

# MEDICAL POLICY

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|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Medical Policy Title   | Shoulder Joint Procedures for Managed Medicaid (MMC), Health and Recovery Plan (HARP), Child Health Plus (CHP), and Essential Plan (EP) Members |
| Policy Number          | 7.01.125                                                                                                                                        |
| Current Effective Date | January 1, 2027                                                                                                                                 |
| Next Review Date       | September 2027                                                                                                                                  |

Our medical policies are guides to evaluate technologies or services for medical necessity. Criteria are established through the assessment of evidence based, peer-reviewed scientific literature, and national professional guidelines. Federal and state law(s), regulatory mandates and the member's subscriber contract language are considered first in the determination of a covered service.

(Link to [Product Disclaimer](#))

## SECTION LINKS

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## POLICY STATEMENT(S)

### Total Shoulder Arthroplasty

- I. Shoulder arthroplasty is **not medically necessary** for **ANY** of the following contraindications:
  - A. Material allergy incompatible with implantation;
  - B. Clinical instability or inadequately managed comorbid conditions;
  - C. Poor dentition requiring major dental intervention prior to arthroplasty;
  - D. Diabetes with HbA1c greater than 8%;
  - E. Nicotine or tobacco use, including cigars, cigarette, e-cigarette, nicotine pouch, smokeless tobacco, or vape pen, within 6 weeks of surgery;
  - F. Intra-articular corticosteroid injection within 12 weeks of surgery;
  - G. Untreated or unmanaged substance use disorder;
  - H. Uncontrolled hypertension;
  - I. Active local or systemic infection, including infection that is undergoing treatment or remains unresolved;

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- J. Neurologic conditions resulting in **one (1) or more** of the following:
  - 1. Charcot arthropathy;
  - 2. Complex regional pain syndrome (CRPS) or related CRPS variant; **or**
  - 3. Loss of deltoid or rotator cuff function;
- K. Shoulder arthroscopy of the affected shoulder within the preceding 12 weeks.

Total Shoulder Arthroplasty (TSA) or Resurfacing

- II. Total shoulder arthroplasty or resurfacing is **medically necessary** when **ALL** of the following are met:
  - A. Shoulder pain and dysfunction result in limitations of activities of daily living (ADLs);
  - B. Documentation supports **one (1)** of the following:
    - 1. Advanced glenohumeral joint disease confirmed by imaging studies (e.g., radiographs, CT, and/or MRI) demonstrating severe joint degeneration and joint space loss associated with **one (1)** of the following:
      - a. Degenerative arthritis or post-traumatic arthritis, including findings such as asymmetric joint space loss, glenoid wear, glenoid flattening, subchondral sclerosis, or cuff tear arthropathy; **or**
      - b. Inflammatory arthropathy, including rheumatoid arthritis, characterized by uniform joint space narrowing, erosive changes, synovitis, pannus formation, or cartilage loss;
    - 2. Prior osteotomy associated with persistent loss of shoulder function and range of motion;
    - 3. **All** the following conditions are present:
      - a. Adequate bone stock to support fixation of the prosthesis;
      - b. Intact deltoid function; **and**
      - c. A reparable rotator cuff;
    - 4. Conservative management meets **either** of the following:
      - a. Conservative management is not required when **any** of the following is documented:
        - i. Acute proximal humerus fracture not amenable to internal fixation, including displaced three- or four-part fractures, head-splitting fractures, or complex fracture-dislocations;
        - ii. Osteonecrosis (avascular necrosis) of the humeral head with collapse;
        - iii. End-stage glenohumeral arthritis with bone-on-bone articulation identified on

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radiographs; **or**

- iv. Primary or metastatic malignancy involving the shoulder joint or adjacent soft tissues;

**OR**

- b. For all other indications, conservative management must include **both** of the following:
  - i. Physical therapy (PT) meets **all** the following:
    - a) Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b) Participation for a minimum of 6 weeks during the previous 6 months;
    - c) Failure to improve symptoms or functional impairments; **and**
  - ii. Pain management includes **either** of the following:
    - a) Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
    - b) Medication management (e.g., non-steroidal anti-inflammatory drugs [NSAIDs] or oral analgesics);

Reverse Total Shoulder Arthroplasty (RTSA)

III. Reverse total shoulder arthroplasty is **medically necessary** when **ALL** the following are met:

- A. Shoulder dysfunction results in limitations of activities of daily living (ADLs);
- B. Documentation supports **one (1)** of the following:
  - 1. Advanced glenohumeral joint degeneration demonstrated by imaging studies (e.g., radiographs, CT, and/or MRI) with severe joint space loss associated with:
    - a. Degenerative or post-traumatic arthritis; **or**
    - b. Inflammatory arthropathy, including rheumatoid arthritis;
  - 2. Massive irreparable rotator cuff pathology, including substantial partial-thickness or full-thickness tearing associated with significant loss of shoulder function;
  - 3. Persistent severe pain following prior rotator cuff repair failure;
  - 4. Failure of a prior total shoulder arthroplasty in the setting of an irreparable rotator cuff deficiency;
  - 5. Conservative management meets **either** of the following:
    - a. Conservative management is not required when **any** of the following is documented:
      - i. Acute proximal humerus fracture, including two-part, three-part, or four-part fracture patterns, with or without associated tuberosity involvement;

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- ii. Symptomatic malunion of a proximal humerus fracture associated with rotator cuff dysfunction;
    - iii. Primary or metastatic malignancy involving the glenohumeral joint or adjacent soft tissues;
    - iv. Bone-on-bone glenohumeral degeneration identified on radiographs, CT, or MRI; **or**
    - v. End-stage glenohumeral arthritis (Kellgren-Lawrence Grade IV); **or**
  - b. For all other indications, conservative management must include **both** of the following:
    - i. Physical therapy (PT) meets **all** the following:
      - a) Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
      - b) Participation for a minimum of 6 weeks during the previous 6 months;
      - c) Failure to improve symptoms or functional impairments; **and**
    - ii. Pain management includes **either** of the following:
      - a) Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
      - b) Medication management (e.g., NSAIDs or analgesics);
  - C. Glenoid bone loss, bone deficiency, or structural compromise that limits the ability to support a conventional glenoid component;
  - D. Preserved deltoid muscle function;
  - E. Painful loss of shoulder motion resulting in pseudoparalysis, demonstrated by inability to actively elevate the arm to 90 degrees without assistance;
  - F. Imaging demonstrates advanced structural shoulder disease, including **one (1) or more** of the following:
    - 1. Bone-on-bone glenohumeral articulation;
    - 2. Complete or near-complete joint space loss; **or**
    - 3. Significant osseous deformity involving the glenohumeral joint.
- IV. Revision of a prior shoulder arthroplasty is **medically necessary** when **ALL** the following are met:
- A. Functional impairment of the affected shoulder that interferes with ADLs and/or IADLs;
  - B. No active or inadequately treated joint infection; **and**
  - C. **One (1) or more** of the following prosthesis-related complications:
    - 1. Recurrent instability, dislocation, or subluxation;

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2. Periprosthetic infection requiring revision;
3. Periprosthetic fracture;
4. Aseptic component loosening;
5. Osteolysis;
6. Implant failure, component dysfunction, instability, or device recall; **or**
7. Symptomatic synovitis or adverse local tissue reaction, including metallosis;

Hemiarthroplasty

- V. Shoulder hemiarthroplasty is **medically necessary** when **ALL** the following are met:
- A. Shoulder dysfunction results in limitations of activities of daily living (ADLs);
  - B. Documentation supports **one (1)** of the following:
    1. Advanced glenohumeral joint disease demonstrated by imaging studies (e.g., radiographs, CT, and/or MRI) with severe joint space loss associated with:
      - a. Degenerative arthritis;
      - b. Post-traumatic arthritis;
      - c. Inflammatory arthropathy, including rheumatoid arthritis
      - d. Massive irreparable partial-thickness rotator cuff pathology;
      - e. Full-thickness rotator cuff tear associated with significant functional deficit, including weakness and/or impingement symptoms; **or**
      - f. Structural joint destruction demonstrated by bone-on-bone articulation or osseous deformity;
    2. When **all** the following criteria are met:
      - a. Humeral bone quality or bone stock is inadequate to support stable internal fixation;
      - b. Preserved deltoid;
      - c. Rotator cuff function sufficient to support the planned procedure; **and**
    3. Conservative management meets **either** of the following:
      - a. Conservative management is not required when **any** of the following is documented:
        - i. Osteonecrosis (avascular necrosis) of the humeral head with collapse;
        - ii. Acute proximal humerus fracture that is not amenable to internal fixation, including displaced three-part or four-part fractures, head-splitting fractures, or complex fracture-dislocations; **or**

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- iii. Primary or metastatic malignancy involving the glenohumeral joint or adjacent soft tissues; **or**
- b. For all other indications, conservative management must include **both** of the following:
  - i. Physical therapy (PT) meets **all** the following:
    - a) Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b) Participation for a minimum of 6 weeks during the previous 6 months;
    - c) Failure to improve symptoms or functional impairments; **and**
  - ii. Pain management includes **either** of the following:
    - a) Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
    - b) Medication management (e.g., NSAIDs or analgesics).

Shoulder Arthroscopy

Diagnostic Shoulder Arthroscopy

- VI. Diagnostic shoulder arthroscopy is **medically necessary** when **ALL** the following criteria are met:
- A. Alternative conditions that could reasonably account for the individual's symptoms have been excluded, including:
    - 1. Glenohumeral arthritis;
    - 2. Brachial plexus pathology;
    - 3. Fracture;
    - 4. Referred cervical pain; **or**
    - 5. Thoracic outlet syndrome;
  - B. Persistent functional impairment as evidenced by **both** the following:
    - 1. Shoulder pain and functional limitations have been present for at least 6 months; **and**
    - 2. Symptoms interfere with activities of daily living (ADLs) or instrumental activities of daily living (IADLs);
  - C. Clinical examination demonstrates abnormalities when compared with the unaffected shoulder, including **one (1) or more** of the following:
    - 1. Findings consistent with impingement syndrome;
    - 2. Restricted active or passive range of motion; **or**
    - 3. Measurable loss of strength;

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- D. Conservative management must include **both** of the following:
    - 1. Physical therapy (PT) meets **all** the following:
      - a. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
      - b. Participation for a minimum of 3 months during the previous 6 months;
      - c. Failure to improve symptoms or functional impairments; **and**
    - 2. Pain management includes **either** of the following:
      - a. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
      - b. Medication management (e.g., NSAIDS or analgesics);
  - E. Both radiographs and MRI have been performed and have not established a definitive diagnosis or explanation for the individual's symptoms.
- VII. Rotator cuff repair is **not medically necessary** when **ANY** of the following contraindications are present:
- A. Advanced glenohumeral degenerative joint disease, including severe joint-space loss, bone-on-bone articulation, large osteophytes, subchondral sclerosis, or subchondral cyst formation (Kellgren-Lawrence grade II or greater);
  - B. Full-thickness rotator cuff tear without associated symptoms;
  - C. Medical or behavioral health conditions that are not adequately controlled or optimized for surgery;
  - D. Corticosteroid injection into the operative shoulder within the preceding twelve (12) weeks;
  - E. Deltoid paralysis or rotator cuff paralysis;
  - F. Poorly controlled diabetes mellitus (HbA1c greater than 8%);
  - G. Uncontrolled hypertension;
  - H. Active local or systemic infection; **or**
  - I. Nicotine or tobacco use within 6 weeks of the planned procedure, including cigarettes, cigars, smokeless tobacco, nicotine pouches, electronic cigarettes, or vaping devices.
- VIII. Arthroscopic rotator cuff repair is **medically necessary** when **ALL** the following are met:
- A. Shoulder symptoms result in functional impairment affecting activities of daily living (ADLs) and/or instrumental activities of daily living (IADLs);
  - B. Imaging confirms a rotator cuff tear, including partial-thickness tear; or full-thickness tear;
  - C. Clinical findings are consistent with rotator cuff pathology, including **both** the following:
    - 1. Reproducible pain patterns characteristic of rotator cuff disease; **and**
    - 2. Examination findings demonstrating rotator cuff dysfunction;

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- D. Symptoms are consistent with shoulder impingement, including pain reproduced with overhead activity and improvement with lowering of the arm;
- E. Conservative management meets **either** of the following:
  - 1. Conservative management is not required when **either** of the following is documented:
    - a. Progressive enlargement of a full-thickness rotator cuff tear by 50% or more on serial imaging obtained at least 3 months apart; **or**
    - b. Symptomatic traumatic rotator cuff tear with imaging demonstrating absence of glenohumeral arthritis; **or**
  - 2. For all other indications, conservative management must include **both** of the following:
    - a. Physical therapy (PT) meets **all** the following:
      - i. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
      - ii. Participation for a minimum of 6 weeks during the previous 6 months;
      - iii. Failure to improve symptoms or functional impairments; **and**
    - b. Pain management includes **either** of the following:
      - i. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
      - ii. Medication management (e.g., NSAIDS or oral analgesics).

Revision Rotator Cuff Repair

- IX. Revision rotator cuff repair is **medically necessary** when **ALL** the following are met:
  - A. For revision procedures performed more than 1 year after the index repair, the request must satisfy the current rotator cuff repair medical necessity criteria;
  - B. MRI or CT arthrography demonstrates **one (1)** of the following:
    - 1. Failure of tendon healing following prior repair (e.g., Sugaya Type IV or Type V); **or**
    - 2. Recurrent rotator cuff tear occurring more than 3 months after the original surgical procedure.

Anterior-Inferior Labral Tear Repair (Bankart Repair)

- X. Anterior-inferior labral tear repair is **medically necessary** when **ALL** the following are met:
  - A. No evidence of moderate-to-severe glenohumeral arthritis (Kellgren-Lawrence grade II or greater);
  - B. No nicotine or tobacco use, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
  - C. Comorbid conditions are appropriately managed and there is no active infection;
  - D. For individuals with diabetes mellitus, HbA1c is 8% or less;

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- E. Presence of **one (1) or more** of the following:
  - 1. Combined labral pathology;
  - 2. Recurrent glenohumeral instability, including **two (2) or more** subluxation or dislocation episodes; **or**
  - 3. Acute shoulder pain associated with activity or exertion;
- F. MRI or CT arthrogram confirms an anterior-inferior labral tear or bony Bankart lesion;
- G. Conservative management must include **both** of the following:
  - 1. Physical therapy (PT) meets **all** the following:
    - a. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b. Participation for a minimum of 6 weeks during the previous 6 months; **and**
    - c. Failure to improve symptoms or functional impairments; **and**
  - 2. Pain management includes **either** of the following:
    - a. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
    - b. Medication management (e.g., NSAIDS or analgesics);
- H. Physical examination reveals **all** the following:
  - 1. Absence of significant shoulder stiffness;
  - 2. Clinical evidence of instability;
  - 3. Restricted or abnormal range of motion; **and**
    - a. At least **one(1)** of the following:
      - i. Positive apprehension test;
      - ii. Positive relocation test;
      - iii. Positive labral grind test; **or**
      - iv. Objective painful laxity on examination.

Shoulder Capsulorrhaphy

- XI. Shoulder capsulorrhaphy is **medically necessary** when **ALL** the following are met:
  - A. No evidence of moderate-to-severe glenohumeral arthritis (Kellgren-Lawrence grade II or greater);
  - B. No nicotine or tobacco, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
  - C. Comorbid conditions are appropriately managed and there is no active local or systemic infection;

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- D. For individuals with diabetes mellitus, HbA1c is 8% or less;
- E. Chronic shoulder stiffness resulting from **one (1)** of the following:
  - 1. Adhesive capsulitis; **or**
  - 2. Arthrofibrosis related to disease, injury, or prior surgery;
  - 3. Conservative management must include **both** of the following:
    - a. Physical therapy (PT) meets **all** the following:
      - i. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
      - ii. Participation for a minimum of 3 months during the previous 6 months;
      - iii. Failure to improve symptoms or functional impairments; **and**
    - b. Pain management includes **either** of the following:
      - i. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
      - ii. Medication management (e.g., NSAIDS or analgesics);
- F. Physical examination demonstrates excessive glenohumeral joint translation, including **all** the following:
  - 1. Sulcus sign greater than 1 cm;
  - 2. Hyperabduction (Gagey) testing demonstrating greater than 105 degrees of abduction; **and**
  - 3. Beighton hypermobility score greater than 4;
- G. Shoulder dysfunction has been present for at least 3 months;
- H. Symptoms interfere with ADLs;
- I. Documentation supports **one (1)** of the following:
  - 1. History of shoulder trauma; **or**
  - 2. Postoperative shoulder contracture.

Shoulder Loose Body or Foreign Body Removal

- XII. Removal of an intra-articular loose body or foreign body from the shoulder is **medically necessary** when **ALL** the following are met:
- A. No evidence of moderate-to-severe glenohumeral arthritis (Kellgren-Lawrence grade II or greater);
  - B. No nicotine or tobacco, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
  - C. Comorbid conditions are appropriately managed and there is no active infection;

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- D. For individuals with diabetes mellitus, HbA1c is 8% or less;
- E. Documentation does not support another condition that adequately explains the individual's symptoms, including **any** of the following:
  - 1. Glenohumeral arthritis;
  - 2. Brachial plexus pathology;
  - 3. Fracture;
  - 4. Referred cervical pain; **or**
  - 5. Thoracic outlet syndrome;
- F. CT or MRI demonstrates an intra-articular loose body or foreign body;
- G. Documentation demonstrates **both** of the following:
  - 1. Shoulder pain or mechanical symptoms, including clicking, catching, or popping; and
  - 2. Functional limitation affecting ADLs;
- H. A minimum of 3 months of conservative management failed, or was not tolerated, or the loose or foreign body results in **any** of the following:
  - 1. Acute mechanical restriction of shoulder motion;
  - 2. Locking; **or**
  - 3. Other severe mechanical symptoms requiring surgical intervention.

Shoulder Lysis of Adhesions, Capsulotomy, and Capsular Release

- XIII. Shoulder lysis of adhesions, capsulotomy, or capsular release is **medically necessary** when **ALL** the following are met:
- A. No evidence of moderate-to-severe glenohumeral arthritis (Kellgren-Lawrence grade II or greater);
  - B. Imaging studies do not demonstrate fracture or other significant soft tissue injury as the primary cause of the individual's symptoms;
  - C. No nicotine or tobacco use, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
  - D. Medical comorbidities are appropriately managed and there is no active infection;
  - E. For individuals with diabetes mellitus, HbA1c is 8% or less;
  - F. A minimum of 3 months of conservative management during the previous 6 months failed, or was not tolerated, and includes non-pharmacologic management with **either**:
    - a. Chiropractic care; **or**
    - b. Supervised physical therapy (PT);

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- G. Shoulder pain and loss of function interfere with ADLs;
- H. Physical examination demonstrates loss of shoulder motion of at least 50% in **two (2)** planes when compared with the contralateral shoulder.

### Shoulder Manipulation Under Anesthesia (MUA)

Requests for manipulation under anesthesia of the shoulder will be reviewed on an individual case basis using the clinical information submitted for review.

### Shoulder Osteotomy

XIV. Shoulder osteotomy is **medically necessary** when documentation supports **one (1)** of the following indications:

- A. Achondroplasia;
- B. Degenerative or inflammatory shoulder arthritis;
- C. Symptomatic osseous impingement or bone spur formation;
- D. Hill-Sachs deformity;
- E. Limb-length discrepancy resulting from trauma, infection, hypoplasia, or skeletal dysplasia;
- F. Malunited fracture resulting in functional impairment;
- G. Symptomatic shoulder instability; **or**
- H. Residual shoulder deformity or dysfunction associated with obstetric brachial plexus palsy.

### Partial Claviclectomy, Acromioplasty, or Distal Clavicle Excision (DCE)

XV. Partial claviclectomy, acromioplasty, and/or distal clavicle excision is **medically necessary** when **ALL** the following are met:

- A. Conservative management must include **BOTH** of the following:
  - 1. Physical therapy (PT) meets **all** the following:
    - a. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b. Participation for a minimum of 6 weeks during the previous 6 months;
    - c. Failure to improve symptoms or functional impairments; **and**
  - 2. Pain management includes **either** of the following:
    - a. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
    - b. Medication management (e.g., NSAIDS or analgesics);
- B. Localized acromioclavicular joint tenderness;
- C. Positive cross-body adduction testing;
- D. Shoulder pain and dysfunction have been present for at least 3 months;

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- E. Symptoms interfere with ADLs;
- F. Radiographs or MRI demonstrate pathology involving the acromioclavicular joint, including **one (1) or more** of the following:
  - 1. Joint-space narrowing;
  - 2. Moderate-to-severe acromioclavicular degenerative disease;
  - 3. Distal clavicular edema; **or**
  - 4. Distal clavicular osteolysis.

Posterior Labral Repair

XVI. Posterior labral repair is **medically necessary** when **ALL** the following are met:

- A. Imaging does not demonstrate **any** of the following advanced degenerative diseases:
  - 1. Posterior glenoid cartilage loss;
  - 2. Subchondral cyst formation;
  - 3. Significant joint-space narrowing; **or**
  - 4. Posterior humeral head subluxation associated with arthropathy;
- B. No nicotine or tobacco use, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
- C. Medical comorbidities are appropriately managed and there is no active infection;
- D. For individuals with diabetes mellitus, HbA1c is 8% or less;
- E. Conservative management must include **both** of the following:
  - 1. Physical therapy (PT) meets **all** the following:
    - a. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b. Participation for a minimum of 6 weeks during the previous 6 months;
    - c. Failure to improve symptoms or functional impairments; **and**
  - 2. Pain management includes **either** of the following:
    - a. Intra-articular, subacromial or bicipital groove corticosteroid injection; or
    - b. Medication management (e.g., NSAIDS or analgesics);
- F. MRI confirms a posterior labral tear;
- G. Physical examination demonstrates **any** of the following findings:
  - 1. Positive load-and-shift test;
  - 2. Positive drawer test;

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- 3. Positive jerk test; **or**
- 4. Positive Kim test;
- H. Documentation demonstrates **one (1) or more** of the following:
  - 1. Instability;
  - 2. Painful mechanical symptoms, including catching or popping; or
  - 3. Shoulder pain is attributable to the labral pathology.

Superior Labral Anterior-Posterior (SLAP) Repair

Debridement, biceps tenotomy, and biceps tenodesis are distinct procedures and are not considered SLAP repair.

XVII. Superior labral anterior-posterior (SLAP) repair is **medically necessary** when **ALL** the following are met:

- A. No evidence of moderate-to-severe glenohumeral arthritis (Kellgren-Lawrence grade II or greater);
- B. No nicotine or tobacco use, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
- C. Medical comorbidities are appropriately managed and there is no active infection;
- D. For individuals with diabetes mellitus, HbA1c is 8% or less;
- E. Documentation supports a shoulder injury associated with development of a SLAP tear, including:
  - 1. Overhead athletic activity;
  - 2. Fall;
  - 3. Traction injury;
  - 4. Lifting injury; **or**
  - 5. Motor vehicle accident;
- F. Conservative management must include **both** of the following:
  - 1. Physical therapy (PT) meets **all** the following:
    - a. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b. Participation for a minimum of 6 weeks during the previous 6 months;
    - c. Failure to improve symptoms or functional impairments; **and**
  - 2. Pain management includes **either** of the following:
    - a. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**

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- b. Medication management (e.g., NSAIDS or analgesics);
- G. MRI confirms a superior labral tear;
- H. The lesion is classified as a Type II or Type IV SLAP tear;
- I. At least **one (1)** of the following provocative tests is positive:
  - 1. Anterior slide test;
  - 2. Biceps load test I or II;
  - 3. Forced shoulder abduction and elbow flexion test;
  - 4. Jobe relocation test;
  - 5. O'Brien (active compression) test;
  - 6. Pain provocation test; **or**
  - 7. Resisted supination external rotation test;
- J. Shoulder symptoms have persisted for at least three 3 months; and
- K. Pain and loss of function interfere with ADLs.

Shoulder Synovectomy

XVIII. Partial or complete shoulder synovectomy is **medically necessary** when **ALL** the following are met:

- A. No evidence of moderate-to-severe glenohumeral arthritis (Kellgren-Lawrence grade II or greater);
- B. No nicotine or tobacco use, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
- C. Medical comorbidities are appropriately managed and there is no active infection;
- D. For individuals with diabetes mellitus, HbA1c is 8% or less;
- E. No uncontrolled hypertension;
- F. Documentation demonstrates **one (1)** of the following:
  - 1. Hemochromatosis;
  - 2. Hemophilia;
  - 3. Inflammatory arthropathy, including rheumatoid arthritis, gout, pseudogout, or psoriatic arthritis;
  - 4. Lyme-related or nonspecific synovitis;
  - 5. Pigmented villonodular synovitis (PVNS);
  - 6. Recurrent hemarthrosis; **or**

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- 7. Synovial chondromatosis;
- G. Conservative management must include **both** of the following:
  - 1. Physical therapy (PT) meets **all** the following:
    - a. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b. Participation for a minimum of 6 weeks during the previous 6 months;
    - c. Failure to improve symptoms or functional impairments; **and**
  - 2. Pain management includes **either** of the following:
    - a. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
    - b. Medication management (e.g., NSAIDS or analgesics);
- H. MRI or CT findings consistent with primary synovial disease or joint effusion, or prior arthroscopic findings demonstrating secondary hypertrophic synovitis;
- I. Shoulder symptoms result in impairment of ADLs.

Long Head of Biceps (LHB) Tenotomy or Tenodesis

Tenodesis may be more appropriate in highly active individuals with greater functional demands, while tenotomy may be preferred when tendon healing capacity is a concern.

XIX. Long head biceps tenotomy or tenodesis is **medically necessary** when **ALL** the following are met:

- A. No evidence of moderate-to-severe glenohumeral arthritis (Kellgren-Lawrence grade II or greater);
- B. No nicotine or tobacco use, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
- C. Medical comorbidities are appropriately managed and there is no active infection;
- D. For individuals with diabetes mellitus, HbA1c is 8% or less;
- E. No uncontrolled hypertension;
- F. Documentation demonstrates **one (1) or more** of the following:
  - 1. Long head biceps hypertrophy, subluxation, or tear confirmed by MRI or CT;
  - 2. Superior labral anterior-posterior (SLAP) tear demonstrated on MRI;
  - 3. Full-thickness rotator cuff tear that independently meets medical necessity criteria for repair;
  - 4. Failure of a prior SLAP repair; **or**
  - 5. Chronic biceps tenosynovitis associated with localized pain in the bicipital groove;

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- G. Conservative management must include **both** of the following:
  - 1. Physical therapy (PT) meets **all** the following:
    - a. Supervised by a licensed PT, chiropractor, or through tele-rehab PT;
    - b. Participation for a minimum of 6 weeks during the previous 6 months;
    - c. Failure to improve symptoms or functional impairments; **and**
  - 2. Pain management includes **either** of the following:
    - a. Intra-articular, subacromial or bicipital groove corticosteroid injection; **or**
    - b. Medication management (e.g., NSAIDS or analgesics);
- H. Physical examination demonstrates at least **two (2)** of the following:
  - 1. Anterior shoulder pain;
  - 2. Positive Yergason test;
  - 3. Positive Speed test;
  - 4. Bicipital groove tenderness; **or**
  - 5. Weakness attributable to long head biceps pathology;
- I. Shoulder pain and dysfunction have been present for at least 3 months; **and**
- J. Symptoms interfere with ADLs.

Subacromial Decompression (SAD)

- XX. Subacromial decompression is **medically necessary** when **ALL** the following are met:
  - A. Radiographs obtained within the previous 12 months do not demonstrate moderate-to-severe glenohumeral degenerative joint disease, including advanced joint-space loss, large osteophyte formation, or bone-on-bone articulation;
  - B. No nicotine or tobacco use, including cigar, cigarette, e-cigarette, nicotine pouch, smokeless tobacco or vape pen use within 6 weeks of surgery;
  - C. Medical comorbidities are appropriately managed and there is no active infection;
  - D. For individuals with diabetes mellitus, HbA1c is 8% or less;
  - E. No uncontrolled hypertension;
  - F. Subacromial decompression is being performed in conjunction with at least **one (1)** of the following medically necessary procedures:
    - 1. Capsulorrhaphy;
    - 2. Debridement;
    - 3. Distal clavicle excision;

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4. Labral repair;
5. Removal of an intra-articular loose body or foreign body;
6. Lysis of adhesions or capsular release;
7. Rotator cuff repair;
8. Synovectomy; **or**
9. Long head biceps tenotomy or tenodesis.

### **RELATED POLICIES**

Not Applicable

### **POLICY GUIDELINE(S)**

Not Applicable

### **DESCRIPTION**

Total shoulder arthroplasty (replacement) is a surgical technique that involves replacing the humeral head and the glenoid. A total shoulder arthroplasty is typically the best option if the glenoid is damaged, but sufficient bone and rotator cuff remain to ensure that the glenoid component will last. The primary goal of shoulder replacement surgery is pain relief, with the secondary benefits of restoring motion, strength, and function, and helping individuals return to an activity level as near to normal as possible.

Partial shoulder replacement, also known as hemiarthroplasty, is a surgical technique that involves replacing the humeral head and not replacing the glenoid (socket), which is typically the best option if the glenoid does not have any arthritis or if there is some concern that the glenoid component might fail if it is replaced. Hemiarthroplasty is a highly technical procedure. There are two types of hemiarthroplasties: stemmed hemiarthroplasty and resurfacing hemiarthroplasty. The surgeon determines the type of procedure to perform, based on the nature of the injury and the condition of the shoulder.

Reverse shoulder arthroplasty (replacement) involves replacing both the humeral head and the glenoid, but the ball and socket are reversed to improve muscle function. This allows the deltoid muscle, which has a longer movement arm, to generate greater force, allowing it to act in place of an inadequately functioning or torn rotator cuff.

Revision of shoulder arthroplasty (replacement) is a surgical technique that involves surgical reconstruction or replacement due to failure or complication of previous shoulder arthroplasty.

Shoulder pseudoparesis is a shoulder dysfunction, particularly in the setting of a massive unrepairable or irreparable rotator cuff tear, in which there is the presence of less than 90 degrees of active elevation.

Shoulder pseudoparalysis is a shoulder dysfunction, particularly in the setting of a massive

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unreparable or irreparable rotator cuff tear, with all of the following: the presence of true anterosuperior escape; no true active shoulder elevation; and the individual is only able to demonstrate a shrug.

Shoulder resurfacing is a surgical technique that involves replacing the diseased part of the shoulder joint without replacing the humeral head. Resurfacing of the humeral head involves a prosthetic metal covering or cap to provide complete or partial coverage. It can be performed alone (hemi-resurfacing) or in combination with glenoid resurfacing (total or partial shoulder resurfacing).

The Walch classification of glenoid morphology is used to stratify the outcomes of shoulder arthroplasty for varying pathologic glenoid types. It also is used in preoperative planning to recognize morphologies that may pose intraoperative problems.

Type A: Centered humeral head, concentric wear, no subluxation of the humeral head

- A1: minor central erosion
- A2: major central erosion, humeral head protruding into the glenoid cavity

Type B: Humeral head subluxated posteriorly, biconcave glenoid with asymmetric wear

- B1: narrowing of the posterior joint space, subchondral sclerosis, osteophytes
- B2: biconcave aspect of the glenoid with posterior rim erosion and retroverted glenoid
- B3: monoconcave and posterior wear with  $>15^\circ$  retroversion or  $>70\%$  posterior humeral head subluxation, or both

Type C:

- C1: dysplastic glenoid with  $>25^\circ$  retroversion regardless of the erosion
- C2: biconcave, posterior bone loss, posterior translation of the humeral head

Type D: Glenoid anteversion or anterior humeral head subluxation  $<40^\circ$

### **SUPPORTIVE LITERATURE**

In a systematic review and meta-analysis, Carter and colleagues (2012) characterized the change in generic and shoulder-specific health-related quality-of-life (QOL) measures resulting from TSA. These investigators identified published studies reporting pre-operative and post-operative health related QOL outcomes for patients receiving TSA. Health-related QOL measures were identified, and meta-analysis was used to calculate standardized mean differences (SMD)s<sup>1</sup> reflective of the effect size, and 95% confidence interval (CI) for each scale. A total of 20 studies (1,576 TSAs) met the inclusion criteria. Outcome measures were analyzed after an average post-operative follow-up duration of 3.7 +/- 2.2 years. The Short Form-36 demonstrated significant improvement in physical component summary scores (SMD = 0.7,  $p < 0.001$ ), but not in mental component summary scores (SMD = 0.2,  $p = 0.37$ ). Significant improvements were observed in the visual analog scale score for pain (SMD = -2.5,  $p < 0.001$ ) and scores on three shoulder-specific measures: the Constant score (SMD = 2.7,  $p < 0.001$ ), the American Shoulder and Elbow Surgeons score (SMD = 2.9,  $p < 0.001$ ), and the Simple

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Shoulder Test (SMD = 2.3,  $p < 0.001$ ). The authors concluded that TSA leads to significant improvement in scores for function and pain. Shoulder-specific measures of function consistently showed the greatest degree of improvement, with large effect sizes. They noted that TSA also leads to significant improvements in overall physical well-being, with a moderate-to-large effect size.

In a multi-centered retrospective study, Favard and colleagues (2012) evaluated the rate of complications and the functional improvement with different types of shoulder arthroplasties after a minimum follow-up of eight years. A total of 198 shoulders, including 85 with primary osteoarthritis (OA) of the shoulder, 76 with rotator cuff tears, 19 with avascular necrosis, and 18 with rheumatoid arthritis (RA), were included in this study. Arthroplasties included 104 anatomic TSAs, 77 reverse arthroplasties, and 17 hemiarthroplasties. Ten patients had their arthroplasty revised, and 134 patients with TSA were able to be present at the final follow-up or provide information on their case. Function was evaluated by the Constant-Murley score, and loosening was evaluated by standard radiographs. In the group with primary OA of the shoulder, there were eight complications (11 %), including six (8.3 %) requiring implant revision. In the group of rotator cuff arthropathies, there were nine (14.7 %) with complications, including four (6.5 %) requiring implant revision. In the group with RA, there was one complication, but no surgical revision was necessary. There were no complications in the group with avascular necrosis. Glenoid migration occurred in 28.5 % of anatomic TSAs, and 3.4 % of reverse arthroplasties. This difference was significant ( $p < 0.001$ ). The Constant-Murley score was significantly improved in all etiologies. The authors concluded that glenohumeral arthropathies can be successfully treated by arthroplasty. Anatomic TSA was shown to be associated with a high risk of glenoid loosening at radiographic follow-up, which made them hesitate to use the cemented polyethylene implant, especially in young patients.

In a Cochrane review, Singh et al (2011) determined the benefits and potential harm associated with surgery for shoulder OA. These investigators performed a systematic review of clinical trials of adults with shoulder OA, comparing surgical techniques (TSA, hemiarthroplasty, implant type and fixation) to placebo, sham surgery, non-surgical modalities, and no treatment. They also reviewed trials that compared various surgical techniques, identifying patient-reported outcomes (pain, function, quality of life, etc.) or revision rates. They calculated the risk ratio for categorical outcomes and mean differences for continuous outcomes with 95% CI. There were no controlled trials of surgery versus placebo or non-surgical interventions. A total of seven studies with 238 patients were included. Two studies compared TSA to hemiarthroplasty ( $n = 88$ ). Researchers noted significantly worse scores on the 0 to 100 American Shoulder and Elbow Surgeons scale (mean difference, -10.05 at 24 to 34 months; 95 % CI: -18.97 to -1.13;  $p = 0.03$ ) and a non-significant trend toward higher revision rate in hemiarthroplasty compared to TSA (relative risk 6.18; 95 % CI: 0.77 to 49.52;  $p = 0.09$ ). With one study providing data ( $n = 41$ ), no differences were noted between groups for pain scores (mean difference 7.8; 95 % CI: -5.33 to 20.93), quality of life on Medical Outcomes Study Short-Form 36 physical component summary (mean difference 0.80; 95 % CI: -6.63 to -8.23), or adverse events (relative risk 1.2; 95 % CI: 0.4 to 3.8). The authors concluded that TSA was associated with better shoulder function, with no other demonstrable clinical benefits compared to hemiarthroplasty. They stated that more studies are needed, to compare clinical outcomes between them and comparing shoulder surgery to sham, placebo, and other non-surgical treatment options.

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Vancolen et al (2020) conducted a systematic review to evaluate the outcome of six studies totaling 245 participants aged less than 65 years who underwent reverse total shoulder arthroplasty (RTSA), with the most common indications being failed rotator cuff repair and rotator cuff tear arthropathy. The overall concern regarding RTSA is implant longevity and risk of failure necessitating need for revision surgery which may be a dissatisfier in younger individuals due to their higher postoperative expectations of function and pain relief. A significant level of postoperative functional improvement outcome was reported at a mean follow-up of 49 months (range, 19-140 months) ( $P < .05$ ) as measured by the American Shoulder and Elbow Surgeons (ASES) and Subjective Shoulder Value (SSV), as well as pain scores as measured by Visual Analogue Scale (VAS) postoperatively. The pooled complication rate was considered high at 18% ( $n=44/245$ ) with the most common complication reported as postoperative dislocation followed by glenoid loosening. The reoperation (revision) rate was 6% ( $n=15$ , range, 2-5) at a mean follow-up of 34 months (range, 19-140 months). The authors concluded that this small group study identified favorable short- to midterm functional outcomes of RTSA in the younger individual ( $<65$  years) for indications including rotator cuff arthropathy and osteoarthritis. Due to the complication and revision rates identified in this systematic review, the authors stated that additional long-term studies are needed to report definitive clinical results regarding prosthesis longevity, complications, and need for revision surgery in this patient population.

Mowers and colleagues (2025) performed a systematic review and meta-analysis which included six (6) studies totaling 4525 individuals (males,  $n=2288$  and females,  $n=2237$ ) to compare patient-reported outcomes, range of motion, and rates of revision surgery between male and female individuals who had undergone a primary anatomic total shoulder arthroplasty (aTSA). The systematic review identified that males experienced significantly greater improvement in postoperative ASES shoulder pain and functional scores (mean difference 2.18,  $P<.001$ ) and VAS pain scores (mean difference 0.40,  $P<.001$ ) compared to females. The study also found that female individuals compared to male individuals had a significantly higher risk of revision surgery (10.1% versus 7.3%, risk ratio 1.43,  $P<.001$ ) and revision surgeries (6.2% versus 3.7%, risk ratio 1.87,  $P=.03$ ). It has been well established that female individuals are associated with a higher risk of periprosthetic fracture due to a higher prevalence of osteoporosis in females. The authors concluded that there is a need for further investigation to determine the clinical significance of the identified aTSA comparative outcomes and to identify modifiable biological and social risk factors to improve results in female patients.

Bi and colleagues (2024) conducted a systematic review and meta-analysis which included 23 studies totaling 1178 individuals to analyze comparative studies of surgical treatment options for massive irreparable rotator cuff tears (MIRCTs) in individuals less than 70 years of age for several patient-reported outcomes, range of motion (ROM), and acromiohumeral distance (AHD). The mean age of study participants was 62.8 years of age, male ( $n=48.2\%$ ) to female ( $n=51.8\%$ ) participant numbers with a mean follow-up timeframe of 28.9 months. For the Constant-Murley score, debridement (MD, 21.03; 95% CI, 8.98 to 33.08;  $P<.001$ ) and arthroscopic bridging graft (aBG) (mean difference [MD], 6.97; 95% CI, 1.88 to 12.05;  $P=.007$ ) resulted in the highest P-scores. For the ASES score, InSpace balloon arthroplasty (MD, 12.34; 95% CI, 2.18 to 22.50;  $P=.017$ ), aBG (MD, 7.07; 95% CI, 0.28 to

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13.85;  $P = .041$ ), and long head of biceps augmented superior capsular reconstruction (BSCR) (MD, 5.16; 95% CI, 1.10 to 9.22;  $P = .013$ ) resulted in the highest P-scores. For AHD, BSCR resulted in the highest P-score (MD, 1.46; 95% CI, 0.45 to 2.48;  $P = .005$ ). For forward flexion range of motion (ROM), debridement (MD, 45.77; 95% CI, 25.41 to 66.13;  $P < .001$ ) resulted in the highest P-score, while reverse shoulder arthroplasty (RSA) resulted in the lowest P-score (MD, -16.70; 95% CI, -31.20 to -2.20;  $P = .024$ ). The authors concluded that graft interposition repair techniques, superior capsular reconstruction using the long head of the bicep tendon, arthroscopic debridement, and balloon arthroplasty provided superiority in various study outcomes for individuals less than 70 years of age with MICTs without significant arthritis or pseudoparalysis and RSA provides the least benefit in forward flexion.

There is a lack of long-term, randomized controlled studies for shoulder resurfacing using metal, polyethylene and biological materials for the treatment of glenohumeral arthritis, humeral head fractures, and osteochondral lesions. Biological glenoid resurfacing with or without prosthetic humeral head replacement has been suggested as a means to avoid the potential complications of polyethylene use in younger patients with glenohumeral arthritis. A variety of biologic surfaces, including anterior capsule, autogenous fascia lata, and Achilles tendon allograft have been used; however, there is minimal evidence in the peer-reviewed literature that these biological grafts can provide a durable bearing surface over time and there is documentation of post-operative infections. Further studies to assess the long-term outcomes and to evaluate alternative surface bearing materials (especially on the glenoid side) are required.

### **PROFESSIONAL GUIDELINE(S)**

According to the 2020 Management of Glenohumeral Joint Osteoarthritis Evidence-based Clinical Practice Guidelines of the American Academy of Orthopaedic Surgeons (AAOS), there is strong evidence that anatomic TSA produces more favorable function and pain relief in the short-to mid-term follow-up, when compared to hemiarthroplasty, for the treatment of glenohumeral osteoarthritis. These guidelines also recommend, in the absence of reliable evidence, that clinicians use either anatomic TSA or reverse TSA for the treatment of glenohumeral joint osteoarthritis in selected patients with excessive glenoid bone loss and/or rotator cuff dysfunction.

Within the 2020 guidelines, AAOS also advised of limited evidence to support that clinicians may utilize stemmed, stemless or resurfacing prosthesis for patients with glenohumeral joint osteoarthritis undergoing total or hemi-arthroplasty. However, the low-quality studies provided early information that any of these implants are reasonable and safe options but should be used with caution as there are no long-term outcome studies.

According to the 2010 Management of Rotator Cuff Injuries of the AAOS which were updated in 2019, there is strong evidence supporting both physical therapy and surgical management resulted in a notable improvement in PROs for patients with symptomatic small to medium full-thickness rotator cuff tears. AAOS also recommended that there is also strong evidence that supports that PROs improve with physical therapy in symptomatic patients with full-thickness rotator cuff tears. However, the rotator cuff tear size, muscle atrophy, and fatty infiltration may progress over five (5) to 10 years

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with nonsurgical management.

### REGULATORY STATUS

The U.S. Food and Drug Administration (FDA) regulates a variety of shoulder arthroplasty systems, including reverse total shoulder arthroplasty (rTSA) and stemless implants as medical devices. All shoulder implants including related components require FDA approval before marketing and use in the United States to ensure they are safe and effective for human use. Refer to the FDA Medical Device website. Available from: <https://www.fda.gov/medical-devices> [accessed 2026 Sept 09]

The FDA lists the most serious type of medical device recalls as well as early alert communications about corrective actions being taken by companies that the FDA believes are likely to be the most serious type of recalls. Available from: [Medical Device Recalls and Early Alerts | FDA](#) [accessed 2026 Sept 09]

### CODE(S)

- Codes may not be covered under all circumstances.
- Code list may not be all inclusive (AMA and CMS code updates may occur more frequently than policy updates).
- (E/I)=Experimental/Investigational
- (NMN)=Not medically necessary/appropriate

### CPT Codes

| Code  | Description                                                                                                                       |
|-------|-----------------------------------------------------------------------------------------------------------------------------------|
| 23334 | Removal of prosthesis, includes debridement and synovectomy when performed; humeral or glenoid component                          |
| 23335 | Removal of prosthesis, includes debridement and synovectomy when performed; humeral and glenoid components (e.g., total shoulder) |
| 23450 | Capsulorrhaphy, anterior; Putti-Platt procedure or Magnuson type operation                                                        |
| 23455 | Capsulorrhaphy, anterior; with labral repair (e.g., 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 multi-directional instability                                                        |
| 23470 | Arthroplasty, glenohumeral joint; hemiarthroplasty                                                                                |
| 23472 | Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement (e.g., total shoulder).                |
| 23473 | Revision of total shoulder arthroplasty, including allograft when performed; humeral or glenoid component                         |
| 23474 | Revision of total shoulder arthroplasty, including allograft when performed; humeral and glenoid component                        |

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| <b>Code</b> | <b>Description</b>                                                                                                                                                                                                                                                                                                                                              |
|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 23480       | Osteotomy, clavicle, with or without internal fixation;                                                                                                                                                                                                                                                                                                         |
| 23485       | Osteotomy, clavicle, with or without internal fixation; with bone graft for nonunion or malunion (includes obtaining graft and/or necessary fixation)                                                                                                                                                                                                           |
| 23700       | Manipulation under anesthesia, shoulder joint, including application of fixation apparatus (dislocation excluded)                                                                                                                                                                                                                                               |
| 29805       | Arthroscopy, shoulder, diagnostic, with or without synovial biopsy (separate procedure)                                                                                                                                                                                                                                                                         |
| 29806       | Arthroscopy, shoulder, surgical; capsulorrhaphy                                                                                                                                                                                                                                                                                                                 |
| 29807       | Arthroscopy, shoulder, surgical; repair of SLAP lesion                                                                                                                                                                                                                                                                                                          |
| 29819       | Arthroscopy, shoulder, surgical; with removal of loose body or foreign body                                                                                                                                                                                                                                                                                     |
| 29820       | Arthroscopy, shoulder, surgical; synovectomy, partial                                                                                                                                                                                                                                                                                                           |
| 29821       | Arthroscopy, shoulder, surgical; synovectomy, complete                                                                                                                                                                                                                                                                                                          |
| 29822       | Arthroscopy, shoulder, surgical; debridement, limited, 1 or 2 discrete structures (e.g., humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies])      |
| 29823       | Arthroscopy, shoulder, surgical; debridement, extensive, 3 or more discrete structures (e.g., humeral bone, humeral articular cartilage, glenoid bone, glenoid articular cartilage, biceps tendon, biceps anchor complex, labrum, articular capsule, articular side of the rotator cuff, bursal side of the rotator cuff, subacromial bursa, foreign body[ies]) |
| 29824       | Arthroscopy, shoulder, surgical; distal claviclectomy including distal articular surface (Mumford procedure)                                                                                                                                                                                                                                                    |
| 29825       | Arthroscopy, shoulder, surgical; with lysis and resection of adhesions, with or without manipulation                                                                                                                                                                                                                                                            |
| 29826       | Arthroscopy, shoulder, surgical; decompression of subacromial space with partial acromioplasty, with coracoacromial ligament (i.e., arch) release, when performed (List separately in addition to code for primary procedure)                                                                                                                                   |
| 29827       | Arthroscopy, shoulder, surgical; with rotator cuff repair                                                                                                                                                                                                                                                                                                       |
| 29828       | Arthroscopy, shoulder, surgical; biceps tenodesis                                                                                                                                                                                                                                                                                                               |

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**HCPSC Codes**

| <b>Code</b>    | <b>Description</b> |
|----------------|--------------------|
| Not Applicable |                    |

**ICD10 Codes**

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| <b>Code</b>            | <b>Description</b>                                                                             |
|------------------------|------------------------------------------------------------------------------------------------|
| M05.00<br>- M05.9      | Rheumatoid arthritis (code range Felty's syndrome)                                             |
| M12.511 -<br>M12.519   | Traumatic arthropathy, shoulder (code range)                                                   |
| M19.011 -<br>M19.019   | Osteoarthritis, localized, primary, shoulder region (code range)                               |
| M19.111 -<br>M19.119   | Post-traumatic osteoarthritis, shoulder (code range)                                           |
| M19.211 -<br>M19.219   | Osteoarthritis, localized, secondary, shoulder region (code range)                             |
| M24.811 -<br>M24.819   | Other specific joint derangement of shoulder, not elsewhere classified [crepitus] (code range) |
| M87.021 -<br>M87.029   | Idiopathic aseptic necrosis of humerus [head] (code range)                                     |
| S42.001K -<br>S42.199P | Malunion or nonunion of fracture of shoulder (code range)                                      |
| S42.201A -<br>S42.496S | Fracture of humerus (code range)                                                               |
| T84.018A -<br>T84.019A | Broken internal joint prosthesis [shoulder] (code range)                                       |
| T84.028A-<br>T84.029A  | Dislocation of other and unspecified internal joint prosthesis (code range)                    |
| T84.038A -<br>T84.039A | Mechanical loosening of other or unspecified prosthetic joint [shoulder] (code range)          |
| T84.59XA               | Infection and inflammatory reaction due to other internal joint prosthesis [shoulder]          |

## REFERENCES

Ahsan ZS, et al. The Snyder classification of superior labrum anterior and posterior (SLAP) lesions. Clin Ortho Relat Res. 2016;474:2075-2078.

Alkhatib N, et al. Short and long-term outcomes in Bankart repair vs. conservative treatment for first-

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time anterior shoulder dislocation: a systematic review and meta-analysis of randomized controlled trials. J Shoulder Elbow Surg. 2022;31:1751-1762.

Alquraynis AM. The outcomes of arthroscopic surgery for patients with shoulder impingement syndrome: a systematic review. Orthopedic Reviews. 2025 May 25;17:134100.

American Academy of Orthopaedic Surgeons (AAOS) [Internet]. Management of glenohumeral joint osteoarthritis. Evidence-based clinical practice guidelines. Original 2020 Mar 23 [accessed 2026 Oct 19] Available from: <https://www.aaos.org/gjocpg>

American Academy of Orthopaedic Surgeons (AAOS) [Internet]. Management of rotator cuff injuries. Evidence-based clinical practice guidelines. Original 2010 Mar [updated 2019 Mar 11;accessed 2026 Apr 29] Available from: <https://www.aaos.org/globalassets/quality-and-practice-resources/rotator-cuff/rotator-cuff-cpg-final-12-20-19.pdf>

American Academy of Orthopedic Surgeons (AAOS) [Internet]. OrthoInfo: bone tumor. 2026 [accessed 2026 Oct 19]. Available from: <https://orthoinfo.aaos.org/en/diseases--conditions/bone-tumor/>

American Academy of Orthopedic Surgeons (AAOS) [Internet]. OrthoInfo: malunion in the lower limb. 2026 [accessed 2026 Oct 19]. Available from: <https://www.orthoinfo.org/diseases--conditions/malunion-in-the-lower-limb/>

American Academy of Orthopedic Surgeons (AAOS) [Internet]. OrthoInfo: osteoarthritis. 2026 [accessed 2026 Oct 19]. Available from: <https://www.orthoinfo.org/diseases--conditions/osteoarthritis/>

American Academy of Orthopedic Surgeons (AAOS) [Internet] Rotator cuff injuries. 2025 Aug 18 [accessed 2026 Oct 19]. Available from: <https://www.aaos.org/quality/quality-programs/rotator-cuff/>

American Academy of Orthopaedic Surgeons (AAOS) [Internet]. OrthoInfo: achondroplasia. 2026 [accessed 2026 Oct 19]. Available from: <https://www.orthoinfo.org/diseases--conditions/achondroplasia/>

American Academy of Orthopaedic Surgeons (AAOS) [Internet]. OrthoInfo: infections. 2026 [accessed 2026 Oct 19]. Available from: <https://www.orthoinfo.org/diseases--conditions/infections/>

Baig M, et al. Does acromioplasty enhance arthroscopic rotator cuff repair? A systematic review and meta-analysis of randomized trials. Clin Shoulder Elbow. 2025;28(4):457-463.

Belk JW, et al. Biceps tenodesis versus tenotomy: a systematic review and meta-analysis of level I randomized controlled trials. J Shoulder Elbow Surg. 2021;30:951-960.

Bhatia S, et al. Arthroscopic management of recalcitrant stiffness following rotator cuff repair: a retrospective analysis. Indian Journal of Orthopaedics. 2013 Mar;47(2):143-149.

Bi AS, et al. Comparison of multiple surgical treatments for massive irreparable rotator cuff tears in patients younger than 70 years of age: a systematic review and network meta-analysis. Am J Sports Med. 2024 Sep;52(11):2919-2930.

**Medical Policy: Shoulder Joint Procedures for Managed Medicaid (MMC), Health and Recovery Plan (HARP), Child Health Plus (CHP), and Essential Plan (EP) Members**

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Brockmeier SF, et al. Outcomes after arthroscopic repair of type-II SLAP lesions. *J Bone Joint Surg Am.* 2009;91:1595-1603.

Carter MJ, et al. Impact of total shoulder arthroplasty on generic and shoulder-specific health-related quality-of-life measures: a systematic literature review and meta-analysis. *J Bone Joint Surg Am.* 2012 Sep 5;94(17):e127.

Craig RS, et al. Shoulder replacement surgery for osteoarthritis and rotator cuff tear arthropathy. *Cochrane Database Syst Rev.* 2020 Apr 21;4(4):CD012879.

Cusano A, et al. Arthroscopic repair for posterior shoulder instability is associated with favorable outcomes and high return to sport or work: a systematic review and meta-analysis. *Arth Sports Med Rehab.* 2025;7(2):101032.

Dhaliwal K, et al. The role of reverse shoulder arthroplasty in elderly trauma: a systematic review. *Cureus.* 2020 May 18;12(5):e8180.

Ernstbrunner L, et al. Salvage Reverse total shoulder arthroplasty for failed operative treatment of proximal humeral fractures in patients younger than 60 years: long-term results. *J Shoulder Elbow Surg.* 2020 Mar;29(3):561-570.

Favard L, et al. Total shoulder arthroplasty - arthroplasty for glenohumeral arthropathies: results and complications after a minimum follow-up of 8 years according to the type of arthroplasty and etiology. *Orthop Traumatol Surg Res.* 2012 Jun;98(4 Suppl):S41-7.

Gauci MO, et al. Revision of failed shoulder arthroplasty: epidemiology, etiology, and surgical options. *J Shoulder Elbow Surg.* 2020 Mar;29(3):541-549.

Hartland AW, et al. Clinical effectiveness of tenotomy versus tenodesis for long head biceps pathology: a systematic review and meta-analysis. *BMJ Open.* 2022;12:e061954.

Li Y, et al. Clinical outcomes of patients with pigmented villonodular synovitis of the shoulder after arthroscopic synovectomy. *BMC Musculoskeletal Disorders.* 2022;23:1-9.

**XXI.** Kanto K, et al. Arthroscopic subacromial decompression versus placebo surgery for subacromial pain syndrome: 10-year follow-up of the FIMPACT randomized, placebo surgery controlled trial. *BMJ.* 2025;391:e086201.

Kennedy JS, et al. The American Society of Shoulder and Elbow Therapist's consensus statement on rehabilitation for anatomic total shoulder arthroplasty. *J Shoulder Elbow Surg.* 2020;29:2149-2162

Khazzam M, et al. Management of Glenohumeral Joint Osteoarthritis. *Journal of the American Academy of Orthopedic Surgeons.* 2020 Oct 1;28(19):781-789.

Klein A, et al. Early outcomes and complications of obese patients undergoing shoulder arthroplasty: A meta-analysis. *J Clin Orthop Trauma.* 2020 Mar;11(Suppl 2):S260-S264.

Knowles NK, et al. Revision shoulder arthroplasty: a systematic review and comparison of North American vs. European outcomes and complications. *J Shoulder Elbow Surg.* 2020 May;29(5):1071-1082.

**Medical Policy: Shoulder Joint Procedures for Managed Medicaid (MMC), Health and Recovery Plan (HARP), Child Health Plus (CHP), and Essential Plan (EP) Members**

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Lapner P, et al. A multicenter randomized controlled trial comparing single-row with double-row fixation in arthroscopic rotator cuff repair, long-term follow-up. *American J Sport Med.* 2021;49(11):3021-3029.

Mancini MR, et al. Arthroscopic rotator cuff repair: a review of surgical techniques and outcomes. *Clin Sports Med.* 2023;42(2023):81-94.

McKean, J. Orthobullets: avascular necrosis of the shoulder. 2024 Oct 29. [accessed 2026 Oct 19] Available from: <https://www.orthobullets.com/shoulder-and-elbow/3060/avascular-necrosis-of-the-shoulder>

Migliorini F, et al. Anatomic total shoulder arthroplasty versus hemiarthroplasty for glenohumeral osteoarthritis: A systematic review and meta-analysis. *Appl Sci.* 2021;11.

Monir JG, et al. Reverse shoulder arthroplasty in patients younger than 65 years, minimum 5-year follow-up. *J Shoulder Elbow Surg.* 2020 Jun;29(6):e215-e221.

Mowers CC, et al. Females experience inferior outcomes and higher rates of revisions and complications compared to males following anatomic total shoulder arthroplasty: a systematic review and meta-analysis. *J Shoulder Elbow Surg.* 2025. Online Ahead of Print.

Orman S, et al. Comparison of surgical and non-surgical treatments for 3- and 4-part proximal humerus fractures: a network meta-analysis. *Shoulder Elbow.* 2020 Apr;12(2):99-108.

Papalia R, et al. Return to sport after anatomic and reverse total shoulder arthroplasty in elderly patients: a systematic review and meta-analysis. *J Clin Med.* 2020 May 22;9(5):1576.

Polisetty TS, et al. Anatomic and reverse shoulder arthroplasty for management of type B2 and B3 glenoid; a matched-cohort analysis. *J Shoulder Elbow Surg.* 2023;32(8):1629-1637.

Rangan A, et al. Management of adults with primary frozen shoulder in secondary care (UK FROST): a multicentre, pragmatic, three-arm, superiority randomized clinical trial. *Lancet.* 2020;396:977-989.

Rava et al. Preoperative partial-thickness rotator cuff tears do not compromise anatomic total shoulder replacement outcomes: medium-term follow-up. *J Shoulder Elbow Surg.* 2021 Apr;30(4):871-876.

Ricchetti ET, et al. Reliability of the modified walch classification for advanced glenohumeral osteoarthritis using 3-dimensional computed tomography analysis: a study of the ASES B2 glenoid multicenter research group. *J Shoulder Elbow Surg.* 2021 Apr;30(4) 736-746.

Singh JA, et al. Surgery for shoulder osteoarthritis: a Cochrane systematic review. *J Rheumatol.* 2011 Apr;38(4):598-605.

Tokish JM, Brinkman JC. Pseudoparalysis and pseudoparesis of the shoulder: definitions, management, and outcomes. *J Am Acad Orthop Surg.* 2024;32(21):965-974.

Vancolen SY, et al. Reverse total shoulder arthroplasty in the younger patient ( $\leq 65$  years): a systematic review. *J Shoulder Elbow Surg.* 2020 Jan;29(1):202-209.

Wright MA, et al. Comparison of clinical outcomes after anatomic total shoulder arthroplasty and

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reverse shoulder arthroplasty in patients 70 years and older with glenohumeral osteoarthritis and an intact rotator cuff. J Am Acad Orthop Surg. 2020 Mar;28(5):e222-e229.

Zhang C, et al. Biceps tenodesis better improves the shoulder function compared with tenotomy for long head biceps tendon lesions: a meta-analysis of randomized controlled trials. J Clin Med. 2023 Feb 22;12(1754):1-12.

Zhou P, et al. Biceps tenotomy versus tenodesis for lesions of the long head of the biceps tendon- a systematic review and meta-analysis of randomized controlled trials. Medicine. 2021;100(3):e23993.

Zmistowski B, et al. Acromial stress fracture following reverse total shoulder arthroplasty: incidence and predictors. J Shoulder Elbow Surg. 2020 Apr;29(4):799-806.

### **SEARCH TERMS**

Not Applicable

### **CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS)**

Shoulder Arthroplasty is not addressed in specific National or Regional Medicare coverage determinations or policies.

### **PRODUCT DISCLAIMER**

- Services are contract dependent; if a product does not cover a service, medical policy criteria do not apply.
- If a commercial product (including an Essential Plan or Child Health Plus product) covers a specific service, medical policy criteria apply to the benefit.
- If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit.
- If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit.
- If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

### **POLICY HISTORY/REVISION**

#### **Committee Approval Dates**

09/17/26, 10/22/26

#### **Date**

#### **Summary of Changes**

01/01/27

- Original Effective Date

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|----------|--------------------------------------------------------------------------------------------------------|
| 10/22/26 | <ul style="list-style-type: none"><li>Off-cycle update. Removal of site of service criteria.</li></ul> |
| 09/17/26 | <ul style="list-style-type: none"><li>New Policy</li></ul>                                             |