- Pain with passive end ROM
- Joint line tenderness[28-30]
- Special testing:
    - McMurray test[28-30]
        - Start with passive flexion with the tibia in internal or external rotation. Reproduction of symptoms or a palpable click during passive extension equals a positive test.
    - Thessaly test[28-30]
        - While standing on the affected leg with the knee flexed to 20°, the patient internally and externally rotates. Reproduction of symptoms equals a positive test.
    - Apley
        - The patient is supine with the knee flexed to 90°. Reproduction of pain with the application of downward force (compression) and internal/external rotation of the tibia equals a positive test.
        - Less commonly performed due to poor sensitivity
- The following combination of 5 findings has a positive predictive value of 92%[21]:
    - A history of patient-reported "catching" or "locking"
    - Pain with forced hyperextension
    - Pain with maximum flexion
    - Pain or an audible click with McMurray maneuver
    - Joint line tenderness to palpation

Articular cartilage injuries frequently have a normal physical exam or a swollen knee.[27]

Typical Diagnostic Findings

- Normal radiographs in young patients
- Arthritic changes in degenerative tears
    - Loss of joint space
    - Subchondral sclerosis
- Chondral injuries may have a normal radiograph or evidence of loose bodies in the knee joint.

Care Path Services & Medical Necessity Criteria

Conservative Therapy

Service: Physical Therapy

General Guidelines

- **Units, Frequency, & Duration:**
  - For acute meniscus tears in patients over 40 without locking, physical therapy is recommended for 3-6 weeks or up to 3 months.[10] The standard is meniscal repair for younger patients depending on tear pattern and location.[23,31]
  - Physical therapy is recommended for 3-6 months for degenerative tears.[10,21]
  - There is no evidence to support an exact protocol of units and frequency.
- **Criteria for Subsequent Requests:** The patient has not met all physical therapy goals.
- **Recommended Clinical Approach:** Physical therapy should be the first-line treatment for degenerative meniscal tears.[10,26]
  - They are associated with lower extremity strength and function.[32]
  - Compared with arthroscopic partial meniscectomy, functional outcomes may be similar.[10,19,21-26]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Physical therapy** is considered appropriate if **ALL** of the following are **TRUE:**

◆ The patient has **ANY** positive findings from the presentation list:

- Sudden onset of pain
- Pop or tearing sensation
- Swelling
- Pain with end range of motion (ROM)
- Exacerbated by weight bearing, twisting, or pivoting movement
- Catching or locking

- Feeling of instability
- Inability to squat
- Stiffness
- Crepitus

◆ The patient has **ANY** of the positive findings from the physical exam list:

- Antalgic gait
- Effusion
- Limited active ROM compared with the contralateral knee
- Pain with passive end ROM
- Joint line tenderness
- Positive McMurray test
- Positive Thessaly test
- Positive Apley test

Non-Indications

➔ **Physical therapy** is not considered appropriate if **ANY** of the following is **TRUE:**

◆ A locked knee is an indication for urgent arthroscopy.[10]

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
97010	Application of hot or cold packs
97012	Application of mechanical traction
97014	Application of electrical stimulation
97016	Application of vasopneumatic devices
97018	Application of paraffin bath
97022	Application of whirlpool
97024	Application of diathermy
97026	Application of infrared modality
97028	Application of ultraviolet modality

97032	Application of manual electrical stimulation
97033	Application of iontophoresis
97034	Application of contrast baths
97035	Application of ultrasound modality
97036	Application of Hubbard tank
97039	Modality service
97110*	Therapeutic exercises to develop strength and endurance, range of motion and flexibility
97112	Neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and proprioception for sitting and standing activities
97113	Aquatic therapy with therapeutic exercises
97116	Gait training including stair climbing
97124	Massage including effleurage and petrissage; Massage including effleurage and tapotement; Massage including effleurage, petrissage and tapotement; Massage including petrissage and tapotement
97139	Therapeutic procedure
97140	Manual therapy techniques
97150	Group therapeutic procedures
97164	Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient 20 minutes; Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient and family 20 minutes; Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient's family 20 minutes
97530	Direct therapeutic activities with use of dynamic activities to improve functional performance, each 15 minutes
97535	Home management training, direct one-on-one contact, each 15 minutes;

	Self-care management training, direct one-on-one contact, each 15 minutes
97537	Community reintegration training, direct one-on-one contact, each 15 minutes; Work reintegration training, direct one-on-one contact, each 15 minutes
97542	Wheelchair management, each 15 minutes
97545	Work conditioning, initial 2 hours; Work hardening, initial 2 hours
97546	Work conditioning, each additional hour; Work hardening, each additional hour
97750	Physical performance measurement with written report, each 15 minutes; Physical performance test with written report, each 15 minutes
97755	Assistive technology assessment with written report, direct one-on-one contact, each 15 minutes
97760	Initial orthotic management and training with assessment and fitting of lower extremities and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremities, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity, each 15 minutes; Initial orthotic management and training with assessment and fitting of trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of upper and lower extremities and trunk, each 15 minutes

97761	Initial prosthetic training of lower extremities, each 15 minutes; Initial prosthetic training of lower extremity, each 15 minutes Initial prosthetic training of upper and lower extremities, each 15 minutes; Initial prosthetic training of upper extremities, each 15 minutes; Initial prosthetic training of upper extremity, each 15 minutes
97763	Subsequent orthotic management and training of lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity, each 15 minutes Subsequent orthotic management and training of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities, each 15 minutes Subsequent orthotic management and training of upper extremity and trunk, each 15 minutes Subsequent orthotic management and training of upper extremity, each 15 minutes Subsequent orthotic management of lower extremities and trunk, each 15 minutes Subsequent orthotic management of lower extremity and trunk, each 15 minutes Subsequent orthotic management of lower extremity, each 15 minutes Subsequent orthotic management of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic management of upper extremities and trunk, each 15 minutes Subsequent orthotic management of upper extremities, each 15 minutes Subsequent orthotic management of upper extremity and

	trunk, each 15 minutes Subsequent orthotic management of upper extremity, each 15 minutes Subsequent orthotic training of lower extremity, each 15 minutes Subsequent orthotic training of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic training of upper extremities and trunk, each 15 minutes Subsequent orthotic training of upper extremities, each 15 minutes Subsequent orthotic training of upper extremity and trunk, each 15 minutes Subsequent orthotic training of upper extremity, each 15 minutes Subsequent prosthetic management and training of lower extremities and trunk, each 15 minutes Subsequent prosthetic management and training of lower extremity and trunk, each 15 minutes Subsequent prosthetic management and training of lower extremity, each 15 minutes Subsequent prosthetic management and training of upper and lower extremities and trunk, each 15 minutes Subsequent prosthetic management and training of upper extremities and trunk, each 15 minutes Subsequent prosthetic management and training of upper extremities, each 15 minutes Subsequent prosthetic management and training of upper extremity and trunk, each 15 minutes Subsequent prosthetic management and training of upper extremity, each 15 minutes Subsequent prosthetic management of lower extremities and trunk, each 15 minutes Subsequent prosthetic management of lower extremity and trunk, each 15 minutes Subsequent prosthetic management of lower extremity, each 15 minutes Subsequent prosthetic management of upper and lower

	extremities and trunk, each 15 minutes Subsequent prosthetic management of upper extremities and trunk, each 15 minutes Subsequent prosthetic management of upper extremities, each 15 minutes Subsequent prosthetic management of upper extremity and trunk, each 15 minutes Subsequent prosthetic management of upper extremity, each 15 minutes Subsequent prosthetic training of lower extremity, each 15 minutes Subsequent prosthetic training of upper and lower extremities and trunk, each 15 minutes Subsequent prosthetic training of upper extremities and trunk, each 15 minutes Subsequent prosthetic training of upper extremities, each 15 minutes Subsequent prosthetic training of upper extremity and trunk, each 15 minutes Subsequent prosthetic training of upper extremity, each 15 minutes Subsequent orthotic management and training of lower extremities, each 15 minutes Subsequent orthotic management of lower extremities, each 15 minutes Subsequent orthotic training of lower extremities and trunk, each 15 minutes Subsequent orthotic training of lower extremities, each 15 minutes Subsequent orthotic training of lower extremity and trunk, each 15 minutes Subsequent prosthetic management and training of lower extremities, each 15 minutes Subsequent prosthetic management of lower extremities, each 15 minutes Subsequent prosthetic training of lower extremities and trunk, each 15 minutes Subsequent prosthetic training of lower extremities, each 15

	minutes Subsequent prosthetic training of lower extremity and trunk, each 15 minutes
97799	Unlisted physical medicine/rehabilitation service or procedure
420	Physical Therapy
421	Physical Therapy: Visit Charge
422	Physical Therapy: Hourly Charge
423	Physical Therapy: Group Rate
424	Physical Therapy: Evaluation/Re-evaluation
429	Physical Therapy: Other Physical Therapy
97163	Evaluation of physical therapy, typically 45 minutes
97161	Evaluation of physical therapy, typically 20 minutes
97162	Evaluation of physical therapy, typically 30 minutes
97168	Re-evaluation of occupational therapy established plan of care, typically 30 minutes
97165	Evaluation of occupational therapy, typically 30 minutes
97166	Evaluation of occupational therapy, typically 45 minutes
97167	Evaluation of occupational therapy established plan of care, typically 60 minutes
G0151	Hhcp-serv of pt,ea 15 min

*Default codes for suggested services

Advanced Imaging

Service: Magnetic Resonance Imaging (MRI) without contrast

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** The patient presents with a new injury.
- **Recommended Clinical Approach:**
    - MRI is indicated if traumatic injury or clinical examination suggests another intra-articular pathology (e.g., ACL injury).[33]
    - MRI is indicated if symptoms persist despite conservative management and if surgical treatment is considered.[21]
    - MRI is not recommended if the patient has chronic knee pain and "radiographs are diagnostic of advanced osteoarthritis unless symptoms are not explained by the radiographic findings".[34]
    - Radiography should be performed prior to MRI.[34]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **MRI** is considered appropriateif **ANY** of the following are **TRUE**[34]**:**

- ◆ The patient has an acute injury and **ALL** of the following:
    - There is a suspicion of another intra-articular pathology.
    - The patient has sustained an acute injury.
    - A radiograph was performed, and it does not show advanced osteoarthritis.
- ◆ The patient has a chronic disorder and **ALL** of the following are **TRUE:**
    - There is a suspicion of another intra-articular pathology.
    - Symptoms have persisted for more than 6 weeks of conservative management.
    - A radiograph has been performed, and it does not show advanced osteoarthritis.

Non-Indications

➔ **MRI** may not be considered appropriate if **ANY** of the following is **TRUE:**

- ◆ Non-compatible implanted devices
- ◆ There are metallic intraocular foreign bodies
- ◆ The patient is claustrophobic

- Patient is not a surgical candidate
- Advanced arthritis noted on radiographs

➔ **MRI** is not indicated if **ANY** of the following is **TRUE:**
- Surgery is not possible.

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
73721	MRI of lower extremity
73722	MRI scan of leg joint with contrast
73723	MRI scan of leg joint before and after contrast

Non-Surgical Management

Service: Intra-articular Corticosteroid Injection

General Guidelines

- **Units, Frequency, & Duration:** Serial injections are not recommended. There is insufficient literature to recommend units or frequency.
- **Criteria for Subsequent Requests:** At least a 3-month interval between injections
- **Recommended Clinical Approach:**
  - Intra-articular corticosteroids could provide short-term relief for patients with symptomatic osteoarthritis of the knee.[13]
  - Use judiciously due to the risk of cartilage damage.[35-36]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Intra-articular corticosteroid injections** are considered appropriate if **ANY** of the following is **TRUE:**

- ◆ Symptoms of intra-articular knee pathology.
- ◆ Persistent symptoms for more than 6 weeks.
- ◆ The patient failed a trial of oral anti-inflammatory medication.

Non-Indications

➔ **Intra-articular corticosteroid injections** are not considered appropriate if **ANY** of the following is **TRUE**[37]**:**

- Periarticular infection
- Septic arthritis
- Periarticular fracture
- Joint instability

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
20610	Injection of knee joint

Surgical Management

Service: Arthroscopic Partial Meniscectomy

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:**
    - Acute, painful locking knee due to irreparable tear[10,21,38]
    - Retear of a failed repair[38]
    - Degenerative tears:
        - Meniscectomy may be appropriate for middle-aged patients with traumatic tears and no radiographic evidence of osteoarthritis (OA).[39]
        - May be considered after 6 months and persistent pain or mechanical symptoms with no OA on radiographs but an abnormal (grade 3 meniscus) MRI[10,21,40]
            - May be considered earlier for younger patients or patients with considerable mechanical symptoms
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Arthroscopic partial meniscectomy** is considered appropriate if **ALL** of the following are **TRUE:**

- ◆ The patient has **ANY** of the following findings:
    - Acute, painful locking knee due to irreparable tear[10,21,38]
    - Persistent mechanical symptoms
    - Failure of conservative management for more than 6 weeks with degenerative tears and minimal osteoarthritis
    - Failure of conservative management for more than 4 weeks for acute tears
    - Retear of a failed repair[38]
- ◆ The patient's advanced imaging demonstrates a meniscal tear.

Non-Indications

➔ **Arthroscopic partial meniscectomy** is not considered appropriate if **ANY** of the following is **TRUE:**

- ◆ Advanced OA with signs/symptoms primarily due to OA[10]
- ◆ No trial of conservative management for a degenerative tear[10,19,21]

- Not indicated as a first-line treatment for acute radial tears of zone 1 and 2.[38]

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
29881	Surgical arthroscopy of knee with lateral meniscectomy and chondroplasty Surgical arthroscopy of knee with medial meniscectomy and chondroplasty
29880	Surgical arthroscopy of knee with medial and lateral meniscectomy and chondroplasty
29999	Joint procedure using an endoscope
29885	Repair of knee joint with bone graft using an endoscope, with bone graft

Service: Meniscus Repair

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach[38]:**
  - The decision to repair should include many factors: patient age, baseline functional status, and the location, type, and degree of tear. Avoid delays if possible.
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Meniscus repair** is considered appropriate if **ALL** of the following are **TRUE:**

- ◆ The patient has **ANY** of the following advanced imaging findings[38]:
  - Medial meniscus tears in a young active patient
  - Unstable tears, such as bucket handle and double longitudinal tears
  - Isolated simple-pattern meniscus tears in stable knees
  - Posteromedial and posterolateral root tears
  - Longitudinal tears greater than 10 mm
  - Tears mostly in the vascular zones of the meniscus

Non-Indications

➔ **Meniscus repair** is not considered appropriate if **ANY** of the following is **TRUE**[33]:

- ◆ Degenerative tears
- ◆ Isolated meniscus repair in unstable knee[38,41]

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
29883	Surgical arthroscopy of knee with repair of medial and lateral meniscus
29882	Surgical arthroscopy of knee with repair of medial

	meniscus Surgical arthroscopy of knee with repair of lateral meniscus
27403	Arthrotomy of knee with repair of meniscus

Service: Meniscal Allograft

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:** This procedure is still uncommon. Therefore, there are strict criteria for which patients are eligible. It may be appropriate for younger patients with complete or near-complete loss of the meniscus who are symptomatic and have not developed osteoarthritic changes in the knee joint. It may also be indicated in combination with ACL reconstruction in a meniscus-deficient patient. Patients who do well with this surgery are under 50 years of age and have a relatively active lifestyle.[42]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Meniscal allograft** is considered appropriate if **ALL** of the following are **TRUE**[42]**:**
- ◆ Symptoms have not improved with conservative management
- ◆ Physically active patient with persistent pain
- ◆ Normal knee alignment and stable knee ligaments
- ◆ Advanced imaging shows **ANY** of the following:
  - The meniscus is damaged beyond repair.
  - There is insufficient meniscus left for repair (previous surgery or injury).

Non-Indications

➔ **Meniscal allograft** is not considered appropriate if **ANY** of the following is **TRUE**[42]**:**
- ◆ Degenerative arthritis of the symptomatic knee.
- ◆ BMI greater than 40.

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
29868	Surgical arthroscopy of knee with lateral meniscus

	transplantation Surgical arthroscopy of knee with medial meniscus transplantation Surgical arthroscopy of knee with lateral meniscus transplantation, including arthrotomy Surgical arthroscopy of knee with medial meniscus transplantation, including arthrotomy

Service: Arthroscopic Debridement and Microfracture

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:** This procedure is recommended to treat small to medium-sized cartilage defects. It is an arthroscopic surgery. The microfracture procedure creates a blood clot that develops into fibrocartilage to fill the injury.[22]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Arthroscopic debridement and microfracture** is considered appropriate if **ANY** of the following are **TRUE:**

- ◆ Full-thickness cartilage defect with exposed bone
- ◆ Small defect (less than 2 cm^2) and the patient is physically active.[43-46]
- ◆ Isolated articular defect[47-50]

Non-Indications

➔ **Arthroscopic debridement and microfracture** is not considered appropriate if **ANY** of the following is **TRUE:**

- ◆ The patient has knee arthritis.

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
29877	Surgical arthroscopy of knee with chondroplasty
29879	Surgical arthroscopy of knee with abrasion arthroplasty Surgical arthroscopy of knee with abrasion arthroplasty, including chondroplasty Surgical arthroscopy of knee with microfracture Surgical arthroscopy of knee with multiple drilling
29999	Joint procedure using an endoscope

29885	Repair of knee joint with bone graft using an endoscope, with bone graft

Service: Osteochondral Allograft (OCA)/Autograft

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach[51]:**
  - Transplanting cartilage into defects can improve pain and function, especially in younger patients for whom arthroplasty is not an option.
  - Cartilage repair/restoration should be done in concert with that of the ligament(s) or meniscus or malalignment
  - Patient factors, such as high BMI or increasing age, may be associated with poorer outcomes but are not considered to be absolute contraindications.
  - There is some disagreement among experts regarding the appropriate management of large lesions of the patellofemoral joint (i.e., ACI or OCA).[52]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Osteochondral allograft/autograft transplantation** is considered appropriate if **ALL** of the following are **TRUE:**

- Knee symptoms (pain, swelling, mechanical) or loss of function due to chondral injury[51,53]:
  - Allograft is appropriate for larger focal chondral or osteochondral defects (larger than 2 cm).
  - Autograft is appropriate for smaller focal chondral or osteochondral defects (smaller than 2 cm).

Non-Indications

➔ **Osteochondral allograft/autograft transplantation** is not considered appropriate if **ANY** of the following is **TRUE:**

- Risk factors for osteonecrosis
- Inflammatory arthritis
- Smoking[53]
- End-stage osteoarthritis[52]
- ACL or meniscus deficiency (unless being addressed in the same procedure)[51]

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
29866	Surgical arthroscopy of knee with osteochondral autograft Surgical arthroscopy of knee with mosaicplasty using osteochondral autografts, including harvesting of grafts Surgical arthroscopy of knee with osteochondral autograft, including harvesting of graft Surgical arthroscopy of knee with osteochondral autografts, including harvesting of grafts
29867	Surgical arthroscopy of knee with osteochondral allograft Surgical arthroscopy of knee with mosaicplasty with osteochondral allografts
29885	Repair of knee joint with bone graft using an endoscope

Service: Autologous Chondrocyte Implantation (ACI)

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach[51]:**
    - Transplanting cartilage into defects can improve pain and function, especially in younger patients for whom arthroplasty is not an option.
    - Cartilage repair/restoration should be done in concert with that of the ligament(s) or meniscus or malalignment
    - Patient factors, such as high BMI or increasing age, may be associated with poorer outcomes but are not considered to be absolute contraindications.
    - There is some disagreement among experts regarding the appropriate management of large lesions of the patellofemoral joint (i.e., ACI or OCA).[52]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Autologous chondrocyte implantation** is considered appropriate if **ALL** of the following are **TRUE:**

- ◆ Knee symptoms (pain, swelling, mechanical) or loss of function due to chondral injury[51] as indicated by **ALL** of the following
    - Isolated chondral lesions between 2-4 cm or osteochondral defects of grades III or IV

Non-Indications

➔ **Autologous chondrocyte implantation** is not considered appropriate if **ANY** of the following is **TRUE:**

- ◆ End-stage osteoarthritis[52]
- ◆ ACL or meniscus deficiency (unless being addressed in the same procedure)[51]

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
29870	Diagnostic arthroscopy of knee joint Diagnostic arthroscopy of knee with synovial biopsy
27412	Autologous chondrocyte implantation of knee joint
J7330	Cultured chondrocytes implant
S2112	Knee arthroscopy harvest

Surgical Risk Factors

Patient Medical Risk Stratification

Patient Risk Score	Patient Characteristic	Min Range	Max Range	Guidance
1- Very Low Risk	No known medical problems			
2- Low Risk	Hypertension		180/110 mm Hg	
2- Low Risk	Asthma	peak flow >80% of predicted or personal best value		
2- Low Risk	Prior history of alcohol abuse			Screen for liver disease and malnutrition
2- Low Risk	Prior history of tobacco use			
3- Intermediate Risk	Asthma	peak flow <80% of predicted or personal best value		
3- Intermediate Risk	Active alcohol abuse			
3- Intermediate Risk	Age	65	75	
3- Intermediate Risk	History of treated, stable coronary artery disease (CAD)			
3- Intermediate Risk	Stable atrial fibrillation			
3- Intermediate Risk	Diabetes mellitus	HbA1C >7%		
3- Intermediate Risk	Morbid obesity	BMI 30	BMI 40	
3- Intermediate Risk	Anemia	hemoglobin <11 (females), <12 (males)		Workup to identify etiology
3- Intermediate Risk	HIV	CD4 <200 cells/mm3		Get clearance from HIV specialist

3- Intermediate Risk	Rheumatologic disease			Preoperative consultation with rheumatologist re: perioperative medication management
3- Intermediate Risk	Peripheral vascular disease or history of peripheral vascular bypass	ankle-brachial pressure index (ABPI) <0.9		Preoperative consultation with vascular surgeon
3- Intermediate Risk	History of venous thromboembolism (VTE)			
3- Intermediate Risk	Well-controlled obstructive sleep apnea			
3- Intermediate Risk	Malnutrition	transferrin <200 mg/dL albumin <3.5 g/dL prealbumin <22.5 mg/dL total lymphocyte count <1200-1500 cell/mm3 BMI <18		Preoperative consultation with nutritionist
3- Intermediate Risk	Active tobacco Use			Enroll patient in smoking cessation program
4- High Risk	Diabetes mellitus with complications	HbA1c >8%		
4- High Risk	Age	76	85	
4- High Risk	Oxygen dependent pulmonary disease			
4- High Risk	Sickle cell anemia			
4- High Risk	Obesity	BMI 40		
4- High Risk	Cirrhosis, history of hepatic decompensation or variceal bleeding			

4- High Risk	Impaired cognition; dementia			
4- High Risk	Compensated CHF			
4- High Risk	Cerebrovascular disease			
4- High Risk	Uncontrolled or suspected obstructive sleep apnea (OSA)			
4- High Risk	Renal insufficiency	serum creatinine >1.5 mg/dL or creatinine clearance <100 mL/min		
4- High Risk	Opioid dependence			
4- High Risk	End Stage Liver Disease			
4- High Risk	Uncontrolled Seizure Disorder			
4- High Risk	History of Malignant Hyperthermia			
5- Very High Risk	Cardiovascular: unstable angina, recent myocardial infarction (60 days), uncontrolled atrial fibrillation or other high-grade abnormal rhythm, severe valvular disease, decompensated heart failure			
5- Very High Risk	Primary pulmonary hypertension			Preoperative consultation with pulmonologist warranted
5- Very High Risk	Cirrhosis or severe liver disease, history of hepatic decompensation or variceal bleeding			
5- Very High Risk	Severe frailty, dependence for ADLs, or history of 3 or more falls in last 6 mos			
5- Very High Risk	Obesity		BMI >50	
5- Very High Risk	Age		>85	

5- Very High Risk	History of VTE with CI to anticoagulation, failure of anticoagulation, cessation of anticoagulation therapy secondary to bleeding			Preoperative consultation with hematologist or internist
5- Very High Risk	Renal failure requiring dialysis			
5- Very High Risk	Immunosuppression			
5- Very High Risk	Chronic Pain			

Postoperative Care

Service: Physical therapy

General Guidelines

- **Units, Frequency, & Duration:**
  - No guidelines exist for exact protocols
  - Variable protocols exist for post-meniscectomy rehab:
    - 6 months[54]
    - 6-12 weeks for a functional return to sport[55]
  - Up to 6 months after meniscus repair[55-56]
  - At least 3 months for OCA transplant[53]
- **Criteria for Subsequent Requests:** Reinjury or a decrease in functional status
- **Recommended Clinical Approach:**
  - Postoperative functional rehabilitation is associated with improved outcomes.[24]
  - The rate of recovery may be longer with more chronic injuries.[57]
  - Rehabilitation should begin immediately postoperatively.
  - Repairing a meniscus or a chondral defect may require initial limitations on weight-bearing or ROM. Progression depends on functional gains and the pre-injury level of activity.[53,55-56]
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Post-acute physical therapy** is considered appropriate if **ANY** of the following is **TRUE**:

◆ The patient underwent knee cartilage surgery.

Non-Indications

None.

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
97010	Application of hot or cold packs

97012	Application of mechanical traction
97014	Application of electrical stimulation
97016	Application of vasopneumatic devices
97018	Application of paraffin bath
97022	Application of whirlpool
97024	Application of diathermy
97026	Application of infrared modality
97028	Application of ultraviolet modality
97032	Application of manual electrical stimulation
97033	Application of iontophoresis
97034	Application of contrast baths
97035	Application of ultrasound modality
97036	Application of Hubbard tank
97039	Modality service
97110*	Therapeutic exercises to develop strength and endurance, range of motion and flexibility
97112	Neuromuscular reeducation of movement, balance, coordination, kinesthetic sense, posture, and proprioception for sitting and standing activities
97113	Aquatic therapy with therapeutic exercises
97116	Gait training including stair climbing
97124	Massage including effleurage and petrissage; Massage including effleurage and tapotement; Massage including effleurage, petrissage and tapotement; Massage including petrissage and tapotement
97139	Therapeutic procedure
97140	Manual therapy techniques
97150	Group therapeutic procedures

97164	Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient 20 minutes; Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient and family 20 minutes; Physical therapy re-evaluation of established plan of care, high complexity, typical time with patient's family 20 minutes
97530	Direct therapeutic activities with use of dynamic activities to improve functional performance, each 15 minutes
97535	Home management training, direct one-on-one contact, each 15 minutes; Self-care management training, direct one-on-one contact, each 15 minutes
97537	Community reintegration training, direct one-on-one contact, each 15 minutes; Work reintegration training, direct one-on-one contact, each 15 minutes
97542	Wheelchair management, each 15 minutes
97545	Work conditioning, initial 2 hours; Work hardening, initial 2 hours
97546	Work conditioning, each additional hour; Work hardening, each additional hour
97750	Physical performance measurement with written report, each 15 minutes; Physical performance test with written report, each 15 minutes
97755	Assistive technology assessment with written report, direct one-on-one contact, each 15 minutes

97760	Initial orthotic management and training with assessment and fitting of lower extremities and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremities, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity and trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of lower extremity, each 15 minutes; Initial orthotic management and training with assessment and fitting of trunk, each 15 minutes; Initial orthotic management and training with assessment and fitting of upper and lower extremities and trunk, each 15 minutes
97761	Initial prosthetic training of lower extremities, each 15 minutes; Initial prosthetic training of lower extremity, each 15 minutes Initial prosthetic training of upper and lower extremities, each 15 minutes; Initial prosthetic training of upper extremities, each 15 minutes; Initial prosthetic training of upper extremity, each 15 minutes
97763	Subsequent orthotic management and training of lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity and trunk, each 15 minutes Subsequent orthotic management and training of lower extremity, each 15 minutes Subsequent orthotic management and training of upper and lower extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities and trunk, each 15 minutes Subsequent orthotic management and training of upper extremities, each 15 minutes Subsequent orthotic management and training of upper extremity and trunk, each 15 minutes Subsequent orthotic management and training of upper extremity, each 15 minutes Subsequent orthotic management of lower extremities and trunk, each 15 minutes Subsequent orthotic management of lower extremity and trunk, each 15 minutes

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	Subsequent orthotic training of lower extremity and trunk, each 15 minutes Subsequent prosthetic management and training of lower extremities, each 15 minutes Subsequent prosthetic management of lower extremities, each 15 minutes Subsequent prosthetic training of lower extremities and trunk, each 15 minutes Subsequent prosthetic training of lower extremities, each 15 minutes Subsequent prosthetic training of lower extremity and trunk, each 15 minutes
97799	Unlisted physical medicine/rehabilitation service or procedure
420	Physical Therapy
421	Physical Therapy: Visit Charge
422	Physical Therapy: Hourly Charge
423	Physical Therapy: Group Rate
424	Physical Therapy: Evaluation/Re-evaluation
429	Physical Therapy: Other Physical Therapy
97163	Evaluation of physical therapy, typically 45 minutes
97161	Evaluation of physical therapy, typically 20 minutes
97162	Evaluation of physical therapy, typically 30 minutes
97168	Re-evaluation of occupational therapy established plan of care, typically 30 minutes
97165	Evaluation of occupational therapy, typically 30 minutes
97166	Evaluation of occupational therapy, typically 45 minutes
97167	Evaluation of occupational therapy established plan of care, typically 60 minutes
G0151	Hhcp-serv of pt,ea 15 min

*Default codes for suggested services

Service: Orthotics

General Guidelines

- **Units, Frequency, & Duration:** None.
- **Criteria for Subsequent Requests:** None.
- **Recommended Clinical Approach:** A valgus/varus unloader brace may be appropriate for patients with predominant medial or lateral compartment symptoms (e.g., knee pain, swelling, stiffness, and limited range of motion). An unloader brace pushes the knee so that the patient bears weight on the side of the knee with the articular cartilage intact. There is limited usefulness, however. The population that would benefit are patients with arthritis who are physically active or are in an occupation that requires being active (e.g., manual laborers).
- **Exclusions:** None.

Medical Necessity Criteria

Indications

➔ **Orthotics** are considered appropriate if **ALL** of the following are **TRUE**[58]**:**
- ◆ The patient underwent knee cartilage surgery.

Non-Indications

➔ **Orthotics** are not considered appropriate if **ANY** of the following is **TRUE:**
- ◆ Skin conditions that would be irritated by a brace
- ◆ Anatomy does not accommodate proper fitting
- ◆ Sedentary lifestyle

Site of Service Criteria

Outpatient

Procedure Codes (HCPCS/CPT)

HCPCS Code	Code Description/Definition
29530	Strapping of knee
L1834	Knee orthosis, without knee joint, rigid, custom fabricated
L1840	Knee orthosis, derotation, medial-lateral, anterior cruciate ligament, custom fabricated
L1844	Knee orthosis, single upright, thigh and calf, with adjustable flexion and extension joint (unicentric or polycentric),

	medial-lateral and rotation control, with or without varus/valgus adjustment, custom fabricated
L1846	Knee orthosis (KO), double upright, thigh and calf, with adjustable flexion and extension joint (unicentric or polycentric), medial-lateral and rotation control, with or without varus/valgus adjustment, custom fabricated
L2320	Addition to lower extremity, non-molded lacer, for custom fabricated orthosis only
L2330	Addition to lower extremity, lacer molded to patient model, for custom fabricated orthosis only
L2755	Addition to lower extremity orthosis, high strength, lightweight material, all hybrid lamination/prepreg composite, per segment, for custom fabricated orthosis only
L2800	Addition to lower extremity orthosis, knee control, knee cap, medial or lateral pull, for use with custom fabricated orthosis only
L2861	Addition to lower extremity joint, knee or ankle, concentric adjustable torsion style mechanism for custom fabricated orthotics only
L1852	Knee osteoarthritis double upright prefab ots
L3913	Hfo w/o joints cf

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December 29, 2022 (V.4)	Reviewing Physician: Dr. Andrea Young Approving Physician: Dr. Traci Granston