

Total Shoulder Arthroplasty

MEDICAL POLICY NUMBER: 430

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**INSTRUCTIONS FOR USE:** Company Medical Policies serve as guidance for the administration of plan benefits. Medical policies do not constitute medical advice nor a guarantee of coverage. Company Medical Policies are reviewed annually and are based upon published, peer-reviewed scientific evidence and evidence-based clinical practice guidelines that are available as of the last policy update. The Company reserves the right to determine the application of medical policies and make revisions to medical policies at any time. The scope and availability of all plan benefits are determined in accordance with the applicable coverage agreement. Any conflict or variance between the terms of the coverage agreement and Company Medical Policy will be resolved in favor of the coverage agreement. Coverage decisions are made on the basis of individualized determinations of medical necessity and the experimental or investigational character of the treatment in the individual case. In cases where medical necessity is not established by policy for specific treatment modalities, evidence not previously considered regarding the efficacy of the modality that is presented shall be given consideration to determine if the policy represents current standards of care.

**SCOPE:** Providence Health Plan, Providence Health Assurance and Providence Plan Partners as applicable (referred to individually as “Company” and collectively as “Companies”).

## PLAN PRODUCT AND BENEFIT APPLICATION

☒ Commercial

☐ Medicaid/OHP\*

☐ Medicare\*\*

### \*Medicaid/OHP Members

*Oregon:* Services requested for Oregon Health Plan (OHP) members follow the OHP Prioritized List and Oregon Administrative Rules (OARs) as the primary resource for coverage determinations. Medical policy criteria below may be applied when there are no criteria available in the OARs and the OHP Prioritized List.

Total Shoulder Arthroplasty – This is a covered service by OHA/OHP. There is not a guideline note available for this coverage.

### \*\*Medicare Members

This Company policy may be applied to Medicare Plan members only when directed by a separate Medicare policy. Note that investigational services are considered “**not medically necessary**” for Medicare members.

## COVERAGE CRITERIA

### Note:

- In addition to medical necessity review, codes for shoulder arthroplasty procedures may also require inpatient site of service review for all Plan members, using criteria found in the [“Inpatient Surgical Site of Service”](#) medical policy.
  - Revision shoulder arthroplasty procedures do not require site of service review.
- Policy criteria are primarily based on the 2024 InterQual® evidence-based procedure guideline criteria, Joint Replacement, Shoulder,<sup>1</sup> and Removal and Replacement, Total Joint Replacement (TJR), Shoulder.<sup>2</sup>
- This policy addresses shoulder arthroplasty procedures for the following indications:
  - [Initial Shoulder Joint Replacement](#)
    - Intra-articular fracture
    - Nonunion or malunion of an articular fracture
    - Massive rotator cuff tear
    - Bone tumor
    - Avascular necrosis
    - Osteoarthritis
    - Post-traumatic arthritis
    - [Rheumatoid arthritis](#)
  - [Shoulder Joint Removal and Replacement](#)

### **Initial Shoulder Joint Replacement**

- I. The following initial shoulder joint replacement procedures may be considered **medically necessary**

- Partial shoulder arthroplasty (CPT 23470)
- Shoulder hemiarthroplasty (CPT 23470)
- Reverse shoulder arthroplasty (CPT 23472)
- Total shoulder arthroplasty (CPT 23472)

when all the following criteria (A.-D.) are met:

- A. There is no active infection in the shoulder joint; **and**
- B. At least two of the following are met (1.-3.)
  - 1. Pain interferes with activities of daily living (ADLs); **or**
  - 2. Pain is increased with initiation of activity; **or**
  - 3. Pain occurs with range of motion (ROM); **and**
- C. Imaging confirms any of the following (1.-6.):
  - 1. Intra-articular fracture showing humeral head fracture in at least 3 parts with repair not achievable by open reduction and fixation; **or**
  - 2. Nonunion or malunion of an articular fracture; **or**
  - 3. Irreparable or massive rotator cuff tear with physical examination confirming pseudoparesis or pseudoparesis; **or**
  - 4. Bone tumor involving the shoulder; **or**
  - 5. Avascular necrosis (osteonecrosis) and patient has humeral head collapse with either limited range of motion or crepitus with glenohumeral joint rotation; **or**
  - 6. Osteoarthritis or post-traumatic arthritis and both of the following criteria are met (a.-b.):
    - a. Patient has either limited range of motion or crepitus with glenohumeral joint rotation; **and**
    - b. Either of the following are met:
      - i. Imaging shows bone-on-bone contact; **or**
      - ii. **At least two** of the following are present (i.- vii.):
        - a. Subchondral cysts; **or**
        - b. Subchondral sclerosis; **or**
        - c. Periarticular osteophytes; **or**
        - d. Joint subluxation; **or**
        - e. Joint space narrowing; **or**
        - f. Bony glenoid deformity; **or**
        - g. Other structural pathology; **and**
- D. Symptoms continue despite conservative treatments within the past year, including all of the following (1.-3.):
  - 1. At least 3 weeks of NSAIDs or acetaminophen (for osteoarthritis or posttraumatic arthritis, this can be substituted with corticosteroid injection); **and**
  - 2. At least 12 weeks of physical therapy, occupational therapy, or home exercise (6 week requirement for osteoarthritis or posttraumatic arthritis); **and**
  - 3. Activity modification for at least 12 weeks (6 week requirement for osteoarthritis or posttraumatic arthritis).

II. Initial shoulder joint replacement may be considered **medically necessary** for the treatment of rheumatoid arthritis when all the following criteria (A.-E.) are met:

- A. There is no active infection of the shoulder joint; **and**
- B. At least two of the following criteria are met (1.-4.):
  - 1. Pain interferes with activities of daily living (ADLs); **or**
  - 2. Pain is increased with initiation of activity; **or**
  - 3. Pain occurs with range of motion (ROM); **or**
  - 4. Pain at night; **and**
- C. Either of the following are met (1.-2.)
  - 1. Limited range of motion; **or**
  - 2. Crepitus with glenohumeral joint rotation; **and**
- D. Imaging documents at least two of the following (1.-6.):
  - 1. Subchondral cysts; **or**
  - 2. Marginal erosions; **or**
  - 3. Periarticular osteopenia; **or**
  - 4. Joint space narrowing; **or**
  - 5. Joint subluxation; **or**
  - 6. Bony glenoid deformity; **and**
- E. The patient has failed conservative treatment within the past year, including all of the following (1.-3.):
  - 1. Disease-modifying antirheumatic drugs (DMARDs) for at least 12 weeks; **and**
  - 2. At least 12 weeks of physical therapy, occupational therapy, or home exercise; **and**
  - 3. Activity modification for at least 12 weeks.

III. Initial shoulder joint replacement is considered **not medically necessary** when criteria I. or II. above are not met.

#### **Shoulder Joint Removal, Replacement, Revision**

IV. Shoulder arthroplasty removal, replacement or revision may be considered **medically necessary** when imaging confirms any of the following criteria (A.-G.):

- A. Fractured prosthesis or cement and there is no active infection; **or**
- B. Humeral component valgus or varus more than 30 degrees, with no active infection; **or**
- C. Recurrent dislocation and there is no active infection; **or**
- D. Symptomatic loosening of prosthesis or cement and there is no active infection; **or**
- E. Worn or dislocated plastic insert and there is no active infection; **or**
- F. There is a joint infection and any **one or more** of the following criteria (1.-5.) are met:
  - 1. Imaging documents the sinus tract is communicating with the prosthetic joint; **or**
  - 2. Prosthetic joint infection by positive synovial fluid **or** tissue culture **and both** of the following criteria (a. and b.) are met:
    - a. **Any one** of the following criteria (i.-iv.) are met:

- i. Two cultures positive for same organism
  - ii. Culture positive for *Staphylococcus aureus* (*S. aureus*)
  - iii. Culture positive for gram negative organism
  - iv. Culture positive for enterococci
- b. Joint infection onset within 4 weeks of total joint replacement **and either** of the following criteria (i. or ii.) are met:
  - i. Imaging documents loosening of prosthesis or cement; **or**
  - ii. There are continued symptoms or findings after **both** of the following treatments:
    - IV anti-infectives  $\geq 4$  weeks; **and**
    - Joint lavage and drainage; **or**
- 3. Joint infection onset  $> 4$  weeks of total joint replacement **and either** of the following criteria are met (a.-b.):
  - a. There are no new joint symptoms and findings within the past 3 weeks; **or**
  - b. There are new joint symptoms and findings within the past 3 weeks and either of the following criteria are met (i.-ii.):
    - i. Imaging documents loosening of prosthesis or cement; **or**
    - ii. There are continued symptoms or findings after **both** of the following treatments:
      - IV anti-infectives  $\geq 4$  weeks; **and**
      - Joint lavage and drainage
- 4. Joint pain and **both** of the following criteria (a. and b.) are met:
  - a. **Two or more** of the following criteria are met:
    - i. Temperature  $> 100.4$  F ( $38.0$  C)
    - ii. Synovial white blood count (WBC) or neutrophil percentage  $>$  normal
    - iii. ESR  $> 30$  mm/hr.
    - iv. C-reactive protein  $>$  normal; **and**
  - b. Joint infection onset within 4 weeks of total joint replacement **and either** of the following criteria are met:
    - i. Imaging documents loosening of prosthesis or cement; **or**
    - ii. There are continued symptoms or findings after **both** of the following treatments:
      - IV anti-infectives  $\geq 4$  weeks; **and**
      - Joint lavage and drainage
- 5. Erythema or drainage or swelling at joint by physical examination and **both** of the following criteria (a. and b.) are met:
  - a. **Two or more** of the following criteria are met (i.-iv.):
    - i. Temperature  $> 100.4$  F ( $38.0$  C); **or**
    - ii. Synovial white blood count (WBC) or neutrophil percentage  $>$  normal; **or**
    - iii. ESR  $> 30$  mm/hr; **or**
    - iv. C-reactive protein  $>$  normal; **and**
  - b. Joint infection onset within 4 weeks of total joint replacement **and either** of the following criteria are met (i.-ii.):
    - i. Imaging documents loosening of prosthesis or cement; **or**

- ii. There are continued symptoms or findings after **both** of the following treatments:
  - IV anti-infectives  $\geq$  4 weeks; **and**
  - Joint lavage and drainage.

V. Shoulder arthroplasty removal, replacement or revision is considered **not medically necessary** when criterion III. above is not met.

Link to [Evidence Summary](#)

## POLICY CROSS REFERENCES

- [Inpatient Surgical Site of Service](#), MP184

The full Company portfolio of current Medical Policies is available online and can be [accessed here](#).

## POLICY GUIDELINES

### DOCUMENTATION REQUIREMENTS

In order to determine the medical necessity of the request, the following information must be submitted in order to determine if medical necessity criteria are met:

- Indication for the requested surgery
- Clinical notes documenting that the individual has been evaluated at least once by the requesting surgeon before submitting a request for surgery.
- Clinical documentation of extent and response to conservative care, as applicable to the policy criteria, including outcomes of any procedural interventions, medication use and physical therapy notes
- Evaluation and documentation of the extent and specifics of one or more of the functional impairments or disabilities (see Policy Guidelines)
  - Imaging requirements:
    - Documented interpretation of x-rays, which may be performed and read by the operating surgeon.
  - If advanced imaging is required, a radiologist's report (for CT, MRI, US or bone scan).
- Documentation of any criteria-specific lab values or reports.

### DEFINITIONS

#### *Activities of Daily Living*

The activities of daily living (ADLs) is a term used to describe essential skills that

are required to independently care for oneself. Examples may include, but are not limited to, the following:

- Ambulating
- Feeding
- Dressing
- Personal hygiene
- Transportation and shopping
- Meal preparation
- Housecleaning and home maintenance

## **BACKGROUND**

### *Reverse shoulder arthroplasty*

Reverse shoulder arthroplasty is a surgical procedure where the normal ball-and-socket structure of the shoulder is reversed. The ball component is attached to the shoulder blade, and the socket is attached to the top of the arm bone. This technique is used to improve function and reduce pain in patients with rotator cuff tears, arthritis, or previous failed shoulder surgeries.

### *Shoulder hemiarthroplasty*

Shoulder hemiarthroplasty is a surgical procedure where only the head of the humerus (the ball) is replaced with a prosthetic implant, while the socket (glenoid) is left intact. This is often performed in cases where the humeral head is fractured or severely damaged, but the glenoid is still healthy. It helps in relieving pain and restoring shoulder function.

### *Partial Shoulder Arthroplasty*

Partial shoulder arthroplasty, also known as hemiarthroplasty, is a surgical procedure in which only one part of the shoulder joint is replaced with an artificial component. It is commonly performed when the humeral head (upper arm bone) is damaged or diseased, while the glenoid (socket) remains relatively healthy.

### *Total Shoulder Arthroplasty*

Total shoulder arthroplasty is a surgical procedure that involves replacing the damaged or arthritic shoulder joint with an artificial joint, known as a prosthesis. The procedure aims to alleviate pain, restore mobility, and improve function in individuals with severe shoulder joint arthritis, rotator cuff tears, or other shoulder joint conditions. During TSA, both the ball-shaped end of the humerus (upper arm bone) and the glenoid (socket) are replaced with artificial components. The artificial joint may be made of metal, plastic, or ceramic materials, which mimic the natural movement and function of a healthy shoulder joint. This procedure is commonly performed in cases where conservative treatments have failed to provide sufficient relief and function.

## *Shoulder Arthroplasty Removal and Replacement*

Shoulder arthroplasty removal and replacement, often known as revision shoulder arthroplasty, is a surgical procedure performed to remove and replace a previously implanted shoulder prosthesis. This surgery may be necessary due to factors such as implant loosening, infection, wear, or mechanical failure. During the procedure, the surgeon first makes an incision to access the shoulder joint, then carefully removes the existing prosthetic components. Any damaged bone or tissue is also addressed. New, typically more advanced, prosthetic components are then implanted to restore joint function. The primary goals of this surgery are to alleviate pain, improve shoulder stability and mobility, and enhance overall quality of life. Postoperative care includes physical therapy to facilitate recovery and optimize the outcomes of the revision surgery.

## *Shoulder Arthroplasty Revision*

Shoulder arthroplasty revision is a surgical procedure designed to correct or improve the function of a previously implanted shoulder prosthesis without fully removing or replacing the existing implant. Unlike complete removal or replacement, revision focuses on addressing specific issues such as loosening, wear, or infection of the prosthetic components. This procedure may involve the adjustment, repair, or augmentation of the implant and surrounding tissues to restore joint function, alleviate pain, and improve range of motion. The goal of shoulder arthroplasty revision is to optimize the patient's outcome by preserving viable parts of the initial implant while rectifying the causes of its failure or degradation.

## **REGULATORY STATUS**

### **U.S. FOOD AND DRUG ADMINISTRATION (FDA)**

Approval or clearance by the Food and Drug Administration (FDA) does not in itself establish medical necessity or serve as a basis for coverage. Therefore, this section is provided for informational purposes only.

## **CLINICAL EVIDENCE AND LITERATURE REVIEW**

### **EVIDENCE REVIEW**

A review of the ECRI, Hayes, Cochrane, and PubMed databases was conducted regarding the use of shoulder arthroplasty. Below is a summary of the available evidence identified through February 2025.

### **Systematic Reviews**

- In 2022, Polascik et al. conducted a review analyzing outcomes of bilateral shoulder arthroplasty, including bilateral TSA, bilateral RTSA, and ipsilateral TSA with contralateral RTSA (TSA/RSA). A systematic search identified 19 studies encompassing 2,729 patients with a mean age of 72.2 years and follow-up of 47.3 months.<sup>3</sup> TSA was associated with better postoperative



range of motion, higher patient-reported outcome measures, and improved external rotation compared to RSA. However, TSA also had higher complication (15.1%) and reoperation (13.7%) rates compared to RSA (10.6% and 7.1%, respectively). Patients with an interval between arthroplasties of  $\geq 20$  months showed better external rotation and satisfaction. The review concluded that bilateral shoulder arthroplasty leads to significant functional improvements, with TSA providing better motion but at the cost of higher complication risks.

- In 2022, Davies and colleagues investigated the outcomes and implant survival rates following revision shoulder hemiarthroplasty and total shoulder arthroplasty (TSA).<sup>4</sup> A systematic review of 15 studies, encompassing 593 revision cases, found substantial variability in postoperative shoulder function improvement. More than 80% of revision implants lasted five years, and over 70% survived for at least ten years. No significant differences in implant survival or functional outcomes were observed between revision hemiarthroplasty and revision TSA. The findings challenge the assumption that revision of a shoulder hemiarthroplasty results in better outcomes, suggesting that both revision types provide comparable functional recovery and implant longevity.
- In 2021, Burden and colleagues conducted a systematic review to assess complication patterns associated with three different reverse total shoulder arthroplasty (RTSA) prosthetic designs: medial glenoid/medial humerus (MGMH), medial glenoid/lateral humerus (MGLH), and lateral glenoid/medial humerus (LGMH).<sup>5</sup> A literature review of 42 studies was conducted, analyzing complication occurrence and patient-reported outcome measures (PROMs). The results indicated significantly higher rates of scapular notching in MGMH implants (52%) compared to MGLH (18%) and LGMH (12%). Glenoid loosening was also more frequent in MGMH implants (6%) than in MGLH implants (0%), though the strength of this evidence was low. No significant differences in other complications or PROMs were observed among the implant philosophies. Overall, RTSA showed improvements in PROMs with low complication rates, with scapular notching being the most notable issue in MGMH designs.
- In 2020, Bullock et al. conducted a systematic review analyzing rehabilitation protocols following total shoulder arthroplasty (TSA) and RTSA.<sup>6</sup> A computerized search identified 16 relevant studies, with varying levels of evidence. Findings revealed significant heterogeneity in rehabilitation guidelines, particularly regarding sling use, motion parameters, and exercise protocols. For TSA, sling use ranged from 3 to 8 weeks, while post-RTSA recommendations varied from comfort-based sling use to mandatory 6-week immobilization. Passive range of motion restoration timelines also varied, though all protocols recommended early deltoid isometric exercises post-RTSA. The review concluded that while current guidelines are based on biomechanical principles and healing timelines, there is no consensus on optimal rehabilitation strategies, emphasizing the need for further research based on clinical outcomes.
- In 2019, Allahabadi and colleagues examined the safety, complications, and benefits of outpatient shoulder arthroplasty (SA).<sup>7</sup> A total of 26 articles were analyzed, focusing on patient selection, complications, pain management, cost-effectiveness, and patient and surgeon satisfaction. Outpatient SA was found to be a viable alternative for appropriately selected patients, who tended to be younger with a lower BMI. Studies indicated fewer medical complications in outpatient compared to inpatient SA. Both single-shot and continuous interscalene blocks were effective for pain management. High satisfaction levels were reported among both patients and surgeons, and cost analysis demonstrated significant financial savings

with outpatient SA. The review concluded that while outpatient SA appears to be a safe and cost-effective option, further research is needed to refine patient selection criteria and establish best practices.

- In 2018, Ernstbrunner and colleagues conducted a systematic review to evaluate the long-term outcomes of reverse total shoulder arthroplasty (RTSA) in patients with massive irreparable rotator cuff tears (miRCT).<sup>8</sup> The review included eight studies with a total of 365 shoulders, with a mean follow-up of 9.5 years (range: 5-20 years). Results showed significant improvements in shoulder function and patient-reported outcomes. The Constant score increased from 24 to 59 points, the relative Constant score improved from 33% to 74%, and the Subjective Shoulder Value rose from 23% to 72%. Active anterior elevation and abduction also improved, while external rotation remained unchanged. Notably, no significant decline in function or clinical scores was observed up to 20 years post-surgery. However, 42% of RTSAs developed grade III or IV scapular notching after 10 years. The authors concluded that RTSA provides durable benefits, though longer follow-up is needed to determine ultimate implant longevity.
- In 2010, Singh and colleagues conducted a Cochrane review (systematic review) examined the benefits and risks of surgical treatment for patients with advanced shoulder osteoarthritis who did not respond to analgesics or NSAIDs.<sup>9</sup> The review included seven studies with 238 patients, though none compared surgery to sham procedures, placebo, or non-surgical treatments. Two studies comparing hemiarthroplasty (HA) to total shoulder arthroplasty (TSA) found that TSA resulted in significantly better functional scores on the American Shoulder and Elbow Surgeons Shoulder Scale at 24 to 34 months post-surgery. However, there were no significant differences between HA and TSA in terms of pain relief, quality of life, or adverse events. A non-significant trend suggested a higher revision rate for HA. Other studies compared surgical techniques and implant types but lacked strong evidence favoring one approach. The authors concluded that TSA may provide functional advantages over HA, but further research is needed to compare surgical and non-surgical treatments for shoulder osteoarthritis.

## **CLINICAL PRACTICE GUIDELINES**

### **American Academy of Orthopedic Surgeons**

- In 2023, the AAOS published a clinical practice guideline addressing treatment for shoulder osteoarthritis with intact rotator cuff and severe glenoid retroversion.<sup>10</sup> Authors recommended shoulder arthroplasty for patients with advanced glenohumeral osteoarthritis who have not responded to conservative treatments such as analgesics and NSAIDs. The procedure is considered appropriate when the patient has intact and functional rotator cuff structures, no neuromuscular conditions that would limit rehabilitation, and a general medical condition that permits surgery. Specific recommendations vary based on factors such as age, activity level, and severity of glenoid retroversion. Anatomic shoulder arthroplasty is often appropriate for younger, high-demand patients with significant glenoid deformities, while reverse total shoulder arthroplasty is preferred for older patients or those with compromised rotator cuff function.
- In 2020, the AAOS published a clinical practice guideline addressing management of glenohumeral joint osteoarthritis.<sup>11</sup> Authors wrote that there is strong evidence that supports total shoulder arthroplasty demonstrates more favorable function and pain relief in the short-to

mid-term compared to hemiarthroplasty for the treatment of glenohumeral osteoarthritis. It was the opinion of the work group that individuals with glenohumeral osteoarthritis undergoing arthroplasty should be imaged with axillary and true AP radiographs. Advanced imaging should be performed at the discretion of the clinician. Authors also stated that either total shoulder arthroplasty or reverse shoulder arthroplasty be used for the treatment of glenohumeral osteoarthritis with excessive bone loss and/or rotator cuff dysfunction.

### **National Institute for Health and Care Excellence (NICE)**

In 2020, the NICE published a guideline for joint replacement (primary) elective shoulder replacement.<sup>12</sup> Authors wrote that if glenoid bone is adequate, a total shoulder replacement for treatment of osteoarthritis with no rotator cuff tear should be offered. The committee was unable to make a recommendation for shoulder replacement for pain and loss of function for individuals with a previous proximal humeral fracture.

### **EVIDENCE SUMMARY**

Shoulder arthroplasty, including both total shoulder arthroplasty (TSA) and reverse total shoulder arthroplasty (RTSA), has proven to be an effective intervention for improving shoulder function and alleviating pain. Evidence indicates that TSA generally results in better postoperative range of motion and patient-reported outcomes compared to RTSA, though it is associated with higher complication and reoperation rates. Both primary and revision shoulder arthroplasty show substantial implant survival and functional recovery, with no significant differences between revision TSA and hemiarthroplasty. RTSA designs vary in complication rates, with issues like scapular notching being more prevalent in certain implant types. Rehabilitation protocols for shoulder arthroplasty lack standardization, which underscores the need for clear guidelines to optimize recovery. Outpatient shoulder arthroplasty is deemed safe and cost-effective for appropriately selected patients, offering reduced complications and financial savings. Long-term outcomes of RTSA are positive, particularly for patients with severe rotator cuff issues, though some complications such as scapular notching persist. TSA is often preferred for shoulder osteoarthritis due to its functional benefits over hemiarthroplasty. Clinical guidelines recommend shoulder arthroplasty for patients who do not respond to conservative treatments, with specific approaches tailored based on patient age, activity level, and shoulder pathology. Overall, shoulder arthroplasty remains a valuable and effective treatment option in appropriate clinical scenarios.

## **HEALTH EQUITY CONSIDERATIONS**

The Centers for Disease Control and Prevention (CDC) defines health equity as the state in which everyone has a fair and just opportunity to attain their highest level of health. Achieving health equity requires addressing health disparities and social determinants of health. A health disparity is the occurrence of diseases at greater levels among certain population groups more than among others. Health disparities are linked to social determinants of health which are non-medical factors that influence health outcomes such as the conditions in which people are born, grow, work, live, age, and

the wider set of forces and systems shaping the conditions of daily life. Social determinants of health include unequal access to health care, lack of education, poverty, stigma, and racism.

The U.S. Department of Health and Human Services Office of Minority Health calls out unique areas where health disparities are noted based on race and ethnicity. Providence Health Plan (PHP) regularly reviews these areas of opportunity to see if any changes can be made to our medical or pharmacy policies to support our members obtaining their highest level of health. Upon review, PHP creates a Coverage Recommendation (CORE) form detailing which groups are impacted by the disparity, the research surrounding the disparity, and recommendations from professional organizations. PHP Health Equity COREs are updated regularly and can be found online [here](#).

## BILLING GUIDELINES AND CODING

- **Separate SOS Review Required:** In addition to general medical necessity review using this policy, CPT codes 23470 and 23472 may require inpatient site of service review, which is performed using criteria found in the medical policy, [Inpatient Surgical Site of Service](#) (MP184).
- **Separate SOS Review Not Required:** Revision shoulder arthroplasty CPT codes (23473 and 23474) are not subject to the site of service policy criteria linked above.

CODES*		
CPT	23470	Arthroplasty, glenohumeral joint; hemiarthroplasty
	23472	Arthroplasty, glenohumeral joint; total shoulder (glenoid and proximal humeral replacement (eg, 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

### \*Coding Notes:

- The above code list is provided as a courtesy and may not be all-inclusive. Inclusion or omission of a code from this policy neither implies nor guarantees reimbursement or coverage. Some codes may not require routine review for medical necessity, but they are subject to provider contracts, as well as member benefits, eligibility and potential utilization audit.
- All unlisted codes are reviewed for medical necessity, correct coding, and pricing at the claim level. If an unlisted code is submitted for non-covered services addressed in this policy then it will be **denied as not covered**. If an unlisted code is submitted for potentially covered services addressed in this policy, to avoid post-service denial, **prior authorization is recommended**.
- See the non-covered and prior authorization lists on the Company [Medical Policy](#), [Reimbursement Policy](#), [Pharmacy Policy](#) and [Provider Information website](#) for additional information.
- HCPCS/CPT code(s) may be subject to National Correct Coding Initiative (NCCI) procedure-to-procedure (PTP) bundling edits and daily maximum edits known as “medically unlikely edits” (MUEs) published by the Centers for Medicare and Medicaid Services (CMS). This policy does not take precedence over NCCI edits or MUEs. Please refer to the CMS website for coding guidelines and applicable code combinations.

## REFERENCES

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## POLICY REVISION HISTORY

DATE	REVISION SUMMARY
6/2025	New policy.