



Guidelines for Medical Necessity Determination for Knee Arthroscopy

These Guidelines for Medical Necessity Determination (Guidelines) identify the clinical information that MassHealth needs to determine medical necessity for knee arthroscopy. These Guidelines are based on generally accepted standards of practice, review of the medical literature, and federal and state policies and laws applicable to Medicaid programs.

Providers should consult MassHealth regulations at [130 CMR 433.000](#) (physician services), and [450.000](#) (administrative and billing regulations), and [Subchapter 6 of the Physician Manual](#) for information about coverage, limitations, service conditions, and prior authorization requirements. Providers serving members enrolled in a MassHealth-contracted accountable care partnership plan (ACPP) or managed care organization (MCO), should refer to the ACPP's or MCO's medical policies for covered services.

MassHealth requires PA for knee arthroscopy and reviews PA requests on the basis of medical necessity. If MassHealth approves the request, payment is still subject to all general conditions of MassHealth, including member eligibility, other insurance, and program restrictions.

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SECTION I. GENERAL INFORMATION

Knee arthroscopy is a surgical procedure where a fiber-optic camera is put into the knee joint to look at the joint structure in order to better diagnose and treat a broad range of knee problems. In addition to viewing the joint, the surgeon can use instruments with a camera to repair, remove, or reconstruct the knee cartilage. Knee arthroscopy may be used in some painful knee conditions that affect the cartilage and do not respond to conservative, nonsurgical treatments.

Disorders of the knee are evaluated using subjective clinical symptoms such as “locked” or “catching” knee; objective findings on physical examination; radiologic findings; and response to a combination of conservative treatments outlined in Appendix A. Physical examination may include techniques such as the Lachman and drawer tests to assess the integrity of the anterior cruciate ligament; McMurray's test to assess for meniscal tears; and other tests to help identify the intactness of the major knee structures, such as ligaments and menisci. Magnetic resonance imaging (MRI) can be used to identify tears in knee structures, such as the anterior cruciate ligament, indicating the cause of symptoms and guiding treatment. In some conditions, such as osteoarthritis, the medical necessity of knee arthroscopy may be based on the severity of the condition as measured by grading systems, such as the Kellgren-Lawrence Grading System which appears in Appendix B.

This guideline contains the clinical indications outlined for knee arthroscopy without arthroplasty for each of the following purposes.

- 1) Diagnostic knee arthroscopy
- 2) Meniscectomy/meniscal repair
- 3) Baker's or popliteal cyst
- 4) Lateral release/patellar realignment

- 5) Patellar malalignment and/or patellar instability
- 6) Collateral ligament reconstruction/repair
- 7) Anterior cruciate ligament (ACL) reconstruction/repair
- 8) Posterior cruciate ligament (PCL) reconstruction/repair
- 9) Loose body removal
- 10) Synovectomy
- 11) Lysis of adhesions for arthrofibrosis of the knee secondary to trauma/injury
- 12) Debridement with or without chondroplasty for mild to moderate cartilage wear
- 13) Debridement chondroplasty for patellofemoral chondrosis
- 14) Manipulation under anesthesia (MUA) post total knee replacement

MassHealth considers approval for coverage of knee arthroscopy on an individual, case-by-case basis.

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SECTION II. CLINICAL GUIDELINES

A. CLINICAL COVERAGE

MassHealth bases its determination of medical necessity for knee arthroscopy on clinical data including, but not limited to, indicators that would affect the relative risks and benefits of the knee arthroscopy. These criteria include, but are not limited to, the following.

1. **DIAGNOSTIC KNEE ARTHROSCOPY** may be medically necessary when ALL of the following criteria (a through d) are met:
 - a. At least 12 weeks of knee pain with documented loss of function (i.e. deviation from normal knee function which may include painful weight bearing, unstable articulation, inadequate range of motion (>10 degrees flexion contracture or < 90 degrees flexion or both) impacting the ability to accomplish activities of daily living (ADLs), recreational activity, or employment due to injury or pain.
 - b. At least 12 weeks of nonoperative care that has failed to improve symptoms;
 - c. Clinical documentation of painful weight-bearing, joint-line tenderness, effusion, and/or limited motion compared to presymptomatic joint range;
 - d. Indeterminate radiographic and MRI findings.
2. **MENISCECTOMY** or repair of torn meniscus may be medically necessary when ALL of the following criteria (a through c) are met:
 - a. ONE of the following criteria (i, ii, or iii) is met:
 - i. Symptomatic meniscal tear confirmed by MRI results that show a peripheral longitudinal tear in a vascular zone, associated with pain and mechanical symptoms upon physical exam;
 - ii. Pediatric or adolescent patient has pain and mechanical symptoms upon physical exam, and MRI results show unstable tear;

- iii. At least three of the following five criteria are met:
 - a. History of “catching” or “locking” as reported by the patient;
 - b. Knee joint-line pain with forced hyperextension on physical exam;
 - c. Knee joint-line pain with maximum flexion on physical exam;
 - d. Knee pain or an audible click with McMurray’s maneuver on physical exam;
 - e. Joint-line tenderness to palpation on physical exam;
 - b. At least six weeks of nonoperative care has failed to improve symptoms;
 - c. One of the following findings (i, ii, or iii) exists:
 - i. Radiographs without moderate or severe osteoarthritic changes;
 - ii. MRI results confirm meniscal tear in patients < 30 years of age;
 - iii. MRI results confirm displaced tear (any age).
- 3. **EXCISION OF A POPLITEAL/BAKER’S CYST** or exploration of causative pathology may be medically necessary after a failed trial of nonoperative conservative therapy.
- 4. **LATERAL RELEASE/PATELLAR REALIGNMENT** may be medically necessary when ALL of the following criteria (a through f) are met:
 - a. Evidence of lateral patellar tilt from one of the following radiologic images (patellofemoral view);
 - Mercer-Merchant (45-60 degrees flexion);
 - skyline (60-90 degrees flexion);
 - sunrise (60-90 degrees flexion).
 - b. Associated lateral patella facet K-L changes, grade I, II, or III;
 - c. Reproducible isolated lateral patellofemoral pain with patellar tilt test;
 - d. At least six months of non-operative care has failed to improve symptoms, including appropriate hamstring/IT band stretching and patellar mobilization techniques;
 - e. No evidence of patellar dislocation without documented patellar tilt; and
 - f. No evidence of medial patellofemoral changes (Kellgren-Lawrence Grades II, III, or IV osteoarthritis).
- 5. **PATELLAR MALALIGNMENT** and/or **PATELLAR INSTABILITY REPAIR** may be medically necessary when ALL of the following criteria (a through d) are met:
 - a. ONE of the following criteria (i, ii, or iii) is present:
 - i. Acute traumatic patellar dislocation is associated with an osteochondral fracture, loose body, vastus medialis obliquus/Medial patellofemoral ligament muscle avulsion, or other intra-articular injury that requires urgent operative management;
 - ii. Repeat (more than two) patellar dislocations or subluxations have occurred despite six months of nonoperative care with radiologic confirmation of MPFL (medial patellofemoral ligament) deficiency;
 - iii. Physical exam has patellofemoral tenderness and abnormal articulation of the patella in the femoral trochlear groove (patellar apprehension with positive-J sign);

- b. Radiologic images rule out fracture or loose body, and show abnormal articulation, trochlear dysplasia, or other abnormality related to malalignment;
 - c. CT scan or MRI rules out other abnormality to malalignment (tibial tubercle trochlear groove (TT-TG) distance > 20 millimeters);
 - d. At least six months of nonoperative care has failed to improve symptoms.
6. **COLLATERAL LIGAMENT REPAIR OR RECONSTRUCTION:** Collateral ligament repair or reconstruction should rarely occur independent of additional repair or reconstruction surgery. All nontraumatic collateral ligament repair/reconstruction requests will be reviewed for medical necessity on a case-by-case basis.
7. **ANTERIOR CRUCIATE LIGAMENT (ACL) RECONSTRUCTION** or repair may be medically necessary when ALL of the following criteria (a and b) are met:
- a. ONE of the following two criteria (i or ii) is met:
 - i. All of the following ((a) through (c)) are met:
 - (a) Knee instability (as defined subjectively as “giving way”, “giving out”, “buckling”, or two-fist sign) with clinical findings of instability: Lachman’s 1A, 1B, 2A, 2B, 3A, 3B, Anterior Drawer, or Pivot Shift, instrumented (KT-1000 or KT-2000) laxity of greater than three mm side-side difference;
 - (b) MRI results confirm complete ACL tear;
 - (c) Patient has no evidence of severe arthritis (Kellgren-Lawrence Grade III or IV);
 - ii. ONE of the following criteria ((a), (b), or (c)) is met:
 - (a) MRI results confirm ACL tear associated with other ligamentous instability or repairable meniscus;
 - (b) MRI results confirm partial or complete ACL tear AND patient has persistent symptoms despite at least 12 weeks of nonoperative care;
 - (c) Acute ACL tear confirmed by MRI in high-demand occupation or competitive athlete (as quantified by Marx activity score for athletics (any score greater than four) and Tegner activity score for athletics and/or occupation (score greater than two));
 - b. Patient has no evidence of severe arthritis (Kellgren-Lawrence Grade III or IV).
 - c. NB. Tears in patients less than age 13 will be reviewed on a case-by-case basis to determine if (ACL) reconstruction or repair is medically necessary.
8. **POSTERIOR CRUCIATE LIGAMENT RECONSTRUCTION OR REPAIR** may be medically necessary when ALL of the following criteria (a through d) are met:
- a. Knee instability (defined subjectively as “giving way”, “giving out”, “buckling”, or two-fist sign) with clinical findings of a positive posterior drawer test, posterior sag test, quadriceps active test, dial test at 90 degrees knee flexion, or reverse pivot shift test;
 - b. MRI results confirm complete PCL tear;
 - c. Failed nonoperative care (including bracing in full extension for acute PCL tears);
 - d. Absence of medial and patellofemoral Kellgren-Lawrence grade III-to-IV changes in chronic tears.

- e. The following clinical scenarios will be reviewed on a case-by-case basis to determine if posterior cruciate ligament reconstruction or repair is medically necessary:
 - i. Pediatric and adolescent tears in patients with open physes or open growth plates;
 - ii. Symptomatic partial tears with persistent instability despite nonoperative care;
 - iii. Incidental Kellgren-Lawrence grade II-to III-osteoarthritis in acute or subacute tears with unstable joint;
 - iv. Tears in patients less than age 13.
- 9. Loose body or foreign object that causes documented loss of function (i.e. deviation from normal knee function which may include painful weight bearing, unstable articulation, inadequate range of motion (>10 degrees flexion contracture or < 90 degrees flexion or both) impacting the ability to accomplish activities of daily living (ADLs), recreational activity, or employment due to injury or pain.
- 10. Synovectomy (major = 2+ compartments; minor = 1 compartment) as defined by the medial compartment (inside the knee joint), the lateral compartment (outside the knee joint), and the patellofemoral compartment (front of the knee joint between the patella and the femur) may be medically necessary when ONE of the following criteria (a, b, c, or d) is met:
 - a. Proliferative rheumatoid synovium (in patients with established rheumatoid arthritis according to the American College of Rheumatology Guidelines) that is not responsive to disease modifying antirheumatic drug (DMARD) therapy for at least six months, and at least six weeks of nonoperative care that has failed to improve symptoms, and at least one instance of aspiration of joint effusion and cortisone injection (if no evidence of infection);
 - b. Hemarthrosis from injury, coagulopathy, or bleeding disorder confirmed by physical exam, joint aspiration, or MRI, and ONE of the following criteria (i or ii) is met:
 - i. At least six weeks of nonoperative care that has failed to improve symptoms and at least one instance of aspiration of joint effusion and injection of cortisone (if no evidence of infection);
 - ii. Detection of painful plica confirmed by physical exam and MRI findings, with at least 12 weeks of nonoperative care that has failed to improve symptoms and at least one instance of aspiration of joint effusion OR single injection of cortisone (effusion may not be present with symptomatic plica);
 - c. Proliferative pigmented villonodular synovitis, synovial chondromatosis, sarcoid synovitis, or similar proliferative synovial disease, traumatic hypertrophic synovitis confirmed by history, MRI, or biopsy when the following criteria (i and ii) are met:
 - i. At least six weeks of nonoperative care that has failed to improve symptoms; and
 - ii. At least one instance of aspiration of joint effusion and injection of cortisone (if no evidence of infection);
 - d. Detection of painful plica confirmed by physical exam and MRI findings when the following criteria (i and ii) are met:
 - i. At least 12 weeks of nonoperative care that has failed to improve symptoms; and
 - ii. At least one instance of aspiration of joint effusion OR single injection of cortisone (effusion may not be present with symptomatic plica).

- 11. ARTHROSCOPICALLY ASSISTED LYSIS OF ADHESIONS FOR ARTHROFIBROSIS OF THE KNEE:** Surgical indications are based on relevant clinical symptoms, physical exam and radiologic findings, time from primary knee surgery, and response to medically appropriate conservative management. Improvement in range of motion may be accomplished through arthroscopically assisted lysis of adhesions. Arthroscopically assisted lysis of adhesions may be medically necessary when ONE of the following criteria (a or b) is met:
- a. ALL of the following criteria (i, ii, and iii) are met:
 - i. Physical exam findings demonstrate inadequate range of motion of the knee, defined as less than 105 degrees of flexion;
 - ii. Range of motion of the knee has failed to improve despite six weeks (12 visits) of documented physical therapy;
 - iii. The member is more than 12 weeks after ligamentous or joint reconstruction, or resolved infection;
 - b. ALL of the following criteria (i, ii, and iii) are met:
 - i. The member is more than 12 weeks after trauma, or resolved infection;
 - ii. The member has a native knee;
 - iii. Manipulation under anesthesia is also performed.
- 12. DEBRIDEMENT WITH OR WITHOUT CHONDROPLASTY** for mild-to-moderate cartilage wear may be medically necessary when ONE of the following criteria (a or b) is met:
- a. ALL of the following criteria (i through iv) are met:
 - i. At least 12 weeks of knee pain with documented loss of function (i.e. deviation from normal knee function which may include painful weight bearing, unstable articulation, inadequate range of motion (>10 degrees flexion contracture or < 90 degrees flexion or both) impacting the ability to accomplish activities of daily living (ADLs), recreational activity, or employment due to injury or pain.
 - ii. At least 12 weeks of nonoperative care that has failed to improve symptoms;
 - iii. MRI results showing evidence of unstable chondral flap;
 - iv. Recurrent (more than two) or persistent effusion(s);
 - b. Arthrofibrosis as evidenced by physical exam findings of painful stiffness and loss of motion due to proliferation of scar tissue in and around the joint, and at least six weeks of supervised or self-directed physical therapy that has failed to improve symptoms. Imaging may be used to determine the diagnosis, but is not necessary.
- 13. DEBRIDEMENT CHONDROPLASTY FOR PATELLOFEMORAL CHONDROSIS** may be medically necessary when ALL of the following criteria (a through f) are met:
- a. At least 12 weeks of knee pain with documented loss of function (i.e. deviation from normal knee function which may include painful weight bearing, unstable articulation, inadequate range of motion (>10 degrees flexion contracture or < 90 degrees flexion or both) impacting the ability to accomplish activities of daily living (ADLs), recreational activity, or employment due to injury or pain.
 - b. Other extra-articular or intra-articular sources of pain or dysfunction, such as referred pain, radicular pain, tendinitis, bursitis, or neuroma, have been excluded;

- c. Tenderness localized to the patellofemoral joint on physical exam with pain aggravated by activities that load the joint, including performing a single leg squat; ascending is more difficult than descending stairs; and being in a seated position for extended periods of time with knee flexed;
 - d. Imaging to measure tibial tubercle–trochlear groove distance (radiographs, MRI, or CT);
 - e. At least 12 weeks of nonoperative care has failed to improve symptoms;
 - f. No evidence of Kellgren-Lawrence Grade III-IV osteoarthritis evidenced on standing or weight-bearing radiographs and patellofemoral views.
14. **MANIPULATION UNDER ANESTHESIA (MUA)** may be medically necessary when ALL of the following criteria (a through c) are met:
- a. Physical exam findings demonstrate inadequate range of motion of the knee defined as less than 105 degrees of flexion;
 - b. Six weeks (minimum of 12 visits) of physical therapy fails to show improved range of motion of the knee;
 - c. Patient is less than 12 weeks after ligamentous or joint reconstruction.

B. NONCOVERAGE

MassHealth does not consider knee arthroscopy to be medically necessary under certain circumstances. Examples of such circumstances include, but are not limited to, the following:

1. Osteoarthritis of the knee when this is the sole diagnosis
2. Meniscal tear in chronic degenerative knee joint disease in the absence of mechanical symptoms such as locking or catching knee or the absence of a loose body or meniscal tear
3. Meniscal tear in the presence of Kellgren-Lawrence Grade IV osteoarthritis
4. Presence of isolated medial or collateral ligament tears
5. Procedures utilizing computer-navigated or patient-specific or gender-specific instrumentation
6. Bicompartamental arthroplasty that is considered investigational
7. Robot-assisted TKA (Makoplasty)

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SECTION III: SUBMITTING CLINICAL DOCUMENTATION

Requests for PA for knee arthroscopy must be submitted by an orthopedic surgeon who is a MassHealth provider, and accompanied by clinical documentation that supports the medical necessity for knee arthroscopy.

- A. Documentation of medical necessity must include all of the following:
1. The primary diagnosis name(s) and the ICD-CM code(s) for the condition requiring arthroscopy;
 2. The secondary diagnosis name(s) and ICD-CM code(s) pertinent to any co-morbid conditions, if present;

3. A description of the specific arthroscopic procedure and appropriate CPT code(s) for the procedure being requested;
 4. The most recent medical evaluation, including a summary of the medical history and the most recent physical exam, with emphasis on the orthopedic knee examination and testing specific to the patient's condition;
 5. Results of any radiology studies (e.g. routine x-rays, MRI, CT, etc.) and other tests that may have been previously performed and are relevant to the condition for which arthroscopy is being requested;
 6. A summary of appropriate, nonoperative, conservative treatments that have been tried and been unsuccessful in managing the patient's condition;
 7. Any risk factors and/or co-morbid conditions;
 8. Other pertinent information that MassHealth may request.
- B. Clinical information must be submitted by an orthopedic surgeon. *Providers are strongly encouraged to submit requests electronically.* Providers must submit all information pertinent to the diagnosis using the [Provider Online Service Center \(POSC\)](#) or by completing a [MassHealth Prior Authorization Request](#) form (using the PA-1 paper form found at www.mass.gov/masshealth) and attaching pertinent documentation. The PA-1 form and documentation should be mailed to the address on the back of the form. Questions regarding POSC access should be directed to the MassHealth Customer Service Center at 1-800-841-2900.

Appendices

APPENDIX A: CONSERVATIVE, NON-OPERATIVE TREATMENTS FOR KNEE CONDITIONS

1. Modifications in activity including
 - a. Rest or activity modification or limitation
 - b. Bracing/orthosis or walking aids
 - c. Protected weight bearing
 - d. Weight optimization
2. Physical therapy modalities
 - a. Ice/heat
 - b. Exercises to strengthen and improve mobility in formal physical therapy sessions
 - c. Supervised home exercise to strengthen and improve mobility
3. Medication
 - a. Oral/topical NSAIDS or other analgesics
 - b. Injections such as cortisone

APPENDIX B: KELLGREN-LAWRENCE (KL) GRADING SYSTEM

Grade 0: No radiographic features of osteoarthritis

Grade I: Possible joint space narrowing and osteophyte formation

Grade II: Definite osteophyte formation with possible joint space narrowing

Grade III: Moderate multiple osteophytes, definite narrowing of joint space, some sclerosis and possible deformity of bone contour

Grade IV: Large osteophytes, marked narrowing of joint space, severe sclerosis and definite deformity of bone contour

Select References

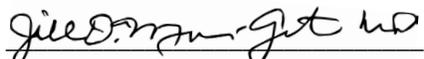
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These Guidelines are based on review of the medical literature and current practice in knee arthroscopy. MassHealth reserves the right to review and update the contents of these Guidelines and cited references as new clinical evidence and medical technology emerge.

This document was prepared for medical professionals to assist them in submitting documentation supporting the medical necessity of the proposed treatment, products or services. Some language used in this communication may be unfamiliar to other readers; in this case, contact your health-care provider for guidance or explanation.

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