Shoulder Arthroscopy and Open Procedures

MEDICAL POLICY NUMBER: 436

Effective Date: 7/1/2025

Last Review Date: 5/2025

Next Annual Review: 5/2026

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

Note: This policy does address all shoulder arthroscopy and open procedures. It is limited to the procedures listed in the "Codes" table below. Unless addressed in a separate Company policy, arthroscopic and open shoulder procedures **not** addressed in this medical policy may be considered medically necessary.

Rotator Cuff Repair

I. Rotator cuff repair (arthroscopic or open) may be considered **medically necessary** when all of the following criteria are met:

   A. Severe, debilitating pain and/or documented loss of shoulder function to the extent which interferes with activities of daily living (see Policy Guidelines for definition of activities of daily living); and
   B. Physical examination demonstrates positive results from at least one of the following tests:
      1. Drop arm test; or
      2. Painful arc test; or
      3. Neer Impingement Test; or
      4. Hawkins Kennedy Impingement Test; and
   C. Physical examination demonstrates positive results from at least one of the following tests:
      1. Functionality limited range of motion; or
      2. Measurable loss of strength of the rotator cuff musculature; and
   D. Advanced imaging (e.g., MRI, CT) demonstrates partial or full thickness (Grade II or III) rotator cuff tear; and
   E. Failure of conservative management for at least 12 weeks in duration (excluding members who suffer a trauma that results in acute complete tear with debilitating pain and loss of

function); and

F. Other potential diagnostic conditions have been excluded (e.g., Thoracic Outlet Syndrome, arthritis, referred neck pain).

II. Rotator cuff debridement may be considered **medically necessary** when performed in conjunction with other medically necessary arthroscopic procedures of the shoulder (i.e., subacromial decompression).

III. Rotator cuff repair is considered **not medically necessary** when criteria I or II are not met.

Labral Tear Repair

IV. Labral repair may be considered **medically necessary** when all of the following criteria are met:

A. Severe, debilitating pain to the extent which interferes with activities of daily living; and
B. A positive physical exam from one of the following orthopedic tests:
    1. O'Brien's test
    2. Anterior slide test
    3. Biceps load test (I and II)
    4. Pain provocation test
    5. Crank test
    6. Jobe relocation test
    7. Forced shoulder abduction and elbow flexion test
    8. Resisted supination external rotation test; and
C. Advanced diagnostic imaging (e.g., MRI, CT) demonstrating a superior labral anterior-posterior (SLAP) tear; and
D. Failure of conservative management for at least 12 weeks

V. Labral tear repair is considered **not medically necessary** when criterion IV is not met.

Debridement

VI. Debridement of discrete structures or regions of the shoulder not covered by other procedures (e.g., humeral or glenohumeral bone/cartilage, rotator cuff, subacromial space, labrum) may be considered **medically necessary** when all of the following criteria are met:

A. Shoulder is unresponsive to 12 weeks of conservative management; and
B. Advanced diagnostic imaging (e.g., MRI, CT) demonstrates underlying pathology which correlates with the reported symptoms and physical exam findings; and
C. Extensive debridement involves 3 or more discrete structures

VII. Debridement of discrete structures or regions of the shoulder not covered by other procedures is considered **not medically necessary** when criterion VI is not met.

Capsulorrhaphy

VIII. Capsulorrhaphy may be considered **medically necessary** when all of the following criteria are met:

A. History of shoulder relocation or recurrent subluxation; and
B. Instability found in physical examination; and
C. Shoulder pain and/or instability which interferes with activities of daily living; (see Policy Guidelines for definition of activities of daily living) and
D. MRI identifies one or more of the following:
    1. A labral lesion consistent with clinical instability
    2. Hill-Sachs lesion
    3. Capsular tear
    4. Capsular redundancy with clinical multidirectional instability; and
E. Failure of at least 12 weeks of conservative management (unless history of traumatic dislocation or multiple dislocations during management)

IX. Capsulorrhaphy is considered **not medically necessary** when criterion VIII is not met.

Partial Claviculectomy (including Mumford Procedure)

X. Partial claviculectomy, including Mumford procedure, may be considered **medically necessary** when all of the following criteria are met:

A. Pain at the acromioclavicular (AC) joint aggravated by shoulder motion
B. Positive cross-arm adduction test
C. Tenderness over the AC joint
D. Imaging findings (MRI or X-ray) consistent with AC arthritis:
    1. Moderate to severe degenerative joint disease of the AC joint, distal clavicle edema, or osteolysis of the distal clavicle on MRI
    2. Moderate to severe AC joint arthritis on x-ray
E. Failure of at least 12 weeks of conservative management

XI. Partial claviculectomy, including Mumford procedure, is considered **not medically necessary** when criterion X is not met.

Arthroscopic Capsular Release, Lysis of Adhesions, and Manipulation under Anesthesia

XII. Arthroscopically assisted lysis of adhesions/capsular release and manipulation under anesthesia may be considered **medically necessary** for post-traumatic, post-surgical, or idiopathic stiffness of the shoulder when all of the following criteria are met:

A. Severe, debilitating pain and/or documented loss of shoulder function to the extent which interferes with activities of daily living (see Policy Guidelines for definition of activities of daily living); and
B. Reduced passive range of motion of the affected glenohumeral joint by at least 50% compared to unaffected shoulder; and
C. Failure of at least 12 weeks of conservative management

XIII. Arthroscopically assisted lysis of adhesions/capsular release and manipulation under anesthesia are considered **not medically necessary** when criterion XII is not met.

Biceps Tenodesis and Tenotomy

XIV. Biceps tenodesis or tenotomy may be considered medically necessary for shoulder pain when one of the following criteria are met:

A. Symptomatic acute proximal biceps tear; or
B. All of the following are met:
    1. Pain in front of shoulder and/or clicking, popping, or catching sensation when using arm and shoulder
    2. Clinical exam is consistent with long head of biceps pathology
    3. MRI findings consistent with biceps tendinopathy or criterion IV for SLAP tear is met
    4. Failure of at least 12 weeks of conservative management (or 6 weeks when criteria for another shoulder procedure are met)

XV. Biceps tenodesis or tenotomy is considered **not medically necessary** when criterion XIV is not met.

Link to Evidence Summary

POLICY CROSS REFERENCES

- Total Shoulder Arthroplasty, MP430

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 documentation must be provided at the time of the request. Medical records to include documentation of all of the following:

- All medical records and chart notes pertinent to the request. This includes:
    - History
    - Physical examination
    - Treatment plan

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

Conservative Management

Conservative management describes non-surgical management to reduce inflammation, alleviate pain, and correct underlying dysfunction, and includes physical therapy AND at least one other strategy (unless contraindicated):

- Physical therapy, delivered through a qualified provider of physical therapy services, within 6 months of planned procedure, including at least 3 physical therapy sessions

OR

- Exception to physical therapy requirement in unusual circumstances (such as pain so severe that physical therapy is not possible) when documented in member's medical record

AND at least one of the following:

- Anti-inflammatory medications
- Nerve membrane stabilizers or muscle relaxants
- Intra-articular Corticosteroid Injections
- Alternative therapies such as activity modification, and/or a trial period of rest (e.g., from the aggravating/contributing factors), where applicable

Rotator Cuff Grading

Partial rotator cuff tears are commonly divided into three grades according to the Ellman classification, based on the amount of tendon tissue that torn where it meets the bone:[1]

1. Grade 1: Less than 3 mm (25% thickness)
2. Grade 2: Sized 3 to 6 mm (25% to 50% thickness)
3. Grade 3: Larger than 6 mm (50% thickness)

Full thickness rotator cuff tear/complete tears are most often divided into four categories using the Codman classification, based on the size of the tear from front to back (anterior to posterior). These are:[1]

1. Small: 0 to 3 cm

2. Medium: 1 cm to 3 cm
3. Large: 3 cm to 5 cm
4. Massive: Greater than 5 cm, as well as tears involving more than one tendon

BACKGROUND

Shoulder arthroscopy is a minimally invasive surgical technique wherein a surgeon inserts a small camera, known as an arthroscope, into the shoulder joint through tiny incisions. This allows for a detailed visual examination and the ability to perform precise repairs on structures such as ligaments, cartilage, and tendons. The procedure typically results in reduced postoperative pain, quicker recovery times, and minimal scarring compared to traditional open surgery.

Rotator cuff repair is a surgical intervention designed to address tears in the rotator cuff, a complex of four muscles and their associated tendons that provide stability and movement to the glenohumeral joint. The procedure typically involves the reattachment of the torn tendon to the greater tuberosity of the humerus using specialized sutures or suture anchors. This surgical approach aims to restore the anatomical integrity and functional capacity of the shoulder, thereby alleviating pain and improving range of motion that conservative treatments have failed to achieve.

Labral tear repair is a surgical procedure aimed at addressing tears in the labrum, a fibrocartilaginous structure that encircles the glenoid cavity of the shoulder joint. This procedure typically involves the reattachment of the torn labrum to the glenoid rim using specialized sutures or suture anchors. The goal is to restore the anatomical integrity and stability of the shoulder joint, thereby alleviating pain and improving function that conservative treatments have failed to achieve.

Debridement of the shoulder is a surgical procedure aimed at removing damaged tissue, loose fragments of tendon, thickened bursa, and other debris from the shoulder joint. This procedure can be performed arthroscopically, using small incisions and an arthroscope to visualize and clear the joint, or through open surgery with a larger incision. The goal is to alleviate pain, improve joint function, and provide a clearer view of the extent of the injury, which may help determine if further surgical intervention is needed.

Capsulorrhaphy is a surgical procedure aimed at tightening a torn or stretched joint capsule to restore stability and prevent recurrent dislocations. This procedure is commonly performed on the shoulder joint, where it involves suturing the capsule or using thermal shrinking techniques to reinforce the joint's stability. The goal is to restore the anatomical integrity and functional capacity of the joint, thereby alleviating pain and improving range of motion.

The Mumford procedure, also known as distal clavicle excision or distal clavicle resection, is a minimally invasive orthopedic surgery aimed at alleviating shoulder pain and discomfort. This procedure involves the removal of the distal (lateral) end of the clavicle, which is closest to the acromioclavicular (AC) joint. By excising this portion of the clavicle, the procedure helps decompress the joint, reducing friction and alleviating symptoms associated with shoulder impingement or osteoarthritis.

Lysis of adhesions of the shoulder is a surgical procedure aimed at breaking down and removing adhesions, which are bands of scar tissue that restrict movement and cause pain in the shoulder joint. These adhesions often form as a result of previous surgeries, injuries, or conditions like adhesive capsulitis (frozen shoulder). The procedure can be performed arthroscopically, using small incisions and an arthroscope to visualize and remove the adhesions, or through open surgery with a larger incision. The goal is to restore the shoulder's range of motion and alleviate pain.

Biceps tenodesis is a surgical procedure designed to treat tears or damage to the long head of the biceps tendon, which connects the biceps muscle to the shoulder. This procedure involves detaching the damaged tendon from its original attachment at the superior labrum and reattaching it to the humerus (upper arm bone) using sutures or anchors. The goal is to alleviate pain, restore shoulder function, and prevent further damage to the tendon.

Biceps tenotomy is a surgical procedure in which the long head of the biceps tendon is intentionally severed from its attachment at the shoulder joint. This procedure is typically performed arthroscopically and is often chosen when the biceps tendon is irreversibly damaged or inflamed. By releasing the tendon, the procedure aims to alleviate pain and improve shoulder function. However, it may result in a cosmetic deformity known as "Popeye" sign, where the biceps muscle bulges in the upper arm.

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 selected open and arthroscopic procedures of the shoulder. Below is a summary of the available evidence identified through April 2025.

In 2014, Abrams and colleagues published a randomized study on arthroscopic repair of rotator cuff tears with and without acromioplasty.[2] The trial had 80 patients who had full-thickness rotator cuff tears. Participants were divided into two groups: one group received single-row fixation, and the other group received double-row fixation. Both techniques resulted in significant improvements in shoulder function and pain relief. However, the double-row fixation technique showed superior results in terms of tendon healing and structural integrity, with imaging studies revealing better tendon reattachment and fewer re-tears in the double-row group compared to the single-row group (ASES score: 55.1-91.5, 48.8-89.0; Constant score: 48.3-75.0, 51.9-78.7, respectively). Patients who underwent double-row

fixation had higher functional scores, indicating better overall shoulder performance and strength. The study concluded that while both techniques are effective, double-row fixation may offer advantages in tendon healing and functional outcomes.

In 2020, Brochin and colleagues published a systematic review on revision rotator cuff repair.[3] The study analyzed clinical outcomes of revision rotator cuff repair (RCR) and identified prognostic factors influencing postoperative outcomes. A total of 22 studies were included. The review found that patients undergoing revision RCR generally experienced improved clinical outcomes, with significant enhancements in shoulder function and pain relief. The success rate of revision RCR varied, with reported retear rates ranging from 20% to 40%. Factors such as preoperative forward flexion and the type of surgical technique (open or arthroscopic) were identified as influential in determining the success of the revision surgery. The authors concluded that while revision RCR can lead to favorable clinical outcomes, the variability in success rates highlights the importance of patient selection and surgical technique. They emphasized the need for further research to refine prognostic factors and optimize surgical approaches to improve outcomes for patients undergoing revision RCR.

In 2017, Shang and colleagues published a meta-analysis comparing tenotomy and tenodesis for treating rotator cuff tears combined with long head of the biceps tendon (LHBT) lesions.[4] The study aimed to assess differences in outcomes between the two surgical techniques. A total of ten articles, involving 903 patients, were included in the meta-analysis. The results showed that the incidence of the Popeye sign was higher in the tenotomy group compared to the tenodesis group (OR, 2.777, P = 0.000). Additionally, tenodesis was favored for the Constant score (SMD, -0.230, P = 0.025). However, no significant differences were found between tenotomy and tenodesis for arm cramping pain, patient satisfaction, VAS score, ASES score, UCLA score, strength, and range of motion. The authors concluded that both tenotomy and tenodesis are effective in pain relief and function improvement for patients with repairable rotator cuff tears. However, tenodesis was associated with a lower risk of Popeye deformity and a better Constant score compared to tenotomy.

In 2014, McCormick and colleagues published a review of the management of Type II Superior Labral Anterior to Posterior (SLAP) injuries.[5] They found that arthroscopic SLAP repairs remain gold standard, yet there are certain populations that may benefit from other procedures. The authors recommend tenodesis in the revision setting.

In 2014, Erickson and colleagues published a systematic review on surgical treatment of symptomatic superior labrum anterior-posterior (SLAP) tears in patients older than 40 years.[6] While some studies found equivalent outcomes of SLAP repair for both older than 40 and younger than 40 years, others demonstrated significantly higher failure in the older cohort. Outcomes included decreased patient satisfaction, and increased complications such as postoperative stiffness and reoperation. The review found that biceps tenotomy and tenodesis are reliable alternatives to SLAP repair and that biceps tenotomy is a viable revision procedure for failed SLAP repair. With concomitant rotator cuff tears, the evidence favors debridement or biceps tenotomy over SLAP repair. The authors concluded that, “While studies show that good outcomes can be obtained with SLAP repair in an older cohort of patients, age older than 40 years and workers' compensation status are independent risk factors for increased

surgical complications. The cumulative evidence supports labral debridement or biceps tenotomy over labral repair when an associated rotator cuff injury is present."[6]

CLINICAL PRACTICE GUIDELINES

American Academy of Orthopaedic Surgeons (AAOS)

In 2019, AAOS published guidelines on the Management of Rotator Cuff Injuries.[7] They recommend the following:

1. **Indications for Surgery**: Surgery is recommended for patients with symptomatic full-thickness rotator cuff tears who have not responded to conservative treatments such as physical therapy.
2. **Surgical Techniques**: The guideline discusses various surgical techniques, including arthroscopic, mini-open, and open repair methods. Arthroscopic repair is often preferred due to its minimally invasive nature and quick recovery times.
3. **Outcomes**: Strong evidence supports that surgical repair of rotator cuff tears results in significant improvement in patient-reported outcomes, including pain relief and functional recovery.

EVIDENCE SUMMARY

There is a substantial amount of lower-quality literature in peer-reviewed medical journals concerning arthroscopic shoulder procedures for treating diseases and injuries. Most of this literature consists of observational case studies focused on specific diseases or conditions and does not compare different procedures. While there are a few systematic reviews on particular diseases or injuries, these studies generally show that arthroscopic shoulder procedures lead to pain reduction and improved functional ability, including daily activities.

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

GENERAL

This policy does **not** address all arthroscopic or open shoulder procedures. It is limited to the procedures listed below.

CODES*		
CPT	23410	Repair of ruptured musculotendinous cuff (eg, rotator cuff) open; acute
	29806	Arthroscopy, Shoulder, Surgical; Capsulorrhaphy
	29807	Arthroscopy, Shoulder, Surgical; Repair of Slap Lesion
	29822	Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, bi
	29823	Arthroscopy, shoulder, surgical; debridement, extensive, 3 or more discrete structures (eg, humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilag
	29824	Arthroscopy, shoulder, surgical; distal claviculectomy including distal articular surface (Mumford procedure)
	29825	Arthroscopy, shoulder, surgical; with lysis and resection of adhesions, with or without manipulation
	29827	Arthroscopy, Shoulder, Surgical; with Rotator Cuff Repair
	29828	Arthroscopy, shoulder, surgical; biceps tenodesis
HCPCS	None	

***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

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7. Lee J, Griepp DW, Burgess CJ, Petrone B, Bitterman AD, Cohn RM. The AAOS 2019 Clinical Practice Guidelines for the Management of Rotator Cuff Injuries Are Unbiased and Incorporate a Diverse Body of Literature. *Arthrosc Sports Med Rehabil.* 2022;4(2):e559-e565.

POLICY REVISION HISTORY

DATE	REVISION SUMMARY
7/2025	New policy.