

Cohere Medicare Advantage Policy -Shoulder Arthroscopy

Clinical Policy for Medical Necessity Review

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Important Notices

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Policy Information:

Specialty Area: Musculoskeletal Care

Policy Name: Cohere Medicare Advantage Policy - Shoulder Arthroscopy

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

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Medical Necessity Criteria

Service: Shoulder Arthroscopy

Related CMS Documents

Please refer to the <u>CMS Medicare Coverage Database</u> for the most current applicable CMS National Coverage.

- There are no applicable NCDs and/or LCDs for Shoulder arthroscopy
 - Billing and Coding: Thermal capsulorrhaphy (A53435).¹

Description

A shoulder arthroscopy is a minimally invasive surgical technique that may involve one or more of several procedures, including the repair of shoulder components such as the rotator cuff, labrum, ligaments, or inflamed tissue or cartilage. Through a small incision and with the aid of an arthroscope, the surgeon is able to thoroughly visualize the shoulder and treat several conditions involving the structures of the joint.²⁻⁹

Medical Necessity Criteria

Indications

Shoulder arthroscopy - adjunctive/soft tissue procedures is considered appropriate if **ALL** of the following are **TRUE**:

- Significant pain and/or functional impairment that impacts activities of daily living^{2.6}; AND
- **ANY** of the following:
 - The procedure is performed as part of a medically necessary surgery (e.g., acute rotator cuff tear)⁶; OR
 - o ALL of the following:
 - Failure of conservative management for greater than 3 months, including **ALL** of the following 10-16::
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain

- medications) if not contraindicated; AND
- Physical therapy, including a physician-directed home exercise program; AND
- ANY of the following:
 - o Corticosteroid injection if medically appropriate; OR
 - Documentation that corticosteroid injection is contraindicated;
 AND
- ANY of the following:
 - The procedure is a subacromial decompression and **ALL** of the following 17,18:
 - Clinical examination findings consistent with impingement syndrome¹⁹; AND
 - Imaging (e.g., radiographs, CT, MRI) demonstrates the presence of type II/III or hooked acromium¹⁸; OR
 - The procedure is a distal clavicle resection and **ALL** of the following 6.17:
 - Examination findings positive for acromioclavicular joint (ACJ) pain (e.g., tenderness at the ACJ, cross-body adduction, resisted ACJ extension test, Neer Impingement test, Hawkins-Kennedy impingement test); AND
 - Imaging findings (e.g., radiographs, CT, or MRI) demonstrate **ANY** of the following²⁰:
 - Moderate to severe ACJ arthritis; OR
 - Inferior osteophytes impinging upon the rotator cuff; OR
 - The procedure is a biceps tenodesis/tenotomy and **ANY** of the following²¹:
 - Examination findings positive for biceps pain (e.g., anterior slide test, biceps load test, biceps tendon tenderness in the bicipital groove, clink test, compression rotation test, O'Brien's test, Speed's test, uppercut test, Yergason test); OR
 - Advanced diagnostic imaging (e.g., MRI, CT) demonstrates presence of biceps pathology (e.g., tenderness, Superior labrum anterior and posterior (SLAP) tear, biceps tendinopathy/partial tearing); OR
 - The procedure is a debridement and **ALL** of the following^{3.17}:
 - Imaging studies (e.g., radiographs, MRI, CT) demonstrate bony and/or soft tissue pathology that correlates with symptoms and physical exam findings; OR
 - The procedure is a loose body removal and **ALL** of the following 17.22:

- Shoulder pain and mechanical symptoms (e.g., catching, locking, clicking);
- Imaging findings (e.g., radiographs, CT, or MRI) demonstrate the presence of a loose body; OR
- The procedure is a superior labrum anterior and posterior (SLAP) repair and ALL of the following 17,23,24:
 - Examination findings consistent with symptomatic SLAP tear; AND
 - Imaging findings demonstrate a superior labral tear consistent with exam findings; OR
- \circ The procedure is a synovectomy and **ANY** of the following $\frac{25,26}{1}$:
 - History or examination consistent with symptomatic synovitis; OR
 - Image findings demonstrate pathological synovium.

Shoulder arthroscopy – rotator cuff repair (RCR) is considered appropriate if ANY of the following is TRUE^{4,6,17,27}:

- ALL of the following:
 - Advanced diagnostic imaging (e.g., MRI, CT) demonstrates ANY of the following:
 - High-grade partial-thickness rotator cuff tear; OR
 - A full-thickness rotator cuff tear (Cofield classification); AND
 - Significant pain and/or functional impairment that impacts activities of daily living; AND
 - ANY of the following:
 - Documentation of an acute rotator cuff tear (RCT) after an inciting event or injury; OR
 - Documentation of a chronic RCT and ALL of the following²⁸:
 - Failure of conservative management for greater than 6 weeks, including ALL of the following²⁹:
 - Physical therapy, including a physician-directed home exercise program; AND
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; OR
- The procedure is a revision of a previous rotator cuff repair and ALL of the following^{17,30}:
 - Significant pain and/or functional impairment that impacts activities of daily living; AND

- ANY of the following:
 - Advanced diagnostic imaging findings document a recurrent rotator cuff tear; OR
 - Suspected postsurgical complication.

Shoulder arthroscopy- capsular and diagnostic procedures is considered appropriate if **ANY** of the following is **TRUE**:

- The procedure is a capsular release/lysis of adhesions and ALL of the following^{Z-9.17.31}:
 - Significant loss of both active AND passive shoulder range of motion on examination; AND
 - Failure of conservative management for greater than 3 months, including AT LEAST TWO of the following:
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; OR
 - Physical therapy, including a physician-directed home exercise program; OR
 - ANY of the following:
 - Corticosteroid injection if medically appropriate; OR
 - Documentation that corticosteroid injection is contraindicated;
 AND
 - Imaging findings (e.g., radiographs, computed tomography[CT], or magnetic resonance imaging[MRI]) do not identify any other shoulder pathology (e.g. severe arthritis, rotator cuff tear, labral tear, etc.) as the primary source of the symptoms; AND
 - Significant pain and/or functional impairment that impacts activities of daily living; OR
- The procedure is a capsulorrhaphy/labral repair for shoulder instability and **ALL** of the following 17.32-34:
 - Documented history of traumatic or atraumatic shoulder instability/laxity (e.g., dislocation, subluxation) AND
 - Documented loss of shoulder function that impacts activities of daily living or demands of employment; AND
 - Physical examination consistent with instability (e.g. apprehension test, relocation test, load/shift test, anterior and/or posterior drawer, jerk test, or sulcus sign); AND

- Advanced diagnostic imaging (e.g., MRI, CT) consistent with instability (e.g. Bankart lesion, GLAD, HAGL, Patulous/redundant capsule); AND
- ANY of the following:
 - Acute traumatic injury less than or equal to 30 days old; OR
 - Failure of conservative management for greater than 3 months, including AT LEAST TWO of the following:
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; OR
 - Physical therapy, including a physician-directed home exercise program; OR
 - ANY of the following:
 - Corticosteroid injection if medically appropriate; OR
 - Documentation that corticosteroid injection is contraindicated;
 OR
- The procedure is a diagnostic arthroscopy and ALL of the following 9,17,30,35:
 - Significant pain and/or functional impairment that impacts activities of daily living; AND
 - o The patient has **ANY** of the following positive exam findings:
 - Instability; OR
 - Weakness; OR
 - Decreased range of motion; OR
 - Painful shoulder range of motion; AND
 - O ANY of the following:
 - Synovial biopsy is required for definitive diagnosis (e.g., clinical, imaging, or laboratory findings inconclusive or arthritis etiology is unclear)^{36,37}; OR
 - Imaging findings (e.g., radiographs, CT, or MRI) are inconclusive as to the source of shoulder pain; **AND**
 - Failure of conservative management for greater than 3 months, including ALL of the following³⁸:
 - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; AND
 - Physical therapy, including a physician-directed home exercise program; AND
 - ANY of the following:

- Corticosteroid injection if medically appropriate; OR
- Documentation that corticosteroid injection is contraindicated.

Non-Indications

Shoulder arthroscopy is not considered appropriate if **ANY** of the following is **TRUE**:

- Thermal capsulorrhaphy is not considered medically necessary^{1,39}; OR
- Biotuberplasty, biceps sling, and superior capsular reconstruction for irreparable rotator cuff tears are considered clinically unproven and not medically necessary⁴⁰⁻⁴²; OR
- Arthroscopic debridement and/or removal of intra-articular loose body is not indicated in the presence of Kellgren-Lawrence grade 3 or 4 osteoarthritis^{25,43,44}; OR
- Use of subacromial balloon spacer to treat irreparable rotator cuff tear^{45,46};
 OR
- Rotator cuff and/or labral repair in the presence of active infection (local or remote)⁴⁷; OR
- Rotator cuff arthropathy.⁴⁸

NOTE: The Centers for Medicare and Medicaid Services (CMS) has issued a billing and coding article noting a lack of clinical evidence supporting improved health outcomes after thermal capsulorrhaphy and stating that claims for this procedure will be denied. This is reflected in the present policy's non-indication for this procedure.

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description	
23450	Capsulorrhaphy, anterior; Putti-Platt procedure or Magnuson type operation	
23455	Capsulorrhaphy, anterior; with labral repair (eg, Bankart procedure)	
23460	Capsulorrhaphy, anterior, any type; with bone block	

23462	Capsulorrhaphy, anterior, any type; with coracoid process transfer	
23465	Capsulorrhaphy, glenohumeral joint, posterior, with or without bone block	
23466	Capsulorrhaphy, glenohumeral joint, any type multidirectional instability	
23929	Unlisted procedure, shoulder	
29805	Diagnostic examination of shoulder using an endoscope	
29806	Arthroscopy, shoulder, surgical; capsulorrhaphy	
29807	Surgical arthroscopy of shoulder with repair of SLAP lesion	
29819	Removal of loose or foreign body of shoulder using an endoscope	
29820	Arthroscopy, shoulder, surgical; synovectomy, partial	
29821	Arthroscopy, shoulder, surgical; synovectomy, complete	
29822	Surgical arthroscopy of shoulder with debridement Surgical arthroscopy of shoulder with limited debridement	
29823	Surgical arthroscopy of shoulder with debridement Surgical arthroscopy of shoulder with extensive debridement	
29824	Surgical arthroscopy of shoulder with distal claviculectomy	
29825	Surgical arthroscopy of shoulder with lysis and resection of adhesions Surgical arthroscopy of shoulder with lysis and resection of adhesions with manipulation	
29826	Arthroscopy, shoulder, surgical; decompression of	

	subacromial space with partial acromioplasty, with coracoacromial ligament (ie, arch) release, when performed (List separately in addition to code for primary procedure)	
29827	Surgical arthroscopy of shoulder with repair of rotator cuff	
29828	Surgical arthroscopy of shoulder with biceps tenodesis	
29999	Unlisted procedure, arthroscopy	
C9781	Arthroscopy, shoulder, surgical; with implantation of subacromial spacer (e.g., balloon), includes debridement (e.g., limited or extensive), subacromial decompression, acromioplasty, and biceps tenodesis when performed	
S2300	Arthroscopy, shoulder, surgical; with thermally-induced Not Covered capsulorrhaphy	

Disclaimer: S Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Evaluation of Clinical Harms and Benefits

Clinical determinations for Medicare Advantage beneficiaries are made in accordance with 42 CFR 422.101 guidance outlining CMS's required approach to decision hierarchy in the setting of NCDs/LCDs identified as being "not fully established". When clinical coverage criteria are "not fully established" Medicare Advantage organizations are instructed to create publicly accessible clinical coverage criteria based on widely-accepted clinical guidelines and/or scientific studies backed by a robust clinical evidence base. Clinical coverage criteria provided by Cohere Health in this manner include coverage rationale and risk/benefit analysis.

The potential harms of using these criteria for shoulder arthroscopy may include:

• Adverse effects from delayed or denied treatment may include persistent tissue damage and disease progression, ongoing and worsening pain, diminished functionality, development or aggravation of osteoarthritis, muscle degeneration and damage to joint surfaces, loss of mobility, strength, and stability, and ongoing diagnostic uncertainty.^{7.9.11.13.14.19.21,22,25,28,32,49} These outcomes may lead to discomfort in activities of daily living and diminished participation in recreational and occupational activities.

The clinical benefits of using these criteria for shoulder arthroscopy may include:

• Improved patient selection, resulting in better long-term outcomes, including relief of pain, restoration of strength, function, and integrity of shoulder structures, avoidance of recurrent injuries and secondary degenerative changes, restored dynamic stability of the joint, delay or avoidance of prosthetic replacement, confirmation of diagnosis, and evaluation of tissue condition.^{3,9,11,19,22,28,30,49} Appropriate use of conservative care requirements may enable return to functioning while avoiding risks and complications inherent to surgical procedures, including infection, bleeding, injury to vascular structures, anesthetic risk, the need for repeat or additional procedures, other postoperative complications, and complications specific to individual procedures, such as postoperative

adhesive capsulitis after capsular release procedures. Conservative management strategies for shoulder instability, including physical therapy and immobilization, may provide relief in up to 78% of patients, with older, non-athlete patients appearing to particularly benefit from non-surgical management. Similarly, up to 74% of patients treated with steroid injections into the tendon sheath of the biceps report good to excellent outcomes and up to 78% of patients with superior labrum anterior-posterior tears may return to full functioning after completion of a rehabilitation protocol.

- Maintenance of rigorous patient safety standards aligned to best available evidence. Subacromial balloon spacers do not improve patient outcomes in patients with rotator cuff tears, according to a clinical trial by Metcalfe et al. (2022).⁴⁶
- Clinical evidence for biotuberplasty, biceps sling, and superior capsular reconstruction for irreparable rotator cuff tears is lacking, with no published reports on long-term outcomes. Saithna (2024) recently expressed concerns that fracture risks, both short-term and in the event of subsequent shoulder procedures, are unknown with these newer procedures, as is the possibility of failure of graft-to-bone healing.⁴²
- Patients with rotator cuff arthropathy who undergo rotator cuff repair are at increased risk for surgical complications and poor functional recovery.
- Patients with active (local or systemic) infection who undergo rotator cuff repair are at increased risk of postsurgical deep infection leading to secondary surgeries, inpatient admission, long-term intravenous antibiotic administration, and increased pain.⁴⁸
- Patients with Kellgren-Lawrence grade 3 or 4 osteoarthritis who undergo arthroscopic debridement are at increased risk of neurovascular injury and treatment failure.^{25, 43, 44}

Medical Evidence

Kim et al. (2021) examined the predominance of arthroscopic distal clavicle excision procedures, specifically those using a fluoroscopic Kirchner wire guide. The technical aspects of the procedure were described, and the group concluded that using the fluoroscopic wire leads to surgical success, particularly in new orthopedic surgeons as the distal clavicle excision is a technically demanding procedure due to visualization difficulties. They state that open distal clavicle excision remains the gold standard procedure for acromioclavicular joint arthritis.²⁰

Redler et al. (2019) examined the literature related to treating adhesive capsulitis of the shoulder, with a discussion of the higher incidence of the diagnosis in diabetic patients, particularly those with long-standing, poorly controlled disease. Hyperthyroidism was determined in studies to be an independent risk factor for developing adhesive capsulitis. The authors preferred surgical technique post-nonsurgical interventions, including both anterior and posterior capsular release with rotator interval release and release of the coracohumeral ligament.⁸

Optimal management of glenohumeral osteoarthritis was reviewed by Ansok et al. (2018), concluding that initial conservative treatment includes the use of viscosupplementation or corticosteroid injections. The age and function of the affected patient should determine the necessity of operative treatment, and operative treatment of young individuals with glenohumeral osteoarthritis remains controversial. Younger, more active patients do benefit from non-arthroplasty techniques or procedures with minimal bone resection. ⁵⁰

Millett et al. (2018) examined the options for treating young, active patients with primary glenohumeral osteoarthritis, stating that arthroplasty may not be ideal in that population. They state that clinical studies report arthroscopic approaches for procedures such as synovectomy, chondroplasty, loose body removal, capsular release, and biceps tenodesis may improve clinical outcomes. It is concluded that arthroscopic management of glenohumeral osteoarthritis has numerous advantages over total shoulder arthroplasty; however, additional larger studies are needed.²⁵

The American Academy of Orthopaedic Surgeons (AAOS) has published the following clinical guidelines related to shoulder arthroscopy:

- Management of Glenohumeral Osteoarthritis (2020): Arthroscopic debridement with capsular release is recommended for young patients with glenohumeral joint osteoarthritis.²
- Management of Rotator Cuff Injuries (2019): Moderate strength evidence does not support the routine use of acromioplasty as adjunct treatment compared to arthroscopic repair alone. A strong recommendation was given for arthroscopic-only technique for better short-term improvement compared to open repair. For unrepairable tears without arthropathy, various arthroscopic treatments received a consensus recommendation.⁶

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Clinical Guideline Revision History/Information

Original Date: May 22, 2024				
Review History				
Version 2	6/10/2024	422.101 Disclaimer added		
Version 2A	9/10/2024	Error corrected. Moved non-indication to indications section.		
Version 3	5/29/2025	Annual review.		
		Corrected Errors in references/added new references.		
		Added codes 23450-23466 (Capsulorrhaphy).		
		Reorganized criteria.		
		Specified that thermal capsulorrhaphy is non-indicated.		
		Added non-indication for Biotuberplasty, biceps sling, and superior capsular reconstruction for irreparable rotator cuff tears.		