# **Shoulder procedures**

Shoulder injuries — in particular rotator cuff tears — are some of the most common complaints orthopedic practices address, though they can be quite complex.

Injuries may be sports or age-related and involve the shoulder muscles, ligaments, tendons or bones. Coders need an in-depth understanding of shoulder anatomy to accurately report common shoulder injuries and associated complications.

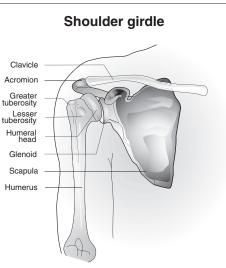
To further complicate things, CMS and the American Academy of Orthopaedic Surgeons (AAOS) have conflicting guidance for how these procedures should be reported. While CMS regards the shoulder as a single anatomic region, the AAOS views the shoulder as a complex structure comprised of three joints and two articulations.

Joints:

- Glenohumeral,
- Acromioclavicular and
- Sternoclavicular.

Articulations:

- Subacromial and
- scapulothoracic bursae.



### **Rotator cuff repairs: Indications**

More than 50% of Americans have experienced a rotator cuff tear. However, most people who tear their rotator cuff don't realize it's torn or don't seek medical treatment.

According to AAOS, it is recommended to get a torn rotator cuff repaired if pain does not improve with nonsurgical treatment methods. Other signs that surgery may be necessary include:

- An X-ray or magnetic resonance imaging scan suggesting that irrecoverable damage to the shoulder may occur if the rotator cuff is not repaired,
- Symptoms lasting more than six months,
- Weakness and loss of sensation in the affected shoulder.

## **RCR** anatomy

The rotator cuff is a group of muscles and tendons in the shoulder that control shoulder joint motion. This group of muscles and tendons includes the supraspinatus, infraspinatus, subscapularis and teres minor. The tendons of these muscles together form the rotator cuff and attach on the humeral head.

The muscles that form the rotator cuff can be remembered using the acronym "SITS":

- **S**: supraspinatus. Holds the humerus in place and keeps the upper arm stable,
- I: infraspinatus. Allows for rotation and extension of the shoulder,
- T: teres. Assists with rotation of the arm away from the body,
- **S**: subscapularis. Connects to the shoulder blade and allows for internal rotation of the arm.

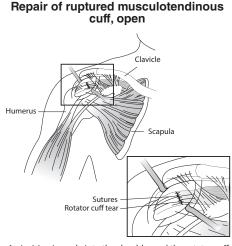
#### Approaches for repairs

There are three main approaches for the treatment of rotator cuff tears: open, mini-open and arthroscopic techniques/ approaches.

An open approach is typically required if the tear is large or complex. An open technique will always involve an incision and visualization of the tendons with the naked eye.

There is also a "mini-open" rotator cuff repair that is used frequently. It is still coded and reported as an open technique even though the incisions may be smaller.

The rotator cuff is repaired using stitches, tacks, anchors or dissolving screws. Injured tendons and muscles can also be



An incision is made into the shoulder and the rotator cuff is exposed, thin or fragmented portions of the rotator cuff are removed and the tear is sutured together, acute rupture. repaired, if necessary, using graft tendon from another part of the body or allograft/biomaterial, according to the AAOS.

Two codes are available to report open rotator cuff repairs, one for chronic and one for acute tears:

- 23410, repair of ruptured musculotendinous cuff (eg, rotator cuff) open; acute
- 23412, repair of ruptured musculotendinous cuff (eg, rotator cuff) open; chronic

An acute tear occurs from trauma such as a fall or sudden injury. Chronic tears stem from overuse or constant stress.

If "chronic" or "acute" is not specified in the operative report, coders may check the patient's history and physical for additional information that could identify whether the condition is due to an injury, trauma or a degenerative problem.

For example, when reviewing an op note for open repair of a musculotendinous cuff, some good buzzwords to look for are: "fraying," "thinning," or "degenerative changes." The presence of those terms will tell you the repair is chronic as opposed to acute and point you to the chronic repair code, 23412.

For an acute repair (23410), in contrast, the patient typically has had symptoms from an acute injury that may persist for several months following a traumatic event. Note that there is no official time frame from an authoritative source that states when a tear would be considered acute versus chronic. ICD-10-CM coding guidelines instruct that the provider must make that determination and document accordingly.

#### Arthroscopic rotator cuff repairs

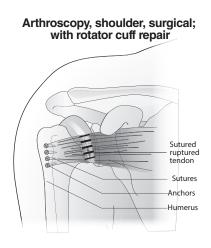
Orthopedic surgeons typically bill Medicare for almost 70,000 arthroscopic rotator cuff repairs a year, with reimbursement of more than \$50 million in professional fees alone, analysis of Medicare physician billing data shows.

During an arthroscopic repair, a surgeon creates several small incisions, or portals, in the shoulder through which a small camera, called an arthroscope, is inserted into the shoulder joint. Tiny instruments can then be used to suture the wound and facilitate healing. The surgeon may use multiple portals to gain access to different structures in the shoulder area.

Documentation for arthroscopic techniques should show a minimum of three stab wounds and insertion of an arthroscope. When the surgeon is performing an arthroscopic repair, expect to see documentation of a portal for the scope itself, as well as injection of fluid — usually saline — to expand the joint and allow access for the surgical instruments.

Moving the scope to different positions doesn't affect coding. Only one CPT code, 29827, would be used to report an arthroscopic rotator cuff repair. That code is reported just once, regardless of the number of rotator cuff components that are addressed.

According to Chapter 4 of the National Correct Coding Initiative (CCI) policy manual, if a provider starts the RCR arthroscopically and finishes using an open approach, coders should report only the open approach.



Certain other procedures performed via arthroscopy such as

biceps tenodesis (29828), distal claviculectomy (29824) and acromioplasty (29826) may be reported separately, provided there are no CCI code pairs bundling those codes with 29827.

#### Stay current on CCI shoulder policy

As mentioned above, Medicare considers the shoulder to be "a single anatomic structure," according to the CCI policy manual. From a coding standpoint, that means that when CCI code pairs exist for two arthroscopic shoulder procedures, practices should not append a modifier to unbundle them unless the two procedures are done on opposite shoulders.

For example, Medicare bundles code 29822 (Arthroscopy, shoulder, surgical; debridement, limited) as a component of many other arthroscopy codes, including rotator cuff repair (29827).

"Shoulder arthroscopy procedures include limited debridement (eg, CPT code 29822) even if the limited debridement is performed in a different area of the same shoulder than the other procedure," the CCI policy manual states. (Chapter 4, Section E., 7.)

While the CCI edits allow the use of modifier 59 (Distinct procedural service) to override, that would not be appropriate unless the two procedures are done on opposite shoulders, the manual advises.

That rule also applies to extensive arthroscopic debridement (29823). However, there are three exceptions. Code 29823 may be reported separately with CPT codes 29824 (arthroscopic claviculectomy including distal articular surface), 29827 (arthroscopic rotator cuff repair), and 29828 (biceps tenodesis) "if the extensive debridement is performed in a different area of the same shoulder," according to the manual.

However, even in the best of cases, practices may still find extensive debridement denied by payers.

#### Case example: On one shoulder, the surgeon:

- repaired a superior labrum from anterior to posterior (SLAP) injury (29807);
- repaired a rotator cuff tear (29827),