

Cohere Medical Policy - Knee Arthroscopy

Clinical Policy for Medical Necessity Review

Version: 8

Cohere Health UMC Approval Date: September 11, 2025

Last Annual Review: April 17, 2025 Revision: September 11, 2025 Next Annual Review: April 17, 2026

This policy was reviewed by the American Association of Orthopaedic Surgeons (AAOS) prior to publication.

Important Notices

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Policy Information:

Specialty Area: Musculoskeletal Care

Policy Name: Knee Arthroscopy

Type: $[\underline{\mathbf{X}}]$ Adult (18+ yo) | $[\underline{\mathbf{X}}]$ Pediatric (0-17 yo)

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Medical Necessity Criteria

Service: Knee Arthroscopy

Cohere Health takes an evidence-based approach to reviewing imaging and procedure requests, meaning that sufficient clinical information must be provided at the time of submission to determine medical necessity. Documentation must include a recent and detailed history, physical examination related to the onset or change in symptoms, relevant lab results, prior imaging, and details of previous treatments. Advanced imaging or procedures should be requested after a clinical evaluation by the treating provider, which may include referral to a specialist.

- When a specific clinical indication is not explicitly addressed in the Cohere
 Health medical policy, medical necessity will be determined based on
 established clinical best practices, as supported by evidence-based
 literature, peer-reviewed sources, professional society guidelines, and
 state or national recommendations, unless otherwise directed by the
 health plan.
- Requests submitted without clinical documentation, or those that do not align with the provided clinical information—such as mismatched procedure, laterality, body part, or CPT code—may be denied for lack of medical necessity due to insufficient or inconsistent clinical information.
- When there are multiple diagnostic or therapeutic procedures requested simultaneously or within the past three months, each will be reviewed independently. Clinical documentation must clearly justify all of the following:
 - The medical necessity of each individual request
 - Why prior imaging or procedures were inconclusive, or why additional/follow-up studies are needed
 - o How the results will impact patient management or treatment decisions
- Requests involving adjacent or contiguous body parts may be considered not medically necessary if the documentation demonstrates that the patient's primary symptoms can be adequately assessed with a single study or procedure.

Description

Knee arthroscopy is a minimally invasive method of visualizing and treating the knee joint. It is the standard treatment for the removal of inflamed synovial tissue, loose fragments of bone or cartilage, and resecting the damaged meniscus. The procedure may also be performed to trim or reconstruct damaged articular cartilage, as well as to reconstruct a torn anterior cruciate ligament (ACL) or posterior cruciate ligament (PCL). Knee arthroscopy is additionally performed to treat knee sepsis and issues related to the patella, such as chondromalacia patella. Osteochondritis dissecans, a condition in which a portion of bone and the cartilage covering it begins to separate from the joint, may be treated and evaluated arthroscopically. As an alternative to more invasive open procedures, knee arthroscopy is well-tolerated, safe, and leads to improved quality of life and function.¹⁻⁷

Medical Necessity Criteria

Indications

Knee arthroscopy is considered appropriate if **ANY** of the following is **TRUE**:

- Intraarticular joint pathology evaluation, lateral retinacular release, or synovectomy/plica resection when ALL of the following are TRUE⁸⁻¹²:
 - ANY of the following
 - Chronic knee pain and **ALL** of the following are **TRUE**:
 - Unknown etiology of symptoms; AND
 - Imaging does not yield definitive results; AND
 - Diagnostic arthrocentesis with synovial fluid analysis when ANY of the following is TRUE:
 - o Nondiagnostic; **OR**
 - Not indicated; OR
 - Symptoms of locking, catching, and giving way; OR
 - A loose body noted on imaging; OR
 - Patellofemoral instability; OR
 - Abnormal patellar tracking; OR
 - Patellar compression syndrome; OR
 - Inflammatory (e.g., rheumatoid arthritis, psoriatic arthritis, Lyme arthritis) arthritis; OR
 - Benign tumor/neoplastic disorders (osteochondromatosis, tenosynovial giant cell tumor [pigmented villonodular synovitis PVNS], synovial hemangioma, and recurrent hemarthrosis)¹³; OR

- Recurrent effusion¹⁴; OR
- Plica syndrome¹⁴; OR
- Hemophilic joint disease¹⁵; OR
- Lipoma arborescens (synovial lipomatosis)¹⁴; **AND**
- ANY of the following:
 - Conservative management does not apply tenosynovial giant cell tumor (pigmented villonodular synovitis [PVNS]) or other pathologic synovial processes; OR
 - Failure of conservative management for greater than 3 months, including **ALL** of the following:
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; AND
 - Physical therapy or physician-directed exercise program; AND
 - Bracing if medically appropriate; AND
 - ANY of the following:
 - Corticosteroid injection if medically appropriate; OR
 - Documentation that corticosteroid injection is contraindicated;
 OR
- **Debridement, lysis, drainage, or lavage** when **ALL** of the following are **TRUE**⁸:
 - ANY of the following:
 - Infected joint (septic arthritis)^{9,10}; **OR**
 - A foreign body on imaging (e.g., hardware); AND
 - The patient has ANY of the following conditions:
 - Nonoperative care does not apply (infected joint; symptoms of locking, catching, giving way); OR
 - Focal articular cartilage lesion (less than 4 cm²) with **ALL** of the following^{2,16,17}:
 - Symptoms that are related to chondral injury; AND
 - Absence of advanced osteoarthritis; AND
 - Nonoperative care (e.g., anti-inflammatory medications, analgesics, physical therapy, bracing) has been attempted and failed; OR
 - Arthrofibrosis (e.g., after prior surgical procedure or trauma), as indicated by ALL of the following⁷:
 - Loss of range of motion; AND

- Nonoperative care (e.g., physical therapy, manipulation under anesthesia) has been attempted and failed for at least 6 weeks;

 OR
- Ligament injury (ACL, PCL, LCL) when ALL of the following are TRUE 9.18-22:
 - o Absence of advanced arthritis; AND
 - Limited activities of daily living (ADLs) due to pain and instability; AND
 - Presence of ANY of the following:
 - Anterior cruciate ligament (ACL) tear; OR
 - Posterior cruciate ligament (PCL) tear; OR
 - Lateral collateral (fibular) ligament (LCL) tear; **OR**
 - Posterolateral corner (PLC) of the knee injury; AND
 - ANY of the following:
 - Decrease in swelling with improvement in range of motion since initial injury; OR
 - Clinically urgent injury for which ROM restoration would not be feasible prior to surgery; AND
 - Treatment is indicated for ANY of the following reasons:
 - Acute tear or injury; OR
 - Chronic injury associated with meniscal tear; OR
 - Concurrent with injury of ANY of the following:
 - Concomitant MCL/PCL/ACL/PLC/LCL injury; OR
 - Concomitant avulsion fracture; OR
 - Posterolateral corner of the knee is injured; OR
 - Tibial displacement of more than 8mm is demonstrated on stress radiographs; OR
 - Anterolateral ligament injury in conjunction with ACL injury; OR
 - Chronic injury with ANY of the following:
 - Failure of conservative management for greater than 3 months, including ALL of the following:
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; AND
 - o Physical therapy or physician-directed exercise program; AND
 - ANY of the following:
 - Corticosteroid injection if medically appropriate; **OR**
 - Documentation that corticosteroid injection is contraindicated; OR

- Persistent instability such that surgical treatment recommended;
 OR
- Treatment of osteochondral defect (e.g., osteochondritis dissecans) when ALL of the following are TRUE^{23,24}:
 - Plain radiograph or advanced imaging demonstrates an osteochondral defect; AND
 - Patient has ANY of the following:
 - Symptoms attributable to the osteochondral defect; OR
 - Acute traumatic injury resulting in osteochondral defect; OR
 - Unstable lesion/unstable defect on imaging; OR
- Autologous chondrocyte implantation (ACI) when ALL of the following are TRUE^{3.8}:
 - The patient has knee symptoms (e.g. pain, swelling, mechanical) or functional compromise; AND
 - o Chondral lesion between 2 cm and 4 cm; AND
 - 12 years or older; AND
 - ANY of the following:
 - Underlying malalignment will be addressed with osteotomy in the same procedure; OR
 - Patient does not have concurrent malalignment; OR
- Treatment of torn meniscus when ANY of the following is TRUE^{1,25-33}:
 - Partial meniscectomy when ANY of the following is TRUE:
 - The tear is an acute tear due to injury or trauma, or a recurrent or failed prior repair, and ALL of the following are TRUE:
 - Advanced imaging demonstrates a meniscal tear; AND
 - Acute, painful knee with exam consistent with MRI finding of tear;
 AND
 - Persistent mechanical symptoms; OR
 - The tear is a chronic (degenerative) tear and ALL of the following are TRUE:
 - Advanced imaging demonstrates a meniscal tear; AND
 - Persistent mechanical symptoms; AND
 - Knee pain with exam consistent with MRI finding of meniscal tear;
 AND
 - Failure of conservative management for greater than 3 months with degenerative tears and minimal osteoarthritis, including **ALL** of the following:

- Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; AND
- Physical therapy or physician-directed exercise program; AND
- o Activity modification; AND
- o **ANY** of the following:
 - Corticosteroid injection if medically appropriate; OR
 - Documentation that corticosteroid injection is contraindicated; OR
- Meniscus repair when ALL of the following are TRUE:
 - The patient has mechanical symptoms following an acute injury;
 AND
 - The patient has a meniscal tear on advanced imaging findings or a failed prior repair; OR
- Meniscus allograft transplantation is considered appropriate if ALL of the following are TRUE⁸:
 - Significant portion of the meniscus is absent due to either prior meniscectomy or prior injury; AND
 - o Persistent pain or impaired function with activity; AND
 - Age 50 years or younger; AND
 - o Symptoms are localized to the tibiofemoral compartment; AND
 - No evidence of advanced arthrosis; AND
 - o Over 50% joint space remaining; AND
 - o ANY of the following:
 - Underlying malalignment will be addressed with osteotomy in the same procedure; OR
 - Patient does not have concurrent malalignment; OR
- Arthroscopic management of fractures when ANY of the following are TRUE⁸:
 - o Fracture of the anterior intercondylar eminence of the tibia; OR
 - Other fracture pattern that would benefit from arthroscopically-assisted fracture reduction.

Non-Indications

Knee Arthroscopy is not considered appropriate if **ANY** of the following is **TRUE**:

- Osteoarthritis of the knee that is moderate or severe (or KL [Kellgren-Lawrence] grade III or grade IV)^{25,27,30}; OR
- Active infection at the surgical site (unless arthroscopy is indicated for surgical management of infection); OR
- The procedure is a meniscus allograft transplantation for **ANY** of the following:
 - o Inflammatory arthropathy; OR
 - Malalignment or instability that is not being corrected at the time of the meniscal allograft surgery; OR
 - o Irreparable/untreatable chondral damage.

Definitions

Advanced osteoarthritis is defined as complete or near-complete loss of joint space or moderate/severe KL grade arthritis^{1,25}:

- **Grade 3 (moderate)**: Moderate multiple osteophytes, definite narrowing of joint space, some sclerosis, and possible deformity of bone ends.
- **Grade 4 (severe)**: Large osteophytes, marked narrowing of joint space, severe sclerosis, and definite deformity of bone ends.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description	
27405	Repair, primary, torn ligament and/or capsule, knee; collateral	
27407	Repair, primary, torn ligament and/or capsule, knee; cruciate	
27409	Repair, primary, torn ligament and/or capsule, knee; collateral and cruciate ligaments	
27412	Autologous chondrocyte implantation, knee	
27427	Ligamentous reconstruction (augmentation), knee; extra-articular	
27599	Unlisted procedure, femur or knee	
29850	Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; without internal or external fixation (includes arthroscopy)	
29851	Arthroscopically aided treatment of intercondylar spine(s) and/or tuberosity fracture(s) of the knee, with or without manipulation; with internal or external fixation (includes arthroscopy)	
29855	Arthroscopically aided treatment of tibial fracture, proximal (plateau); unicondylar, includes internal fixation, when performed (includes arthroscopy)	
29856	Arthroscopically aided treatment of tibial fracture, proximal (plateau); bicondylar, includes internal fixation, when performed (includes arthroscopy)	
29866	Arthroscopy, knee, surgical; osteochondral autograft(s) (e.g., mosaicplasty) (includes harvesting of autograft[s])	
29867	Arthroscopy, knee, surgical; osteochondral allograft	

	(e.g., mosaicplasty)
29868	Arthroscopy, knee, surgical; meniscal transplantation (includes arthrotomy for meniscal insertion), medial or lateral
29870	Arthroscopy, knee, diagnostic, with or without synovial biopsy (separate procedure)
29871	Arthroscopy, knee, surgical; for infection, lavage and drainage
29873	Arthroscopy, knee, surgical; with lateral release
29874	Arthroscopy, knee, surgical; for removal of loose body or foreign body (e.g., osteochondritis dissecans fragmentation, chondral fragmentation)
29875	Arthroscopy, knee, surgical; synovectomy, limited (e.g., plica or shelf resection) (separate procedure)
29876	Arthroscopy, knee, surgical; synovectomy, major, 2 or more compartments (e.g., medial or lateral)
29877	Arthroscopy, knee, surgical; debridement/shaving of articular cartilage (chondroplasty)
29879	Arthroscopy, knee, surgical; abrasion arthroplasty (includes chondroplasty where necessary) or multiple drilling or microfracture
29880	Arthroscopy, knee, surgical; with meniscectomy (medial AND lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29881	Arthroscopy, knee, surgical; with meniscectomy (medial OR lateral, including any meniscal shaving) including debridement/shaving of articular cartilage (chondroplasty), same or separate compartment(s), when performed
29882	Arthroscopy, knee, surgical; with meniscus repair (medial OR lateral)

29883	Arthroscopy, knee, surgical; with meniscus repair (medial AND lateral)	
29884	Arthroscopy, knee, surgical; with lysis of adhesions, with or without manipulation (separate procedure)	
29885	Arthroscopy, knee, surgical; drilling for osteochondritis dissecans with bone grafting, with or without internal fixation (including debridement of base of lesion)	
29886	Arthroscopy, knee, surgical; drilling for intact osteochondritis dissecans lesion	
29887	Arthroscopy, knee, surgical; drilling for intact osteochondritis dissecans lesion with internal fixation	
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction	
29889	Arthroscopically aided posterior cruciate ligament repair/augmentation or reconstruction	
29999	Unlisted procedure, arthroscopy	
J7330	Cultured chondrocytes implant	
S2112	Knee arthroscopy harvest	

Medical Evidence

In a 2022 Cochrane review, O'Connor et al. reviewed the literature to determine the efficacy of arthroscopic knee surgery for the treatment of symptomatic knee osteoarthritis, including for degenerative meniscal tears. While current guidelines discourage the use of the procedure for these indications, it is still performed with some regularity. The review analyzed benefits and harms (e.g., debridement, partial meniscectomy, or both) when compared to non-surgical interventions (e.g., physical therapy, exercise, intra-articular glucocorticoid injections, non-arthroscopic lavage, non-steroidal anti-inflammatory drugs, hyaluronic acid injections) or placebo surgery. Sixteen trials were included, representing randomized controlled trials (RCTs) and quasi-randomized trials. A total of 2105 patients (age range 46 to 65 years; 56% women) met the inclusion criteria. The authors affirmed that arthroscopic surgery is not recommended for patients with symptomatic degenerative knee disease as the evidence does not demonstrate clinically significant improvements in pain, function, or quality of life. In addition, arthroscopy may advance the progression of knee osteoarthritis and may result in earlier or additional surgery (e.g., knee arthroplasty, osteotomy).1

A 2024 publication by Sonesson et al. examined the 10-year outcomes among 150 middle-aged patients with meniscal symptoms who were randomized to either nonsurgical or surgical management. At the time of follow-up, the 142 surviving patients were evaluated for radiographic presence of osteoarthritis, as well as symptoms of osteoarthritis. The authors found that patient-reported outcomes were similar between cohorts and, given the short-term benefit and lack of long-term harm of knee arthroscopy, endorsed it as a first-line treatment for meniscal pathology after a failed trial of conservative care for a minimum of three months.³⁴

The Academy of Orthopaedic Surgeons (AAOS) has published four clinical guidelines to direct the management of patients with disease and damage of the knee that may be treated with arthroscopy. *Diagnosis and Treatment of Osteochondritis Dissecans* was published in 2023.²⁴ Therein, two recommendations, classified as limited in strength, were made regarding the surgical management of osteochondritis dissecans. The authors noted that the current body of evidence is insufficient to make a recommendation for or

against surgical intervention for both adult and pediatric patients. They cite the associated benefits and risks for nonoperative and operative treatment and ultimately opine, as a workgroup, that patients should be given the option of undergoing surgery. Management of Acute Meniscal Pathology was adopted in 2024, although the workgroup notes that current evidence is insufficient to establish strong recommendations.33 Importantly, a moderate-strength recommendation is made regarding the preservation of meniscal tissue during surgical intervention in order to reduce the future risk of osteoarthritis. The authors opine that patients with a displaced acute meniscal tear or a symptomatic acute meniscal tear would benefit from early surgical intervention. Elsewhere in the guideline, the authors recommend surgical treatment of acute meniscal tears within six months of injury after failed conservative treatment, although this guidance was limited in strength and based on low-quality evidence. The workgroup advocates for future research in this area to allow for improved recommendations to be made in the future. Management of Anterior Cruciate Ligament Injuries was published in 2022. The AAOS recommends operative treatment of ACL injuries in select patients. Early reconstruction for patients with acute isolated ACL tears is recommended due to the increased risk profile (potential chondral injury, meniscal injury) beyond 3 months. In general, ACL reconstruction was endorsed over ACL repair due to the higher risk of revision surgery after ACL repair. ACL reconstruction was characterized as the standard of care for primary ACL injury. Both recommendations were categorized as strong and were based on evidence that was rated as high-quality. Management of Osteoarthritis of the Knee (Non-Arthroplasty) was adopted in 2021. In this guideline, the AAOS does not recommend arthroscopy with lavage and/or debridement for primary knee osteoarthritis. Among patients with meniscal tears and concomitant mild to moderate osteoarthritis, arthroscopic partial meniscectomy may be necessary when conservative treatment (e.g., physical therapy) has been unsuccessful. Both recommendations were made with moderate strength.²⁵

The AAOS has also issued position statements pertaining to knee arthroscopy. Information statement 1047, published in 2016, acknowledges the increased patient safety risks conferred by tobacco use – including increased ventilatory support, myocardial infarction, cardiac arrest, cerebrovascular accident, sepsis, and death. The AAOS states that patients who are active smokers may reduce these risks through cessation of smoking prior to

surgery; they also note the special role orthopaedic surgeons play in counseling patients on the benefits of reduced or eliminated tobacco use before surgery. Importantly, unconfirmed cessation is not endorsed as a hard stop to surgery; rather, the surgeon's unique role as an advocate for preoperative smoking cessation is emphasized. Statements 1040 and 1184 discuss the impact of obesity on musculoskeletal conditions. Patients with morbid obesity (BMI of 40 or above) are encouraged to participate in a weight loss program, obtain weight reduction resources through their physician, rectify nutritional deficiencies, and consider a delay in surgical treatment if it would facilitate participation in weight loss interventions that may improve surgical outcomes. Statement 1040 notes that individuals with obesity face an increased risk for sports injuries and that when such injuries are treated arthroscopically, the procedure may be more technically difficult because of the loss of superficial landmarks.³⁶ Questions remain as to whether functional results are affected by obesity. Further, the authors note the risks associated with general anesthesia for patients with obesity and emphasize the importance of adequate patient positioning and padding to avoid pressure ulcers, nerve palsies, and compartment syndromes, which are more common among obese patients. In general, obesity is associated with a greater risk of premature complications and mortality during the perioperative period. The AAOS endorses compassionate, risk-informed patient counseling for obese patients who are considering surgery. Careful screening and appropriate referral to nutrition or endocrine care is also endorsed. Statement 1184 reinforces the risks associated with obesity in the setting of orthopaedic care and similarly encourages adequate patient counseling prior to surgery.37

Social determinants of health remain an important area of ongoing orthopaedic surgery research, with recent literature raising questions regarding the healthcare disparities that may be potentiated by care limitations based on obesity and smoking status/nicotine dependence. Other ongoing research interrogates the impacts that biological sex, race, and socioeconomic status have on knee arthroscopy utilization and outcomes.

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Policy Revision History/Information

Original Date: March 20, 2023			
Review History			
Version 2	10/13/2023	Policy criteria reviewed and updated per medical literature	
Version 3	12/1/2023	Policy criteria reviewed and updated per medical literature	
Version 4	05/30/2024	Annual policy review	
Version 5	09/20/2024	Updated language regarding conservative treatment.	
Version 6	04/17/2025	Annual policy review & restructure:	
		Removed requirement for "young, active patient" for medial or lateral meniscal tears	
		Permitted osteochondritis dissecans to be visualized on plain radiograph per professional society guideline	
		Removed qualifier for "due to patient's occupation" on ACL reconstruction per professional society guidelines	
		Removed requirement for conservative management of greater than 3 months for ACL tear per professional society guidelines	
		Modified indications for meniscus allograft transplantation for clarity and to better reflect the referenced source	
		Removed redundant synovectomy indication for Lyme arthritis, which was already captured in prior indication	

Removed redundant synovectomy indication for tenosynovial giant cell tumor, which was already captured in prior indication

Added indications for synovectomy: synovial hemangioma, degenerative synovitis, plica syndrome

Added an "out" for conservative management requirement for plica syndrome and PVNS

Adjusted chondral lesion size for optimal ACI treatment to reflect appropriate arthroscopic management versus open arthrotomy

Added minimum age of 12 for optimal ACI treatment

Removed requirement for grade III or grade IV osteochondral defect for optimal arthroscopic ACI treatment versus open arthrotomy

Moved debridement of articular cartilage lesion indication beneath existing indications for debridement

Removed hemangioma indication under diagnostic arthroscopy as this indication was better covered elsewhere

Added indication for arthroscopic management of certain fracture types

Removed BMI requirement for meniscus allograft as it is not an absolute contraindication

Consolidated all indications which require three months of conservative care for policy's ease of use.

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		Updated conservative care to current internal standard language.
		Conservative care language modified to reflect non-opioid pain control.
		Modified steroid injection language for clarity.
		Added references.
		Updated medical evidence section.
Version 7	5/22/2025	Added CPT codes: 27405, 27407, 27409, 27427
		Slight modification to ligamentous injury indication to allow approval for lateral collateral ligament injury - changed "cruciate ligament injury" to "ligament injury" and added bullet points: presence of LCL tear, presence of PLC injury
Version 8	9/11/2025	Added "unstable lesion/unstable defect on imaging" as indication under osteochondritis dissecans to allow approval for patients who may not have mechanical symptoms
		Added requirement that underlying malalignment be addressed with osteotomy in the same procedure as meniscal transplant or autologous chondrocyte implantation per current medical guidelines
		Added definition of advanced osteoarthritis to "definition" section