



CLINICAL GUIDELINES

CMM-318 ~ Shoulder Arthroplasty (Total, Hemi, Reverse)/Arthrodesis

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eviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Imaging requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

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CMM-318.1: Definition

Hemi-arthroplasty 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.

Total shoulder arthroplasty 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.

Reverse shoulder arthroplasty 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 inadequate functioning or torn rotator cuff.

Revision shoulder surgery involves surgical reconstruction or replacement due to failure or complication of previous shoulder arthroplasty.

Shoulder resurfacing is a surgical procedure 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).

Shoulder arthrodesis is a surgical resection and fusion of the shoulder (glenohumeral) joint.

Non-surgical care, with regard to the treatment of the shoulder, is defined as any non-surgical treatment, which has been demonstrated in the scientific literature as efficacious and/or is considered standard of care in the treatment of shoulder pain or loss of function. The types of treatment involved can include, but are not limited to: Ice, relative rest/activity modification, manual therapy, therapy modalities, supervised therapeutic exercise, oral medication, bracing and/or injections (steroid).

CMM-318.2: Indications and Non-Indications

Hemi-arthroplasty (Replacement)

Hemi-arthroplasty **is considered medically necessary** for the treatment of ANY of the following resulting in severe pain and loss of function:

- Proximal humerus fracture not amenable to internal fixation
- Destructive degenerative joint disease (i.e., rheumatoid arthritis or osteoarthritis) resulting in marked narrowing of the joint space
- Arthritic conditions in which the glenoid bone stock is inadequate to support a glenoid prosthesis
- Rotator cuff tear arthropathy (severe rotator cuff tearing and end-stage arthritic disease)
- Osteonecrosis without glenoid involvement.

When all of the following criteria have been met:

- Chronic severe disabling pain for at least six (6) months in duration
- Loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
- Failure of non-surgical management for at least six (6) weeks in duration
- No history of active joint infection
- No current systemic infection
- No paralytic disorder of the shoulder
- Radiographic imaging and/or an advanced diagnostic procedure (i.e., MRI, CT scan, etc.), is conclusive for underlying pathology (i.e., as stated above), and correlates with the individual's reported symptoms and physical exam findings.

Total Shoulder Arthroplasty (Replacement)

Total Shoulder Arthroplasty **is considered medically necessary** for the treatment of:

- Destructive degenerative joint disease (rheumatoid arthritis, osteoarthritis, avascular necrosis) resulting in marked narrowing of the joint space or other findings, consistent with advanced degenerative change including one or more of the following:
 - Irregular joint surfaces
 - Glenoid sclerosis Osteophyte changes
 - Flattened glenoid
 - Cystic changes in the humeral head.

That has resulted in severe pain and loss of function and when **all of the following criteria have been met:**

- Chronic severe disabling pain for at least six (6) months in duration
- Loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
- Failure of non-surgical management for at least six (6) weeks in duration
- There is no history of active joint infection

- There is no current systemic infection
- Radiographic imaging and/or an advanced diagnostic procedure (i.e., MRI, CT scan), which is conclusive for underlying pathology (i.e., as stated above), and correlates with the individual's reported symptoms and physical exam findings.

Reverse Shoulder Arthroplasty (Replacement)

Reverse Shoulder Arthroplasty **is considered medically necessary** for treatment of ANY of the following indications:

- Deficient rotator cuff with severe glenohumeral arthropathy and limited ability to actively flex the upper extremity to 90° against gravity
- Failed hemi-arthroplasty
- Failed total shoulder replacement with a deficient rotator cuff that is non-repairable
- Required reconstruction after a tumor resection
- Shoulder fracture that is not repairable or cannot be reconstructed with other techniques.

That has resulted in severe pain and loss of function and when **all of the following criteria have been met:**

- Chronic severe disabling pain for at least six (6) months in duration
- Loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
- Failure of non-surgical management for at least six(6) weeks in duration
- Affected joint must be anatomically and structurally suited (i.e., residual bone allows for firm fixation of implant) to receive the selected implant(s)
- The individual must possess functional use of the deltoid muscle
- At least 90° of passive shoulder range of motion (elevation/flexion)
- No active or local infection
- No condition that would place excessive stress on the implant (i.e., Charcot' joint).

Reverse shoulder arthroplasty is considered experimental, investigational, or unproven for any other indication.

Shoulder Resurfacing

Shoulder Resurfacing, including total, hemi or partial resurfacing, is considered experimental, investigational or unproven.

Shoulder Revision

Shoulder Revision is considered medically necessary when ALL of the following criteria have been met:

- Previous partial or total shoulder arthroplasty
- Chronic severe, disabling pain
- Loss of function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment

- One or more of the following:
 - fracture or dislocation
 - instability of the components
 - aseptic loosening
 - infection
 - periprosthetic fracture
 - unexplained pain for greater than six (6) months not responsive to non- surgical management.

Shoulder Revision is considered not medically necessary when EITHER of the following is present:

- Persistent infection
- Poor bone quality.

Shoulder Arthrodesis

Shoulder Arthrodesis **is considered medically necessary** for ANY of the following indications:

- Irreparable deltoid and rotator cuff deficiency
- Failed total shoulder arthroplasty
- Joint infection
- Reconstruction after tumor resection
- Brachial plexus palsy
- Recurrent shoulder instability, which has failed previous repair/reconstruction
- Paralytic disorder in infancy.

That has resulted in severe pain and loss of function and when all of the following criteria have been met:

- Chronic severe, disabling pain
- Loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
- Failure of non-surgical management for at least six to eight (6-8) weeks in duration or is not a candidate for alternative treatments
- Radiographic imaging and/or advanced diagnostic procedure (i.e., MRI, CT scan, etc.), which is conclusive for underlying pathology and correlates with the individual's reported symptoms and physical exam findings.

Shoulder Arthrodesis is considered not medically necessary for ANY of the following:

- Deficient functional scapulothoracic motion
- Paralysis of the trapezius, levator, scapulae and serratus anterior
- Charcot arthropathy
- Advanced age and frailty
- Progressive neurologic disease.

CMM-318.3: Procedure (CPT®) Codes

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only. Any given code's inclusion on this list does not necessarily indicate prior authorization is required.

CPT®	Code Description/Definition
23330	Removal of foreign body, shoulder; subcutaneous
23333	Removal of foreign body, shoulder; deep (subfascial or intramuscular)
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)
23400	Scapulopexy (e.g. Sprengels deformity or for paralysis)
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
23800	Arthrodesis, glenohumeral joint
23802	Arthrodesis, glenohumeral joint; with autogenous graft (includes obtaining graft)
29819	Arthroscopy, shoulder, surgical; with removal of loose body or foreign body

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

CMM-318.4: References

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