

# Cohere Medicare Advantage Policy - Shoulder Arthroscopy

**Clinical Guidelines for Medical Necessity Review** 

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#### **Guideline Information:**

**Specialty Area:** Disorders of the Musculoskeletal System

Guideline Name: Cohere Medicare Advantage Policy - Shoulder Arthroscopy

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**Type:** [X] Adult (18+ yo) | [\_] Pediatric (0-17yo)

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## **Medical Necessity Criteria**

Service: Shoulder Arthroscopy

#### **Benefit Category**

Not applicable

#### **Recommended Clinical Approach**

A shoulder arthroscopy may involve one or more of several procedures, such as the repair of shoulder components such as the rotator cuff, labrum, ligaments, shoulder instability, or inflamed tissue or cartilage. The surgeon is able to thoroughly visualize the shoulder and treat several conditions involving the structures of the joint.<sup>1-8</sup>

Arthroscopy may be appropriate when shoulder pain has not responded to nonsurgical treatment. This includes rest, limiting motion, physical therapy, or medications administered orally or by injection directly to the shoulder.

#### **Evaluation of Clinical Benefits and Potential Harms**

Cohere Health uses the criteria below to ensure consistency in reviewing the conditions to be met for coverage of shoulder arthroscopy. This process helps to prevent both incorrect denials and inappropriate approvals of medically necessary services. Specifically, limiting incorrect approvals reduces the risks associated with unnecessary procedures, such as complications from surgery, infections, and prolonged recovery times.

The potential clinical harms of using these criteria may include:

- Inadequate management of shoulder conditions, leading to complications like progression of degenerative joint disease, recurrent dislocations, worsening pain, and reduced mobility. Decreased shoulder range of motion secondary to pain or a functional impairment can impact activities of daily living. Untreated full thickness rotator cuff tears can progress to rotator cuff arthropathy that may require a total shoulder arthroplasty.
- Risks with inappropriate surgical procedures include infection, bleeding, injury to neurovascular structures, injury to the articular cartilage, implant (anchor) migration, stiffness or adhesions, anesthetic risk and

- need for repeat or additional procedures. Redler et al recommend nonsurgical management for adhesive capsulitis as most patients will have complete resolution of symptoms. There are significant surgical complications for adhesive capsulitis including fracture, glenoid and labral injuries, neuropraxic injuries and rotator cuff injuries.
- Increased healthcare costs and complications from the inappropriate use of emergency services and additional treatments.

The clinical benefits of using these criteria include:

- Improved patient outcomes by ensuring timely and appropriate access
  to shoulder arthroscopy for managing various shoulder conditions such
  as rotator cuff tear. According to the American Academy of Orthopedic
  Surgeons (AAOS) evidence based clinical guidelines there is moderate
  evidence to support healed rotator cuff repairs show improved patient
  reported and functional outcomes compared to physical therapy and
  unhealed rotator cuff repairs.<sup>5</sup>
- Reduction in complications and adverse effects from unnecessary procedures. The AAOS notes strong evidence to support patient reported outcomes (PRO) improve with physical therapy in symptomatic patients with full thickness rotator cuff tears, therefore conservative therapy should be attempted before surgery. They also note strong evidence supports that older age is associated with higher failure rates and poorer patient reported outcomes after rotator cuff repair.
- Subacromial balloon spacers value remain uncertain. Piekaar et al report that while patients report good outcomes at 3 years postoperatively, the specific contribution of the balloon needs further investigation.<sup>23</sup>
- Enhanced overall patient satisfaction and healthcare experience.

This policy includes provisions for expedited reviews and flexibility in urgent cases to mitigate risks of delayed access. Evidence-based criteria are employed to prevent inappropriate denials, ensuring that patients receive medically necessary care. The criteria aim to balance the need for effective treatment with the minimization of potential harms, providing numerous clinical benefits in helping avoid unnecessary complications from inappropriate care.

In addition, the use of these criteria is likely to decrease inappropriate denials by creating a consistent set of review criteria, thereby supporting optimal patient outcomes and efficient healthcare utilization.

#### **Medical Necessity Criteria**

#### **Indications**

- → Shoulder arthroscopy is considered appropriate if ANY of the following is TRUE:
  - ◆ Capsular release/lysis of adhesions is considered appropriate if ALL of the following are TRUE<sup>6-8</sup>:
    - Significant pain and/or functional impairment that impacts activities of daily living; AND
    - Significant loss of both active AND passive shoulder range of motion on exam; AND
    - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 6 months.
       Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement;

      AND
    - Imaging findings (e.g., radiographs, CT, or 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; OR
  - ◆ Capsulorrhaphy/labral repair for shoulder instability is considered appropriate if ALL of the following are TRUE<sup>9</sup>:
    - Documented history of traumatic or atraumatic shoulder instability/laxity (e.g. dislocation, subluxation) with documented loss of shoulder function that impacts activities of daily living; AND
    - The patient has ANY of the following positive exam tests:
      - o Apprehension test; **OR**
      - o Relocation test; OR
      - Load/Shift test; OR
      - Anterior and/or posterior drawer; OR
      - o Jerk test; OR
      - Sulcus sign; AND
    - ANY of the following:

- Failure of conservative management is not required for acute traumatic injuries less than or equal to 30 days old; OR
- Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 6 weeks. Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement; AND
- Advanced diagnostic imaging (e.g., MRI, CT) of ANY of the following findings consistent with instability:
  - ALPSA lesion; OR
  - o Bankart lesion; OR
  - o Capsular tear; OR
  - GLAD lesion; OR
  - HAGL lesion; OR
  - Patulous/redundant capsule; OR
  - Reverse Bankart lesion; OR
  - Hill Sachs lesion; OR
  - Reverse Hill Sachs lesion; OR
- ◆ **Diagnostic arthroscopy** is considered appropriate if **ALL** of the following are **TRUE**:
  - Significant pain and/or functional impairment that impact activities of daily living; AND
  - The patient has ANY of the following positive exam findings:
    - Instability; OR
    - Weakness; OR
    - Decreased range of motion; OR
    - o Painful shoulder range of motion; AND
  - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 6 months.
     Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement;
     AND
  - Imaging findings (e.g., radiographs, CT, or MRI) are inconclusive as to the source of shoulder pain; OR
- ◆ Rotator cuff repair (RCR) is considered appropriate if ANY of the following is TRUE<sup>1-2</sup>:
  - Acute rotator cuff tear and ALL of the following after an inciting event or injury:
    - Significant pain and/or functional impairment that impacts activities of daily living; AND

- The patient has ANY of the following positive exam tests<sup>10</sup>:
  - Drop arm test; OR
  - Full can test; OR
  - Jobe/empty can test; OR
  - Weakness of external rotation; OR
  - Belly-press test; OR
  - Hawkins (Hawkins-Kennedy) sign/test; OR
  - Neer/Neer impingement test; OR
  - Lift-off/Gerber's test; AND
- Advanced diagnostic imaging (e.g., MRI, CT) demonstrates ANY of the following:
  - High-grade partial thickness rotator cuff tear;OR
  - ◆ Full-thickness rotator cuff tear; OR
- Chronic rotator cuff tear and ALL of the following<sup>11</sup>:
  - Significant pain and/or functional impairment that impacts activities of daily living; AND
  - The patient has **ANY** of the following positive exam tests<sup>10</sup>:
    - Drop arm test; OR
    - ◆ Full can test; OR
    - Jobe/empty can test; OR
    - Weakness of external rotation; OR
    - ◆ Belly-press test; **OR**
    - Hawkins (Hawkins-Kennedy) sign/test; OR
    - Neer/Neer impingement test; OR
    - ◆ Lift-off/Gerber's test; **AND**
  - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 6 weeks. Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement; AND
  - 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); OR
- Revision of a previous rotator cuff repair is considered appropriate if ANY of the following is TRUE<sup>12</sup>:

- Advanced diagnostic imaging findings of a recurrent rotator cuff tear; OR
- Suspected postsurgical complication; OR
- Distal clavicle resection is considered appropriate if ALL of the following are TRUE<sup>5</sup>:
  - Significant pain and/or functional impairment that impact activities of daily living; AND
  - The patient demonstrates localized tenderness to palpation of the acromioclavicular (AC) joint and ANY of the following positive orthopedic tests on physical examination when compared to the non-involved side:
    - Cross-body adduction test; OR
    - Resisted AC joint extension test; OR
    - Neer impingement test; OR
    - o Hawkins-Kennedy impingement test; AND
  - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months.
     Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement;
     AND
  - Imaging findings (e.g., radiographs, CT, or MRI) demonstrate
     ANY of the following findings consistent with pathology in the subacromial space or at the AC joint<sup>13</sup>:
    - o Cystic formation in the distal clavicle; OR
    - Presence of osteophytes; OR
    - Moderate to severe degenerative changes in the AC joint; OR
- ◆ **Biceps tenodesis/tenotomy** is considered appropriate if **ALL** of the following are **TRUE**<sup>14</sup>:
  - Significant pain and/or functional impairment that impact activities of daily living; AND
  - The patient has **ANY** of the following positive exam tests:
    - Anterior slide test; OR
    - o Biceps load test; OR
    - Biceps tendon tenderness in the bicipital groove; OR
    - Clunk test; OR
    - Compression rotation test; OR
    - O'Brien's test; OR
    - Speed's test; OR
    - Uppercut test; OR

- Yergason test; AND
- Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months.
   Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement;
   AND
- Advanced diagnostic imaging (e.g., MRI, CT) demonstrates biceps tendon pathology that correlates with the patient's reported symptoms and physical exam findings including ANY of the following:
  - Biceps tendon subluxation; OR
  - Biceps tendinopathy/tearing; OR
  - Superior labrum anterior and posterior (SLAP) tear; OR
- ◆ **Debridement** is considered appropriate if **ALL** of the following are **TRUE**<sup>2</sup>:
  - ANY of the following:
    - The procedure coincides with the indicated repair of a rotator cuff injury; OR
    - There is a need for decompression and debridement after a full-thickness rotator cuff tear; OR
    - Subacromial impingement syndrome, including ALL of the following:
      - Significant pain and/or functional impairment that impacts activities of daily living; AND
      - ◆ The patient demonstrates ANY of the following positive exam tests when compared to the non-involved side<sup>11</sup>:
        - Neer impingement sign/test; OR
        - Hawkins (Hawkins-Kennedy) impingement sign/test; AND
      - Imaging studies demonstrate ANY of the following findings consistent with pathology in the subacromial space:
        - Subacromial spurs/osteophytes; OR
        - Type III (hooked) acromion; OR
        - Acromioclavicular osteoarthritis with inferior osteophyte formation; AND

- Significant pain and/or functional impairment that impacts activities of daily living; AND
- Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months.
   Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement;
   AND
- Imaging studies (e.g., radiographs, MRI, CT) demonstrate bony and/or soft tissue pathology that correlates with symptoms and physical exam findings; OR
- ◆ Removal of loose body is considered appropriate if ALL of the following are TRUE:
  - 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
- Superior labrum anterior and posterior (SLAP) repair is considered appropriate if ALL of the following are TRUE<sup>15-16</sup>:
  - Significant pain and/or functional impairment that impacts activities of daily living; AND
  - The patient has **ANY** of the following positive exam tests:
    - O'Brien's test; OR
    - Biceps load test; OR
    - Crank test; OR
    - Modified dynamic labral shear test; OR
    - Anterior slide test; AND
  - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months.
     Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement;
  - Advanced imaging (e.g., MRI, CT) demonstrates a SLAP lesion that correlates with symptoms and exam findings;
     OR
- ◆ **Subacromial decompression** is considered appropriate if **ANY** of the following is **TRUE**.:

- The procedure coincides with the indicated repair of a rotator cuff injury; OR
- There is a need for decompression and debridement after a full-thickness rotator cuff tear; OR
- Subacromial impingement syndrome, including ALL of the following:
  - Significant pain and/or functional impairment that impacts activities of daily living; AND
  - The patient demonstrates ANY of the following positive exam tests when compared to the non-involved side<sup>18</sup>:
    - Neer impingement sign/test; OR
    - Hawkins (Hawkins-Kennedy) impingement sign/test; AND
  - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months. Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement; AND
  - Imaging (radiographs, CT, MRI) demonstrates ANY of the following findings consistent with pathology in the subacromial space:
    - ◆ Subacromial spurs/osteophytes; OR
    - ◆ Type III (hooked) acromion; **OR**
    - Acromioclavicular osteoarthritis with inferior osteophyte formation; OR
- ◆ Synovectomy (partial or complete) is considered appropriate if ALL of the following are TRUE<sup>19</sup>:
  - Significant pain and/or functional impairment that impacts activities of daily living; AND
  - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months.
     Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement;
     AND
  - Advanced diagnostic imaging (e.g., MRI, CT) demonstrates findings consistent with pathologic synovial disease (e.g.,

synovial plica, synovial chondromatosis, pigmented villonodular synovitis, inflammatory/rheumatoid arthritis, crystalline arthropathy, infection).

#### **Non-Indications**

- → **Shoulder arthroscopy** is not considered appropriate if **ANY** of the following is **TRUE**:
  - ◆ Arthroscopic debridement and/or removal of intra-articular loose body is not considered to be indicated in the presence of Kellgren-Lawrence grade 3 or 4 osteoarthritis<sup>21</sup>; **OR**
  - Use of subacromial balloon spacer to treat irreparable rotator cuff tear<sup>21</sup>; OR
  - Rotator cuff and/or labral repair in the presence of active infection (local or remote); OR
  - Rotator cuff arthropathy.

#### **Level of Care Criteria**

Outpatient.

#### **Procedure Codes (HCPCS/CPT)**

<b>HCPCS Code</b>	Code Description/Definition
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
\$2300	Arthroscopy, shoulder, surgical; with thermally-induced Not Covered capsulorrhaphy

**Disclaimer:** S, I, and N Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

## **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 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.<sup>13</sup>

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.<sup>2</sup>

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.<sup>22</sup>

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.<sup>24</sup>

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.<sup>1</sup>
- 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. Strong recommendation 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.<sup>5</sup>

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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.		