# Cohere Medicare Advantage Policy - Shoulder Manipulation Under Anesthesia

*Clinical Guidelines for Medical Necessity Review*

**Version:** 1
**Effective Date:** March 27, 2025

# Important Notices

## Notices & Disclaimers:

**GUIDELINES ARE SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION-MAKING OF END USERS.**

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## Other Notices:



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## Guideline Information:

**Specialty Area:** Disorders of the Musculoskeletal System
**Guideline Name:** Cohere Medicare Advantage Policy - Shoulder Manipulation Under Anesthesia

**Date of last literature review:** 3/25/2025
**Document last updated:** 3/26/2025
**Type:** [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

**Table of Contents**

# Medical Necessity Criteria

***Service: Shoulder Manipulation Under Anesthesia***

## Benefit Category

Not applicable

Please Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service. Cite the applicable CMS document here.

## Related CMS Documents

Please refer to the CMS Medicare Coverage Database for the most current applicable CMS National Coverage.

- There are no applicable NCDs or LCDs for shoulder manipulation under anesthesia.

## Recommended Clinical Approach

Frozen shoulder (FS) is a common shoulder condition that leads to progressive loss of glenohumeral movements and debilitating contractions of the shoulder.[1] As it stands, there are a variety of treatments for FS, which include non-invasive conservative treatments (e.g., physical therapy, exercise, intra-articular steroid injections, medication management) or surgery. Shoulder manipulation under anesthesia (MUA) is a non-invasive procedure used to improve mobility in patients with FS to alleviate pain and improve range of motion (ROM).[2] The primary indication for shoulder MUA is refractory shoulder pain and stiffness despite a course of appropriate conservative treatment.

## Evaluation of Clinical Harms and Benefits

Cohere Health uses the criteria below to ensure consistency in reviewing the conditions to be met for coverage of shoulder manipulation under anesthesia (MUA). 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:

- Structural damages in the glenohumeral joint and its surrounding soft tissues due to uncontrolled manipulation.[3]
- Potentially serious complications in rare cases such as a humeral shaft fracture, osteochondral lesions, and brachial plexus injury.[4]
- Long-term recurrence of FS symptoms which may lead to additional surgical procedures.[5]
- Increased healthcare costs and complications from the inappropriate use of emergency services and additional treatments.

The clinical benefits of using these criteria include:

- Improvements in shoulder ROM.[6]
- Reduction in localized pain after the intervention.[7-8]
- Reduction in complications and adverse effects from unnecessary procedures. Proper use of diagnostic criteria can prevent unnecessary surgeries and associated risks.
- 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 Manipulation Under Anesthesia (MUA)** is considered appropriate if **ALL** of the following are **TRUE**[4-9]:
  - ◆ The patient has had clinical signs and symptoms of adhesive capsulitis (frozen shoulder) for at least 3 months to include a significant loss in passive shoulder ROM; **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**
  - ◆ Imaging findings do not identify other shoulder pathology as the primary source of the symptoms (e.g. severe arthritis).

### Non-Indications

- ➔ **Shoulder Manipulation Under Anesthesia (MUA)** is not considered appropriate if **ANY** of the following is **TRUE**:
  - ◆ Severe osteoporosis.

## Level of Care Criteria

Outpatient

## Procedure Codes (CPT/HCPCS)

| CPT/HCPCS Code | Code Description |
|---|---|
| 23700 | Manipulation under anesthesia, shoulder joint, including application of fixation apparatus (dislocation excluded) |

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

# Medical Evidence

Kraal et al. (2023) conducted a randomized control trial (RCT) to assess the effectiveness of manipulation under anesthesia (MUA) followed by physiotherapy (PT) compared to PT alone in treating stage 2 frozen shoulder (FS). The trial involved 82 patients - both groups showed significant improvement in outcomes at the one-year follow-up, including Shoulder Pain and Disability Index (SPADI) scores, Oxford Shoulder Score, pain, range of motion (ROM), and quality of life. However, MUA improved SPADI scores faster at three months and showed significantly better increases in anteflexion and abduction ROM throughout the follow-up period. No significant complications were reported in either group. The authors concluded that MUA can be considered safe and leads to a quicker recovery of ROM and improved functional outcomes compared to PT alone in the short term, but after one year, the results of MUA are comparable to PT, with slightly better ROM scores for MUA.[5]

Brealey et al. (2020) conducted a multicenter, open-label, three-arm, randomized trial to compare the effectiveness and cost-effectiveness of three treatments for frozen shoulder. Treatments included early structured physiotherapy with a steroid injection, MUA with a steroid injection, and arthroscopic capsular release followed by manipulation. The primary outcome measured was the Oxford Shoulder Score at 12 months post-randomization. The study found that arthroscopic capsular release resulted in a statistically significant improvement in shoulder function compared to MUA or early structured physiotherapy. However, these differences were not deemed clinically significant. Serious adverse events were rare but more common in participants who underwent surgery. Qualitative data suggested that patients preferred quicker resolution of their shoulder problems. However, none of the interventions emerged as superior, with early structured physiotherapy being accessible and low-cost, MUA being the most cost-effective, and arthroscopic capsular release carrying higher risks and costs.[8]

Fairclough et al. (2023) performed a retrospective analysis to examine the long-term outcomes of MUA as a treatment for frozen shoulder (FS). The study included 398 shoulders treated between 1999 and 2010, with complete data available for 240 shoulders. The findings indicate that at a mean follow-up of 13.2 years, the majority (71.3%) had no symptoms, 16.6% had minor, and 12.1% had significant symptoms. Only a small percentage experienced a recurrence of FS or required repeat MUA. Additionally, the

development of other shoulder problems, such as rotator cuff pathology or shoulder osteoarthritis, was relatively low and comparable to that of the general population. Overall, research shows that MUA for FS yields favorable long-term outcomes, with few instances of recurrence and no significant increase in the development of other shoulder issues.[11]

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# Clinical Guideline Revision History/Information

| Original Date: 3/27/2025 | | |
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| **Review History** | | |
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