

Knee Arthroscopy and Open Procedures

MEDICAL POLICY NUMBER: 434

Effective Date: 12/1/2025	COVERAGE CRITERIA .....	2
Last Review Date: 11/2025	POLICY CROSS REFERENCES.....	7
Next Annual Review: 5/2026	POLICY GUIDELINES.....	7
	REGULATORY STATUS.....	11
	CLINICAL EVIDENCE AND LITERATURE REVIEW .....	11
	HEALTH EQUITY CONSIDERATIONS.....	14
	BILLING GUIDELINES AND CODING .....	14
	REFERENCES.....	15
	POLICY REVISION HISTORY.....	16

**INSTRUCTIONS FOR USE:** Company Medical Policies serve as guidance for the administration of plan benefits. Medical policies do not constitute medical advice nor a guarantee of coverage. Company Medical Policies are reviewed annually and are based upon published, peer-reviewed scientific evidence and evidence-based clinical practice guidelines that are available as of the last policy update. The Company reserves the right to determine the application of medical policies and make revisions to medical policies at any time. The scope and availability of all plan benefits are determined in accordance with the applicable coverage agreement. Any conflict or variance between the terms of the coverage agreement and Company Medical Policy will be resolved in favor of the coverage agreement. Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case. In cases where medical necessity is not established by policy for specific treatment modalities, evidence not previously considered regarding the efficacy of the modality that is presented shall be given consideration to determine if the policy represents current standards of care.

**SCOPE:** Providence Health Plan, Providence Health Assurance and Providence Plan Partners as applicable (referred to individually as “Company” and collectively as “Companies”).

## PLAN PRODUCT AND BENEFIT APPLICATION

☒ Commercial

☒ Medicaid/OHP\*

☐ Medicare\*\*

### \*Medicaid/OHP Members

*Oregon:* Services requested for Oregon Health Plan (OHP) members follow the OHP Prioritized List and Oregon Administrative Rules (OARs) as the primary resource for coverage determinations. Medical policy criteria below may be applied when there are no criteria available in the OARs and the OHP Prioritized List.

### \*\*Medicare Members

This Company policy may be applied to Medicare Plan members only when directed by a separate Medicare policy. Note that investigational services are considered “**not medically necessary**” for Medicare members.

## COVERAGE CRITERIA

### Notes:

- This policy does not address all knee arthroscopy and open services. It is limited to the procedures listed in the “[Code Table](#)” table below. Unless addressed in a separate medical policy (see below), knee procedures **not** addressed in this medical policy may be considered medically necessary.
- This policy does not address the following procedures, which are addressed in the following medical policies:
  - [Autologous Chondrocyte Implantation \(ACI\) for Cartilaginous Defects of the Knee](#)
  - [Meniscal Allograft Transplant and Other Meniscal Implants](#)
  - [Osteochondral Allograft and Autografts for Cartilaginous Defects of the Knee](#)
- See note “[Documentation Requirements](#)” regarding multiple procedures planned during the same surgery.
- This policy applies to elective, non-emergent cases and does not apply to acute fractures and other emergent conditions.

### Criteria Table of Contents

- [Meniscal Repair](#) (CPT 29880, 29881, 29882)
- [Ligament Reconstruction](#)
  - Medial patellofemoral ligament (MPFL) injury (CPT 27422)
  - Anterior cruciate ligament (ACL) injury (CPT 27428, 29888)
  - Posterior cruciate ligament (PCL) injury (CPT 27428, 29889)
  - Lateral collateral ligament (LCL) or posterolateral corner injury (CPT 27427)
  - Medial collateral ligament (MCL) injury (CPT 27428)

- Multi-ligamentous injury (CPT 27428)
- [Cartilage Restoration Procedures](#) (CPT 29879)
- [Synovectomy](#)
  - Synovectomy (major) (CPT 29876)
  - Synovectomy (limited) (CPT 29875)
- [Patellofemoral Realignment](#) (CPT 29873)
- [Debridement and Infection Management](#)
  - Removal of loose or foreign body (CPT 29874)
  - Lavage of joint (CPT 29871)
  - Arthroscopically assisted lysis of adhesions (CPT 29884)

## Meniscal Repair

- I. Resection or repair of meniscal tear (CPT 29880, 29881, 29882) may be considered **medically necessary** when either of the following criteria are met (A.-B.):
  - A. All of the following are met (1.-3.):
    1. No severe osteoarthritis is present on imaging, unless meniscal repair is performed as part of ligament reconstruction; **and**
    2. Patient presents with any of the following mechanical symptoms (a.-d.):
      - a. Knee locked by physical examination; **or**
      - b. Knee locking weekly; **or**
      - c. Limited range of motion; **or**
      - d. Daily joint catching; **and**
    3. Either of the following are met (a.-b.):
      - a. Isolated meniscal tear by imaging; **or**
      - b. Advanced imaging not feasible due to knee in locked position; **or**
  - B. All of the following are met (1.-4.):
    1. No severe osteoarthritis is present on imaging, unless meniscal repair is performed as part of ligament reconstruction; **and**
    2. Patient presents with symptomatic tear with confirmed imaging with at least **two** of the following are met (a.-e.):
      - a. Joint effusion; **or**
      - b. Joint line tenderness; **or**
      - c. Pain with flexion and rotation; **or**
      - d. Knee giving way by history; **or**
      - e. Snapping or clicking; **and**
    3. Either of the following are met (a.-b.):
      - a. Isolated meniscal tear by imaging; **or**
      - b. ACL tear by imaging (if part of combined procedure); **and**
    4. Symptoms or findings continue after both of the following (a.-b.): **and**
      - a. PT or home exercise  $\geq 8$  weeks ( $\geq 6$  weeks for adolescents); **and**
      - b. Activity modification  $\geq 8$  weeks ( $\geq 6$  weeks for adolescents).
- II. Resection or repair of meniscal tear of the knee is considered **not medically necessary** when criterion I. is not met.

## Ligament Reconstruction

- III. Reconstruction of medial patellofemoral ligament (MPFL) injury (CPT 27422) may be considered **medically necessary** when all of the following criteria (A.-E.) are met:
  - A. Patellar or peripatellar pain; **and**
  - B. Giving way by history; **and**
  - C. No or minimal changes of patellofemoral articular surfaces by imaging; **and**
  - D. Medial patellofemoral ligament (MPFL) tear by imaging; **and**
  - E. Symptoms or findings continue after both of the following (1.-2.):
    - 1. PT or home exercise  $\geq 12$  weeks; **and**
    - 2. External joint support  $\geq 12$  weeks.
- IV. Reconstruction or repair of anterior cruciate ligament (ACL) injury (CPT 27428, 29888) may be considered **medically necessary** when either of the following criteria (A-B) are met:
  - A. Grade II or III instability of ACL by physical examination; **or**
  - B. ACL tear by imaging.
- V. Reconstruction or repair of posterior cruciate ligament (PCL) injury (CPT 27428, 29889) may be considered **medically necessary** when all of the following criteria (A-D) are met:
  - A. Knee giving way by history; **and**
  - B. Grade II or III instability of PCL by physical examination; **and**
  - C. Isolated PCL tear by imaging; **and**
  - D. Either of the following are met (1.-2.)
    - 1. Displaced avulsion fracture by imaging; **or**
    - 2. Symptoms or findings continue after both of the following (a.-b.):
      - a. PT or home exercise  $\geq 6$  weeks; **and**
      - b. Activity modification  $\geq 6$  weeks.
- VI. Reconstruction or repair of lateral collateral ligament (LCL) or posterolateral corner injury (CPT 27427) may be considered **medically necessary** when either of the following criteria (A-B.) are met:
  - A. Grade III instability of lateral collateral ligament (LCL) or posterolateral corner by physical examination; **or**
  - B. All of the following are met (1.-3.):
    - 1. Grade II instability of lateral collateral ligament (LCL) or posterolateral corner by physical examination; **and**
    - 2. Isolated lateral collateral ligament (LCL) or posterolateral corner tear by imaging; **and**
    - 3. Instability continues after all of the following (a.-b.)
      - a. PT or home exercise  $\geq 6$  weeks; **and**
      - b. Brace  $\geq 6$  weeks.
- VII. Reconstruction or repair of medial collateral ligament (MCL) injury (CPT 27428) may be

considered **medically necessary** when all of the following criteria (A-C) are met:

- A. Grade II or III instability of medial collateral ligament (MCL) by physical examination; **and**
- B. Isolated medial collateral ligament (MCL) tear by imaging; **and**
- C. Instability continues after both of the following (1.-2.):
  - 1. PT or home exercise  $\geq 6$  weeks; **and**
  - 2. Brace  $\geq 6$  weeks.

VIII. Reconstruction or repair of multi-ligamentous injury (CPT 27428) may be considered **medically necessary** when all of the following criteria (A.-C.) are met:

- A. Grade II or III instability of lateral (LCL), medial (MCL) or posterolateral complex by physical examination and tear by imaging; **and**
- B. Grade II or III instability of anterior cruciate ligament (ACL) or posterior cruciate ligament (PCL) by physical examination; **and**
- C. Anterior cruciate ligament (ACL) or posterior cruciate ligament (PCL) tear by imaging.

IX. Knee ligament reconstruction or repair is considered **not medically necessary** when criteria III.-VIII. are not met.

#### **Cartilage Restoration Procedures**

X. Microfracture or drilling or abrasion knee arthroplasty (with chondroplasty) (CPT 29879) may be considered **medically necessary** when all of the following are met (A.-F.):

- A. Either of the following are met (1.-2.)
  - 1. Pain interferes with ADLs; **or**
  - 2. Joint effusion or swelling; **and**
- B. Grade III or IV articular cartilage defect by MRI or arthroscopy; **and**
- C. Articular defect  $< 3 \text{ cm}^2$ ; **and**
- D. Defect located on femoral condyle or trochlea or patella or tibial plateau; **and**
- E. Normal joint space and alignment on imaging; **and**
- F. Symptoms or findings continue after treatment of both of the following (1.-2.):
  - 1. PT or home exercise  $\geq 6$  weeks; **and**
  - 2. Activity modification  $\geq 6$  weeks.

XI. Cartilage restoration procedures are considered **not medically necessary** when criterion X. not met.

#### **Synovectomy**

XII. Synovectomy (major) (CPT 29876) may be considered **medically necessary** when all of the following are met (A.-C.):

- A. Patient has any of the following (1.-3.):
  - 1. Joint pain; **or**

- 2. Limited range of motion; **or**
    - 3. Joint effusion or swelling; **and**
  - B. Imaging confirms no or minimal degenerative changes in bone or cartilage; **and**
  - C. Continued symptoms or findings after disease-specific treatment  $\geq 12$  weeks within last year.
- XIII. Synovectomy (limited) (CPT 29875) may be considered **medically necessary** when all of the following are met (A.-C.):
  - A. Patient has either of the following (1.-2.):
    - 1. Joint pain; **or**
    - 2. Giving way by history; **and**
  - B. Both of the following are met (1.-2.):
    - 1. Tenderness over suspected plica; **or**
    - 2. Imaging nondiagnostic for etiology of symptoms or findings; **and**
  - C. Instability continues after all of the following (1.-2.)
    - 1. PT or home exercise  $\geq 6$  weeks; **and**
    - 2. Activity modifications  $\geq 6$  weeks.
- XIV. Synovectomy is considered **not medically necessary** when criteria XII-XIII. are not met.

#### **Patellofemoral Realignment**

- XV. Lateral release (CPT 29873) may be considered **medically necessary** when all of the following are met (A.-C.):
  - A. Either of the following are met (1.-2.):
    - 1. Patellar or peripatellar pain; **or**
    - 2. Retropatellar crepitus; **and**
  - B. Both of the following are met (1.-2.):
    - 1. Excessive or abnormal lateral patellar tilt by physical examination or imaging; **and**
    - 2. No or minimal changes of patellofemoral articular surfaces by imaging; **and**
  - C. Continued symptoms or findings after all of the following (1.-2.):
    - 1. PT or home exercise  $\geq 12$  weeks; **and**
    - 2. External joint support  $\geq 12$  weeks.
- XVI. Patellofemoral realignment with lateral release is considered **not medically necessary** when criterion XV. is not met.

#### **Debridement and Infection Management**

- XVII. Removal of loose or foreign body (e.g. osteochondritis dissecans fragmentation) (CPT 29874) may be considered **medically necessary** when the following criteria are met:
  - A. Imaging confirms evidence of acute, post-traumatic, intra-articular foreign body or displaced fracture; and

B. Knee pain with grinding, catching, or popping is present.

XVIII. Lavage of joint with joint aspirate diagnostic for infection (CPT 29871) may be considered **medically necessary** when there is urgent need for diagnostic evaluation of joint infection.

XIX. Arthroscopically assisted lysis of adhesions (CPT 29884) may be considered **medically necessary** for the treatment of post-traumatic, post-surgical, or idiopathic stiffness of the knee when all of the following are met (A.-C.)

- A. Physical exam demonstrates limited range of motion of the knee, defined as range of motion less than 10 – 100 degrees; **and**
- B. Range of motion of the knee has failed to improve despite 6 weeks of conservative management; **and**
- C. Failure of prior manipulation under anesthesia or manipulation under anesthesia is planned concurrently.

XX. Debridement and infection management procedures are considered **not medically necessary** for when criteria XVII-XIX. are not met.

Link to [Evidence Summary](#)

## POLICY CROSS REFERENCES

- [Autologous Chondrocyte Implantation \(ACI\) for Cartilaginous Defects of the Knee](#), MP137
- [Meniscal Allograft Transplant and Other Meniscal Implants](#), MP150
- [Osteochondral Allograft and Autografts for Cartilaginous Defects of the Knee](#), MP149

The full Company portfolio of current Medical Policies is available online and can be [accessed here](#).

## POLICY GUIDELINES

### DOCUMENTATION REQUIREMENTS

In order to determine the medical necessity of the request, the following information must be submitted in order to determine if medical necessity criteria are met:

- Indication for the requested surgery
- Clinical documentation of extent and response to conservative care (e.g. physical therapy, activity modification and oral analgesics), as applicable to the policy criteria, including outcomes of any procedural interventions, medication use and physical therapy notes.
- Evaluation and documentation of the extent and specifics of one or more functional impairments or disabilities
- Imaging requirements:

- Imaging completed within the past 12 months
- Documented interpretation of x-rays, which may be performed and read by the operating surgeon.
- If advanced imaging is required, a radiologist's report (for CT, MRI, US or bone scan).
  - If discrepancies should arise in the interpretation of the imaging, the radiologist's report will supersede.
- Documentation of any criteria-specific lab values or reports.

## **Multiple Procedures**

When multiple diagnostic or therapeutic procedures are planned for the same surgery—or may become necessary during surgery—all relevant procedures should be included in a single prior authorization (PA) request. Each procedure requiring PA will be reviewed for medical necessity based on applicable medical policies. If the documentation does not support all requested services, a partial approval may be issued.

If additional procedures not fully approved in the PA are performed during surgery, providers must submit clinical documentation with the claim showing intraoperative findings that support medical necessity. If the claim is denied for not meeting medical necessity, providers may request reconsideration through the standard process.

## **DEFINITIONS**

### *Activities of Daily Living*

The activities of daily living (ADLs) is a term used to describe essential skills that are required to independently care for oneself. Examples may include, but are not limited to, the following:

- Ambulating
- Feeding
- Dressing
- Personal hygiene
- Transportation and shopping
- Meal preparation
- Housecleaning and home maintenance

## **BACKGROUND**

### *Knee Arthroscopy*

Knee arthroscopy is a minimally invasive surgical procedure used to diagnose and treat various conditions within the knee joint. This procedure involves inserting a small camera, called an arthroscope, into the knee through a small incision. The camera provides a clear, detailed view of the joint on a monitor, enabling the surgeon to identify issues such as torn ligaments, damaged cartilage, or



joint inflammation. Additional small incisions may be made to insert instruments for treating the identified problems. The benefits of knee arthroscopy include reduced pain, quicker recovery, and less scarring compared to traditional open surgery.

### *Arthroscopically Assisted Knee Surgery*

Arthroscopically assisted knee surgery is a technique that combines arthroscopy with traditional surgical methods to treat knee problems more effectively. It involves using an arthroscope—a small camera—to visualize the knee joint, guiding the surgeon during the procedure. This approach allows for more precise manipulation and treatment of complex knee issues such as ligament reconstruction, meniscus repair, or cartilage restoration. By utilizing arthroscopy, surgeons can perform the procedure with smaller incisions, leading to less trauma to surrounding tissues, reduced post-operative pain, and quicker recovery times compared to conventional open knee surgery. In contrast to knee arthroscopy, this procedure combines arthroscopy with open surgical techniques to perform more complex repairs like ligament reconstructions, where the arthroscope helps guide the procedure but additional incisions are needed for structural work.

### Procedures

- Microfracture, drilling, or abrasion arthroplasty are techniques aimed at repairing damaged cartilage by creating small holes or abrasions in the bone. This stimulates the growth of new cartilage by promoting blood flow to the area.
- Lavage of joint with joint aspirate diagnostic involves inserting a needle into the joint to remove excess fluid. The fluid is then analyzed to diagnose conditions such as infections, gout, or arthritis. It can also provide immediate relief from pain and swelling.
- Resection or repair of meniscal tear involves either removing the damaged part of the meniscus (resection) or stitching the torn edges together (repair). The goal is to restore knee function and alleviate pain. Meniscal repair is often preferred to preserve the meniscus's shock-absorbing function.
- Synovectomy (limited) involves removing a portion of the inflamed synovial membrane lining the joint. It is typically used to treat conditions like rheumatoid arthritis and aims to reduce pain and swelling.
- Synovectomy (major) is similar to limited synovectomy but involves the complete removal of the synovial membrane. This is usually done when the inflammation is severe and widespread.
- Chondroplasty is a surgical procedure to smooth and repair damaged cartilage in the knee. It is often performed arthroscopically, allowing the surgeon to trim rough cartilage and promote healthy tissue growth.
- Lateral release surgery involves cutting tight structures on the outer side of the kneecap (lateral retinaculum) to allow the kneecap to move properly within its groove. It helps alleviate pain and improve knee stability.

- Removal or stabilization of osteochondritis dissecans (adolescents only) addresses loose bone and cartilage fragments in joints, typically in adolescents. It involves either removing the fragments or stabilizing them to prevent further damage.
- Urgent joint exploration post penetrating joint injury involves immediate surgical examination and cleaning of a joint after a penetrating injury to prevent infection and assess damage. This is crucial to avoid septic arthritis and other complications.
- Removal or stabilization of symptomatic intra-articular osteochondral lesion (adults only) involves surgery to address painful bone and cartilage lesions within a joint in adults. This can involve removing loose fragments or stabilizing them to improve joint function.
- Removal of symptomatic intra-articular loose body (adolescents only) involves surgical removal of loose bone or cartilage fragments causing pain in adolescents. This helps restore normal joint movement and alleviate discomfort.
- Resection or repair of meniscal tear involves arthroscopic techniques for meniscal repair or removal, similar to the procedure described earlier.
- Reconstruction of MPFL, ACL, PCL, LCL, MCL, and multi-ligamentous injuries involves surgical reconstruction of knee ligaments to restore stability and function. This often involves using grafts to replace damaged ligaments.
- Removal or stabilization of osteochondritis dissecans involves arthroscopic techniques to address loose bone and cartilage fragments in joints, typically in adolescents.
- Diagnostic arthroscopy of the knee joint is a minimally invasive procedure performed to visually examine the inside of the knee using a small camera (arthroscope). It may be considered medically necessary when used to obtain a synovial biopsy - to evaluate joint inflammation or infection - or to harvest cartilage tissue (chondrocytes) for procedures like autologous chondrocyte implantation (ACI). This approach allows for precise tissue sampling with minimal disruption to surrounding structures.
- Arthroscopic lysis of adhesions of the knee is a minimally invasive surgical procedure used to treat arthrofibrosis, a condition where excessive scar tissue forms within the joint, often after surgery or trauma. This scar tissue can restrict movement and cause pain. Using an arthroscope and specialized instruments inserted through small incisions, the surgeon visualizes the joint and carefully removes or releases the adhesions. The goal is to restore range of motion, reduce discomfort, and improve knee function. T
- Repair of intra-articular loose body involves arthroscopic removal or stabilization of loose bone or cartilage fragments within a joint.
- Repair of intra-articular tibial fracture involves surgical fixation of fractures within the tibia using arthroscopic assistance. This helps ensure proper healing and alignment of the bone.

## REGULATORY STATUS

### U.S. FOOD AND DRUG ADMINISTRATION (FDA)

Approval or clearance by the Food and Drug Administration (FDA) does not in itself establish medical necessity or serve as a basis for coverage. Therefore, this section is provided for informational purposes only.

## CLINICAL EVIDENCE AND LITERATURE REVIEW

### EVIDENCE REVIEW

A review of the ECRI, Hayes, Cochrane, and PubMed databases was conducted regarding the use of knee arthroscopy and open knee surgery. Below is a summary of the available evidence identified through April 2025.

- In 2022, Fackler and colleagues published a systematic review addressing the outcomes of arthroscopic lysis of adhesions for postoperative knee arthrofibrosis.<sup>1</sup> In total, eight studies comprising 240 patients were included. The mean time from index surgery to arthroscopic LOA and MUA was 8.4 months, and the mean postoperative follow-up was at 31.2 months. All studies demonstrated a significant improvement (41.6°) in arc of motion after arthroscopic LOA. Clinically significant improvements in outcome measures, including the International Knee Documentation Committee, Western Ontario and McMaster Universities Osteoarthritis Index, and Knee injury and Osteoarthritis Outcome Score, were reported after arthroscopic LOA across all applicable studies. Of 240 patients, a single complication (synovial fistula) occurred after LOA and MUA, which resolved without intervention. The authors concluded that arthroscopic LOA and MUA is a safe and efficacious treatment for postoperative arthrofibrosis of the knee.
- In 2015, the Multicenter Orthopaedic Outcomes Network (MOON) reported that meniscal injuries are common in both primary and revision ACL reconstructions.<sup>2</sup> The longitudinal research included 509 individuals undergoing primary ACL reconstruction and 281 undergoing revision. Meniscal repairs are crucial in ACL reconstruction to minimize the risk of posttraumatic osteoarthritis. Despite advances in understanding posterior cruciate ligament anatomy and biomechanics, optimal treatment remains controversial. Double-bundle reconstructions may better restore knee kinematics than single-bundle reconstructions, though clinical outcomes show no significant difference. Tibial inlay reconstructions are preferred to avoid graft laxity. Posterior cruciate ligament reconstruction improves subjective outcomes and return to sports, though stability may not fully normalize.
- In 2015, Thorlund and colleagues conducted a systematic review and meta-analysis on the benefits and harms of arthroscopic surgery for degenerative knee disease.<sup>3</sup> Authors included RCTs assessing partial meniscectomy, debridement, or both for middle-aged or older individuals with knee pain and degenerative disease. The analysis showed a small, short-term benefit for pain relief from arthroscopic surgery, but no significant benefit for physical function. Harms included symptomatic deep venous thrombosis, pulmonary embolism, infection, and death. The

authors concluded that the limited and transient benefits do not support the practice of arthroscopic surgery for degenerative knee disease.

- In 2014, Mordecai and colleagues conducted an evidence-based review on managing meniscal tears.<sup>4</sup> Authors categorized treatment options into nonoperative, meniscectomy, and meniscal repair. Nonoperative treatment, including structured physical therapy, is effective for degenerative tears in older individuals without mechanical symptoms. Partial meniscectomy is suitable for symptomatic tears that cannot be repaired, preserving meniscal function if the peripheral rim is intact. Meniscal repair, with an 80% success rate at 2 years, is ideal for younger individuals with reducible tears that are peripheral and horizontal or longitudinal. Successful repair requires careful patient selection, technique, and adherence to post-operative rehabilitation, including bracing and nonweight bearing for 4-6 weeks.
- In 2013, Katz and colleagues published a multicenter RCT comparing arthroscopic partial meniscectomy with postoperative physical therapy to standardized physical therapy alone for individuals with meniscal tears and mild-to-moderate OA.<sup>5</sup> Authors enrolled individuals aged 45 or older with symptomatic meniscal tears and OA. The primary outcome was the change in WOMAC physical-function scores from baseline to 6 months. The study found no significant differences in functional status and pain improvement between the surgical and physical therapy groups at 6 and 12 months. The results suggest that physical therapy alone is as effective as surgery for these individuals.
- In 2010, the Cochrane Musculoskeletal Group published a systematic review on joint lavage for knee OA, including seven trials with 567 individuals.<sup>6</sup> Authors concluded that joint lavage does not provide pain relief or functional improvement for knee OA. Kirkley's 2008 RCT compared surgical lavage and/or arthroscopic debridement with optimized physical and medical therapy alone. The study found no significant differences in WOMAC scores or SF-36 Physical Component Summary scores between the surgery and control groups after 2 years, indicating no benefit of surgery for knee OA.
- In 2008, a Cochrane review assessed three RCTs, including Moseley's study, on arthroscopic debridement for knee OA.<sup>7</sup> The review concluded that arthroscopic debridement offers no benefit for undifferentiated OA. Chang et al.'s study compared arthroscopy with closed needle lavage, finding no significant differences in pain or functional status. Another study compared laparoscopic debridement with washout, noting high risk of bias and inconsistent pain outcomes. The Cochrane review highlighted the need for independent and blinded outcome assessors and concluded that arthroscopic debridement does not benefit knee OA.
- In 2002, Moseley and colleagues published a randomized placebo-controlled trial evaluating arthroscopy for knee osteoarthritis (OA).<sup>8</sup> Authors randomized 180 individuals to debridement, lavage, or placebo surgery, with placebo involving simulated debridement. Over a 2-year follow-up, neither debridement nor lavage groups reported less pain or better function than the placebo group. A 2007 systematic review noted limitations in generalizability due to the study's single-surgeon and single-center design. The review concluded that existing evidence does not show arthroscopic lavage with or without debridement is more effective than placebo, suggesting further placebo-controlled RCTs are needed to refute Moseley's findings.

## CLINICAL PRACTICE GUIDELINES

### *Osteoarthritis Research Society International*

- In 2014, the Osteoarthritis Research Society International (OARSI) convened 16 experts from various fields to develop consensus recommendations for managing hip and knee osteoarthritis (OA).<sup>9</sup> The experts concluded that the roles of joint lavage and arthroscopic debridement are controversial. While some studies show short-term symptom relief, others suggest that improvements may be due to a placebo effect. This highlights the need for further research to clarify the effectiveness of these treatments.

### *American Academy of Orthopaedic Surgeons*

- In 2014, the AAOS clinical practice guideline on anterior cruciate ligament (ACL) injuries noted limited evidence for combined ACL tears and reparable meniscus tears.<sup>10</sup> However, it supports repairing meniscus tears during ACL reconstruction to improve patient outcomes. This recommendation underscores the importance of addressing meniscal injuries in ACL procedures to enhance recovery and long-term knee health.
- In 2013, the American Academy of Orthopaedic Surgeons (AAOS) published the second edition of their clinical practice guideline, "Treatment of Osteoarthritis of the Knee."<sup>11</sup> Recommendation 11 advises against needle lavage for symptomatic knee OA, with moderate strength due to the quality of evidence. Recommendation 12 strongly advises against arthroscopy with lavage and/or debridement for primary symptomatic knee OA, supported by high-quality evidence. Recommendation 13 is inconclusive regarding arthroscopic partial meniscectomy for knee OA with a torn meniscus, due to a lack of compelling evidence.

### *National Institute for Health and Care Excellence*

In 2020, the National Institute for Health and Care Excellence (NICE) published guidelines on osteoarthritis care and management in over 16s.<sup>12</sup> The guidelines recommend considering intra-articular corticosteroid injections for moderate to severe pain relief in OA patients but advise against intra-articular hyaluronan injections.

## EVIDENCE SUMMARY

The clinical utility of knee arthroscopy and open knee surgery has been extensively studied, with varying conclusions. Knee arthroscopy, particularly for osteoarthritis (OA), has been scrutinized through numerous randomized controlled trials (RCTs) and systematic reviews. Evidence suggests that arthroscopic procedures, such as lavage and debridement, offer limited and short-term symptom relief, often comparable to placebo effects. Studies have shown no significant long-term benefits in pain relief or functional improvement for knee OA patients undergoing these procedures.

For degenerative knee conditions, systematic reviews and meta-analyses have highlighted the minimal benefits of arthroscopic surgery, with some studies reporting small, short-term pain relief but no

improvement in physical function. Additionally, these procedures carry risks, including deep venous thrombosis, pulmonary embolism, infection, and even death. In contrast, arthroscopically assisted surgeries, such as meniscal repairs during anterior cruciate ligament (ACL) reconstructions, have demonstrated more promising outcomes. Meniscal repairs are crucial in ACL reconstructions to reduce the risk of posttraumatic osteoarthritis and improve patient recovery. However, the optimal treatment for posterior cruciate ligament injuries remains controversial, with ongoing debates about the efficacy of single-bundle versus double-bundle reconstructions. Overall, while knee arthroscopy for OA shows limited benefits and significant risks, arthroscopically assisted surgeries for specific injuries like meniscal tears in ACL reconstructions are supported by evidence indicating improved patient outcomes.

## HEALTH EQUITY CONSIDERATIONS

The Centers for Disease Control and Prevention (CDC) defines health equity as the state in which everyone has a fair and just opportunity to attain their highest level of health. Achieving health equity requires addressing health disparities and social determinants of health. A health disparity is the occurrence of diseases at greater levels among certain population groups more than among others. Health disparities are linked to social determinants of health which are non-medical factors that influence health outcomes such as the conditions in which people are born, grow, work, live, age, and the wider set of forces and systems shaping the conditions of daily life. Social determinants of health include unequal access to health care, lack of education, poverty, stigma, and racism.

The U.S. Department of Health and Human Services Office of Minority Health calls out unique areas where health disparities are noted based on race and ethnicity. Providence Health Plan (PHP) regularly reviews these areas of opportunity to see if any changes can be made to our medical or pharmacy policies to support our members obtaining their highest level of health. Upon review, PHP creates a Coverage Recommendation (CORE) form detailing which groups are impacted by the disparity, the research surrounding the disparity, and recommendations from professional organizations. PHP Health Equity COREs are updated regularly and can be found online [here](#).

## BILLING GUIDELINES AND CODING

This policy does not address all knee procedure services. It is limited to the procedures listed in the table below.

CODES*		
CPT	27422	Reconstruction of dislocating patella; with extensor realignment and/or muscle advancement or release (eg, Campbell, Goldwaite type procedure)
	27427	Ligamentous reconstruction (augmentation), knee; extra-articular
	27428	Ligamentous reconstruction (augmentation), knee; intra-articular (open)
	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 (eg, osteochondritis dissecans fragmentation, chondral fragmentation)

29875	Arthroscopy, knee, surgical; synovectomy, limited (eg, plica or shelf resection) (separate procedure)
29876	Arthroscopy, knee, surgical; synovectomy, major, 2 or more compartments (eg, medial or lateral)
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)
29884	Arthroscopy, knee, surgical; with lysis of adhesions, with or without manipulation (separate procedure)
29888	Arthroscopically aided anterior cruciate ligament repair/augmentation or reconstruction
29889	Arthroscopically aided posterior cruciate ligament repair/augmentation or reconstruction

**\*Coding Notes:**

- The above code list is provided as a courtesy and may not be all-inclusive. Inclusion or omission of a code from this policy neither implies nor guarantees reimbursement or coverage. Some codes may not require routine review for medical necessity, but they are subject to provider contracts, as well as member benefits, eligibility and potential utilization audit.
- All unlisted codes are reviewed for medical necessity, correct coding, and pricing at the claim level. If an unlisted code is submitted for non-covered services addressed in this policy then it will be **denied as not covered**. If an unlisted code is submitted for potentially covered services addressed in this policy, to avoid post-service denial, **prior authorization is recommended**.
- **See the non-covered and prior authorization lists on the Company [Medical Policy, Reimbursement Policy, Pharmacy Policy and Provider Information website](#) for additional information.**
- HCPCS/CPT code(s) may be subject to National Correct Coding Initiative (NCCI) procedure-to-procedure (PTP) bundling edits and daily maximum edits known as “medically unlikely edits” (MUEs) published by the Centers for Medicare and Medicaid Services (CMS). This policy does not take precedence over NCCI edits or MUEs. Please refer to the CMS website for coding guidelines and applicable code combinations.

## REFERENCES

1. Fackler N, Chin G, Karasavvidis T, et al. Outcomes of arthroscopic lysis of adhesions for the treatment of postoperative knee arthrofibrosis: a systematic review. *Orthopaedic Journal of Sports Medicine*. 2022;10(9):23259671221124911.
2. Lynch TS, Parker RD, Patel RM, Andrish JT, Spindler KP, Group M. The impact of the Multicenter Orthopaedic Outcomes Network (MOON) research on anterior cruciate ligament reconstruction and orthopaedic practice. *JAAOS-Journal of the American Academy of Orthopaedic Surgeons*. 2015;23(3):154-163.
3. Thorlund JB, Juhl C, Roos E, Lohmander L. Arthroscopic surgery for degenerative knee: systematic review and meta-analysis of benefits and harms. *bmj*. 2015;350.
4. Mordecai SC, Al-Hadithy N, Ware HE, Gupte CM. Treatment of meniscal tears: an evidence based approach. *World journal of orthopedics*. 2014;5(3):233.

5. Katz JN, Brophy RH, Chaisson CE, et al. Surgery versus physical therapy for a meniscal tear and osteoarthritis. *New England Journal of Medicine*. 2013;368(18):1675-1684.
6. Reichenbach S, Rutjes AW, Nüesch E, Trelle S, Jüni P. Joint lavage for osteoarthritis of the knee. *Cochrane Database of Systematic Reviews*. 2010(5).
7. Laupattarakasem W, Laopaiboon M, Laupattarakasem P, Sumananont C. Arthroscopic debridement for knee osteoarthritis. *Cochrane Database of Systematic Reviews*. 2008(1).
8. Moseley JB, O'malley K, Petersen NJ, et al. A controlled trial of arthroscopic surgery for osteoarthritis of the knee. *New England Journal of Medicine*. 2002;347(2):81-88.
9. Zhang W, Moskowitz R, Nuki G, et al. OARSI recommendations for the management of hip and knee osteoarthritis, Part II: OARSI evidence-based, expert consensus guidelines. *Osteoarthritis and cartilage*. 2008;16(2):137-162.
10. American Academy of Orthopaedic Surgeons. AAOS clinical practice guideline: management of anterior cruciate ligament injuries: evidence-based guideline. *JAAOS-Journal of the American Academy of Orthopaedic Surgeons*. 2015;23(5):e6-e8.
11. American Academy of Orthopaedic Surgeons. Treatment of Osteoarthritis of the Knee: Evidence-Based Guideline. *JAAOS-Journal of the American Academy of Orthopaedic Surgeons*. 2013;21(9):571-576.
12. National Institute for Health and Care Excellence. Osteoarthritis in over 16s: diagnosis and management. NICE guideline (NG226). <https://www.nice.org.uk/guidance/ng226>. Published 2022. Accessed 4/15/2025.

## POLICY REVISION HISTORY

DATE	REVISION SUMMARY
7/1/2025	New policy.
7/22/2025	Clarified policy intent.
11/1/2025	Interim update. Added criteria for additional procedures. Title change.
12/1/2025	Interim update. Updated policy guidelines