CLINICAL GUIDELINES

CMM-315 ~Shoulder Surgery – Arthroscopic and Open Procedures

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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.

CMM-315~ Shoulder Surgery-Arthroscopic and Open Procedures	

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CMM-315.1: Definition

Sprain/Strain/Tear can be defined as overstretching or tearing of the ligament/muscle/tendon and is typically graded on a severity scale of I, II or III:

- Grade I: mild sprain/strain caused by overstretching or slight tearing of the ligament/muscle/tendon with no instability and has minimal pain, swelling, and little or no loss of functional ability associated with it.
- Grade II: sprain/strain caused by incomplete tearing of the ligament/muscle/tendon and is characterized by bruising, moderate pain, and swelling; "partial thickness tear."
- Grade III: sprain/strain that result in complete tear or rupture of a ligament/muscle/tendon; "full thickness tear."

Labral tears result when the glenoid labrum becomes injured or torn. Tears are typically classified by the position of the tear in relation to the glenoid.

Bankart tear is a tear in the labrum located in the front, lower (anterior, inferior) part of the shoulder socket. This type of tear occurs most commonly during a shoulder dislocation and makes the shoulder more prone to recurrent dislocations.

SLAP tear (Superior Labral, Anterior and Posterior tear) is a tear in the labrum that covers the top part of the shoulder socket from the front to back. A SLAP tear occurs at the point where the long head of biceps tendon attaches. This type of tear occurs most commonly during falls on an outstretched arm.

Classification of SLAP tears:

- Type I SLAP lesions are described as being indicative of isolated fraying of the superior labrum with a firm attachment of the labrum to the glenoid.
- Type II SLAP lesions are characterized by detachment of the superior labrum and the origin of the tendon of the long head of the biceps brachii from the glenoid resulting in instability of the biceps-labral anchor.
- Type III SLAP lesions are characterized by a bucket-handle tear of the labrum with an intact biceps insertion.
- Type IV SLAP lesions have a bucket-handle tear of the labrum that extends into the biceps tendon. In this lesion, instability of the biceps-labrum anchor is also present.
- Type V SLAP lesions are characterized by the presence of a Bankart lesion of the anterior capsule that extends into the anterior superior labrum.
- Type VI SLAP lesions involve a disruption of the biceps tendon anchor with an anterior or posterior superior labral flap tear.
- Type VII SLAP lesions are described as the extension of a SLAP lesion anteriorly to involve the area inferior to the middle glenohumeral ligament.

Shoulder Dislocation is defined as the complete loss of the humeral articulation with the glenoid fossa, usually as a result of acute trauma.

Shoulder Subluxation is defined as a partial loss of humeral articulation with the glenoid fossa (incomplete or partial dislocation) usually as a result of repetitive trauma to the degree that symptoms are produced.

Shoulder Instability/Laxity is defined as a partial loss of the glenohumeral articulation.

Two categories:

1) Post traumatic shoulder instability includes an individual with a previous injury that has stretched or torn the ligaments of the shoulder.
2) Atraumatic instability/loose shoulder joint includes an individual with generalized looseness of the joints "double-jointed" or "multi-directional instability" usually representing a type of congenital ligamentous laxity.

Impingement syndrome commonly results from friction, abrasion, and inflammation of the rotator cuff and the long head of the biceps tendon with the subacromial arch (anterior lip of the acromion, coracoacromial ligament, and acromioclavicular joint) from acute trauma, repetitive use or degenerative changes.

Adhesive Capsulitis is a condition of the shoulder characterized by stiffness, loss of motion (contracture), and pain. Often called frozen shoulder, adhesive capsulitis is clinically divided into classes:

- Primary adhesive capsulitis is characterized by a significant limitation of both active and passive motions on the shoulder; individuals are typically unable to recall a possible cause of the condition (idiopathic adhesive capsulitis).
- Secondary adhesive capsulitis is characterized by a trauma or a possible cause prior to the onset of the symptoms, such as fracture of the humerus, rotator cuff repair, shoulder girdle injury/surgery, or prolonged immobilization.
- Conditions that have been suggested to predispose an individual to adhesive capsulitis are trauma, surgery to the shoulder, inflammatory diseases, diabetes, hyperthyroidism, dyslipidemia.

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 a standard of care in the treatment of shoulder pain. The types of treatment involved can include, but are not limited to: ice relative rest/activity modification, manual therapy, physical modalities, supervised therapeutic exercise, oral medications, and/or injections (steroid).

Magnetic Resonance Imaging (MRI) is an imaging technique which utilizes radio waves and a powerful magnet linked to a computer to produce a set of detailed images of organs and soft tissue structures of the body.

Computed Tomography (CT) scan is an imaging technique which utilizes a 360- degree x-ray beam and computer to produce a set of cross-sectional images of the body. The individual is exposed to ionizing radiation. CT is also known as computerized axial tomography or CAT scan.

Arthrogram is a series of images of a joint after injection of a contrast medium. Shoulder arthrograms are commonly used to outline structures such as the rotator cull, glenoid labrum, bicipital tendon and sheath. In disease or injury, this contrast fluid may either leak into an area where it does not belong, indicating a tear or opening, or be blocked from entering an area where there normally is an opening.

Diagnostic Ultrasound is an imaging technique which utilizes high-energy sound waves (ultrasound) through a transducer which are bounced off internal tissues or organs which then results in echoes. The echo patterns are then received and shown on the screen of an ultrasound machine, forming a picture of body tissues called a sonogram.

Distal Clavicular Excision is the removal of the end of the clavicle. The superior AC ligament remains intact so that the joint remains stable.

Acromioplasty is the removal of bone from the acromion and partial resection of the coracoacromial ligament.

Subacromial Decompression is the removal of bone or other abnormality to widen the space between the rotator cuff musculature and the acromion.

CMM-315.2 Indications and Non-Indications

A shoulder arthroscopic or open procedure is **considered medically necessary** in an individual on whom surgery is being performed for fracture, tumor, infection or foreign body that has led to or will likely lead to progressive destruction.

A shoulder arthroscopic or open procedure **is considered medically necessary** for a disease process (e.g., synovectomy for rheumatoid arthritis [RA]) when the symptoms are severe and persistent, and all of the following criteria are met:

- Documented 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 three (3) months in duration
- Appropriate diagnostic technology (i.e., MRI, diagnostic arthroscopy) is determined to be conclusive for damage consistent with the individual's reported medical condition.

Diagnostic Arthroscopy

Diagnostic arthroscopy is considered medically necessary when all of the following criteria have been met:

- Severe, disabling pain and/or a documented loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
- Individual demonstrates any of the following abnormal, shoulder physical examination findings as compared to the non-involved side:
    - Functionally limited range of motion (active or passive)
    - Measurable loss in strength
    - Positive impingement signs
- Failure of non-surgical management for at least three (3) months in duration
- Individual has undergone an appropriate radiographic work-up that includes an MRI evaluation which is determined to be inconclusive for internal derangement/pathology
- Other potential diagnostic conditions including but not limited to fracture, Thoracic Outlet Syndrome, Brachial Plexus disorders, referred neck pain and arthritis have been excluded.

Rotator Cuff Repair

Rotator cuff repair **is considered medically necessary** when all of the following criteria have been met:

- Individual has severe, disabling pain and/or documented loss of shoulder function to the extent which interferes with ability to carry out age appropriate activities of daily living and/or demands of employment
- Individual demonstrates both of the following when compared to the non-involved side:
    - One or more of the following positive orthopedic tests:
        - Neer Impingement Test
        - Drop Arm Test
        - Hawkins Kennedy Impingement Test
        - Painful Arc Test
    - Either of the following :
        - Functionally limited range of motion
        - Measurable loss of strength of the rotator cuff musculature

- Advanced diagnostic imaging (e.g., MRI, CT Scan, Diagnostic Ultrasound) demonstrates partial or full thickness (Grade II or III) rotator cuff tear that correlates with the individual's reported symptoms and physical exam findings
- Failure **of non-surgical management for at least** eight (8) weeks in duration (with the exception of the individual who suffers a trauma that results in an acute complete tear AND associated disabling pain and loss of function)
- Other potential diagnostic conditions including but not limited to fracture, Thoracic Outlet Syndrome, Brachial Plexus disorders, referred neck pain and arthritis have been excluded.

Rotator cuff debridement **is considered medically necessary** when performed in conjunction with other medically necessary arthroscopic procedures of the shoulder (i.e., subacromial decompression).

Rotator cuff repair is considered not **medically necessary** for all other indications.

Labral Tear/Bicipital Tendonitis/Tendonopathy Debridement of Repair

Labral tear/Bicipital tendonitis debridement or repair is considered medically necessary when all of the following criteria have been met:

- Severe, disabling pain and/or a documented loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment
- Individual demonstrates both of the following abnormal, shoulder physical examination findings, as compared to the non-involved side:
    - Minimally limited or full shoulder range of motion
    - One or more positive orthopedic tests (e.g., O'Brien's Test (labral or biceps tendon pathology), Anterior or Posterior Apprehension Test, Sulcus Test, Speeds Test)
- Advanced diagnostic imaging procedure demonstrates labral tear/bicipital tendon pathology (e.g., SLAP, Bankart) and correlates with the individual's reported symptoms and physical exam findings
- Failure of non-surgical management for at least six (6) weeks in duration
- Other potential diagnostic conditions including but not limited to fracture, Thoracic Outlet Syndrome, Brachial Plexus disorders, referred neck pain and arthritis have been excluded.

Labral tear/Bicipital tendonitis repair is considered medically necessary when performed in conjunction with the other medically necessary arthroscopic or open procedures of the shoulder (e.g., Rotator Cuff Repair).

Labral tear/bicipital tendonitis repair is **considered not medically necessary** for all other indications.

Subacromial Decompression/Acromioplasty/Distal Clavicular Excision

Subacromial decompression/acromioplasty and/or distal excision **is considered medically necessary** when all of the following criteria have been met:

- Severe, disabling pain and/or documented loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment

- Individual demonstrates local tenderness of the acromioclavicular joint and both of the following compared to the non-involved side:
    - Either of the following:
        - Limited active shoulder ROM
        - Loss of functional strength of the shoulder
    - One or more of the following positive orthopedic tests:
        - Cross Arm Adduction Test
        - Arm Extension Test
        - Neer Impingement Test
        - Hawkins Kennedy Impingement Test
        - Painful Arc Test
- Failure of non-surgical management for at least eight (8) weeks in duration
- Plain radiographs demonstrate findings consistent with pathology in the subacromial space and/or at the AC joint
- Advanced diagnostic imaging procedure (e.g., MRI, CT Scan) demonstrates underlying pathology (e.g., chronic arthritis, rotator cuff impingement syndrome, etc.) which correlates with the individual's reported symptoms and physical exam findings
- Other potential diagnostic conditions including but not limited to fracture, Thoracic Outlet Syndrome, Brachial Plexus disorders, referred neck pain and arthritis have been excluded.

Subacromial decompression/acromioplasty/distal clavicle excision is considered medically necessary when performed in conjunction with other medically necessary arthroscopic or open procedures of the shoulder (i.e., Rotator Cuff Repair).

Athroscopic Capsular Release/Manipulation Under Anesthesia (MUA) Adhesive Capsulitis

Arthroscopic capsular release/MUA for an individual with documented chronic refractory adhesive capsulitis which has resulted from disease, injury or surgery **is considered medically necessary** when all of the following criteria have been met:

- Severe, disabling pain and/or documented loss of shoulder function which interferes with the ability to carry out age appropriate activities of daily living and/or demands of employment for at least six (6) months in duration
- Individual demonstrates all of the following abnormal, shoulder physical examination findings, as compared to the non-involved side:
    - Functionally limited global loss of **active** range of motion of at least 50% as compared to the contralateral side
    - Functionally limited and painful global loss of **passive** range of motion of at least 50%
    - One or more of the following positive orthopedic tests:
        - External Rotation Test
        - Neer Impingement Test
        - Hawkins Kennedy Impingement Test
        - Painful Arc Test
        - Appley's Scratch Test
- Failure of non-surgical management that includes a combination of anti-inflammatory medications, cortisone injection and physical therapy, for at least six (6) weeks in duration to determine if treatment is successful

- Other potential diagnostic conditions including but not limited to fracture, Thoracic Outlet Syndrome, Brachial Plexus disorders, referred neck pain and arthritis have been excluded.

MUA should be performed in conjunction with an active rehabilitation/therapeutic exercise program. Manipulation performed in isolation without the individual participating in an active rehabilitation program in conjunction with a home exercise program is experimental, investigational, or unproven.

Arthroscopic capsular release or MUA is experimental, investigational or unproven for all other indications.

Arthroscopic or Open Procedures for Chronic Shoulder Instability/Laxity

Arthroscopic or open procedures for shoulder instability/laxity **is considered medically necessary** when all of the following criteria have been met:

- Documented history of "post-traumatic" or "atraumatic" instability that has resulted in either severe disabling pain and/or 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 that includes shoulder stabilization/strengthening exercises for at least eight (8) weeks in duration
- One or more positive orthopedic tests for shoulder instability (e.g., O'Brien's Test, Anterior or Posterior Apprehension Test, Sulcus Test).

An arthroscopic or open surgical stabilization procedure is considered medically necessary for an acute traumatic irreducible shoulder dislocation.

CMM-315.3: 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**
23000	Removal of subdeltoid calcareous deposits, open
23020	Capsular contracture release (e.g. Sever type procedure)
23030	Incision and drainage, shoulder area; deep abscess or hematoma
23031	Incision and drainage, shoulder area;infected bursa
23035	Incision, bone cortex (eg, osteomyelitis or bone abscess), shoulder area
23040	Arthrotomy, glenohumeral joint, including exploration, drainage, or removal of foreign body
23044	Arthrotomy, acromioclavicular, sternoclavicular joint, including exploration, drainage, orremovalof foreign body
23065	Biopsy, soft tissue of shoulder area; superficial
23066	Biopsy, soft tissue of shoulder area;deep
23071	Excision, tumor, soft tissue of shoulder area, subcutaneous; 3 cm or greater
23073	Excision, tumor, soft tissue of shoulder area, subfascial (e.g. intramuscular); 5 cm or greater
23075	Excision, tumor, soft tissue of shoulder area, subcutaneous; less than 3 cm
23076	Excision, tumor, soft tissue of shoulder area, subfascial (e.g. intramuscular); less than 5 cm
23077	Radical resection of tumor (e.g. sarcoma), soft tissue of shoulder area; less than 5 cm
23078	Radical resection of tumor (e.g. sarcoma), soft tissue of shoulder area; 5 cm or greater
23100	Arthrotomy, glenohumeral joint, including biopsy
23101	Arthrotomy, acromioclavicular joint or sternoclavicular joint, including biopsy and/or excision
23105	Arthrotomy; glenohumeral joint, with synovectomy, with or without biopsy
23106	Arthrotomy;sternoclavicular joint, with synovectomy, with or without biopsy
23107	Arthrotomy, glenohumeral joint, with joint exploration, with or without removal of loose or foreign body
23120	Claviculectomy; partial
23125	Claviculectomy; total
23130	Acromioplasty or acromionectomy, partial, with or without coracoacromial ligament release
23140	Excision or curettage of bone cyst or benign tumor of clavicle or scapula
23145	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with autograft (includes obtaining graft)
23146	Excision or curettage of bone cyst or benign tumor of clavicle or scapula; with allograft
23150	Excision or curettage of bone cyst or benign tumor of proximal humerus
23155	Excision or curettage of bone cyst or benign tumor of proximal humerus; with autograft (includes obtaining graft)

23156	Excision or curettage of bone cyst or benign tumor of proximal humerus; with allograft.
23170	Sequestrectomy (e.g. for osteomyelitis or bone abscess), clavicle
23172	Sequestrectomy (e.g. for osteomyelitis or bone abscess), scapula
23174	Sequestrecomy (e.g. for osteomyelitis or bone abscess), humeral head to surgical neck
23180	Partial excision (craterization, saucerization, or diaphysectomy) bone (e.g. osteomyelitis), clavicle
23182	Partial excision (craterization, saucerization, or diaphysectomy) bone (e.g. osteomyelitis), scapula
23184	Partial excision (craterization, saucerization, or diaphysectomy) bone (e.g. osteomyelitis), proximal humerus
23190	Ostectomy of scapula, partial (eg, superior medial angle)
23195	Resection, humeral head
23200	Radical resection of tumor; clavicle
23210	Radical resection of tumor; scapula
23220	Radical resection of tumor, proximal humerus
23395	Muscle transfer, any type, shoulder or upper arm; single
23397	Muscle transfer, any type, shoulder or upper arm;multiple
23405	Tenotomy, shoulder area; single tendon
23406	Tenotomy, shoulder area;multiple tendons through same incision
23410	Repair of ruptured musculotendinous cuff (e.g. rotator cuff) open; acute
23412	Repair of ruptured musculotendinous cuff (e.g. rotator cuff) open; chronic
23415	Coracoacromial ligament release, with or without acromioplasty
23420	Reconstruction of complete shoulder (rotator) cuff avulsion, chronic (includes acromioplasty)
23430	Tenodesis of long tendon of biceps
23440	Resection or transplantation of long tendon of biceps
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
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)
23490	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate; clavicle

23491	Prophylactic treatment (nailing, pinning, plating or wiring) with or without methylmethacrylate; proximal humerus
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
29823	Arthroscopy, shoulder, surgical; debridement, extensive
29824	Arthroscopy, shoulder, surgical; distal claviculectomy 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

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-315.4: References

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