

Shoulder Joint Replacements

Policy Number: **M20210611027**
Effective Date: **9/1/2021**
Sponsoring Department: **Health Care Services**
Impacted Department(s): **Health Care Services**

Type of Policy: Internal External

Data Classification: Confidential Restricted Public

Applies to (Line of Business):

- Corporate (All)
- State Products, if yes which plan(s): MediSource; MediSource Connect; Child Health Plus; Essential Plan
- Medicare, if yes, which plan(s): MAPD; PDP; ISNP; CSNP
- Commercial, if yes, which type: Large Group; Small Group; Individual
- Self-Funded Services (*Refer to specific Summary Plan Descriptions (SPDs) to determine any pre-authorization or pre-certification requirements and coverage limitations. In the event of any conflict between this policy and the SPD of a Self-Funded Plan, the SPD shall supersede the policy.*)

Excluded Products within the Selected Lines of Business (LOB)

N/A

Applicable to Vendors? Yes No

Purpose and Applicability:

To set forth Independent Health's medical necessity criteria for **shoulder joint replacement** (arthroplasty).

Policy:

Commercial and Medicare Advantage:

Shoulder joint replacement, including reverse shoulder arthroplasty, are considered medically necessary when the following criteria is met:

General Requirements:

1. Submission of clinical documentation describing:
 - a. Symptom duration and severity;
 - b. Specific functional limitations related to symptoms;
 - c. Type and duration of all therapeutic measures provided. If conservative management is not appropriate, the reason must be clearly documented;
 - d. Documentation of compliance with a plan of therapy that includes elements from these areas is required where conservative management is appropriate.
2. Documented clinical assessment of the member by the requesting provider within 3 months of the request.
3. Documentation reflected in the member's medical records required of non-surgical medical management measures by the requesting provider, ordered by them or other health professionals during the patient's course of treatment for a period of 3 months for this condition(s).
 - Documentation should establish a history of a reasonable attempt at conservative therapy as appropriate for the patient in their current episode of care.
 - Documentation to include the start date of each therapy and the concluding date of therapy with the results of therapy included as outlined below.
 - The documentation should include a combination of strategies to reduce inflammation, alleviate pain, and improve function, including 2 or more of the following:
 - a. Activity modification; the description of activity modification as ordered by the provider and outcomes of modification is required to be documented in the medical record;
 - b. Physical therapy; Complete therapy progress note documentation submission by the therapy provider required;
 - c. Physician or physical therapist-supervised therapeutic home exercise program which includes flexibility and muscle strengthening exercises; complete therapy progress note submission by the therapy provider required;
 - d. Prescription or non-prescription strength anti-inflammatory medications and analgesics; outcomes of medication therapy, including medication name, dosage and frequency documented in the medical record by ordering provider including the start and end dates of medication therapies;
 - e. Intraarticular corticosteroid injection(s); procedure report submission required, and outcomes of therapy documented in the medical record.
4. For patients with significant conditions or co-morbidities, such as coronary artery disease or obstructive pulmonary disease, the risk/benefit of the procedure should be appropriately addressed in the medical record.
5. Adherence to a tobacco-cessation program resulting in abstinence from tobacco for at least 6 weeks prior to surgery is recommended. In smokers, medical documentation must state the provider reviewed the benefits of smoking cessation prior to elective surgery as it appears to improve a number of outcomes such as wound healing and postoperative pulmonary recovery.
6. For members with diabetes every effort should be made to ensure it is well controlled. Members with poor control as evidenced by an elevated HbA1c levels (> 8.5%), every effort should be made to optimize glycemic levels prior to elective surgery. If optimization is not

possible, there is documentation that the surgeon has reviewed the increased risks associated with joint replacement procedures with the member prior to the procedure.

ALL of the following conditions must be present, regardless of the indication for which the procedure is being performed:

1. Anticipated level of function should place limited demands on the shoulder joint;
2. Deltoid muscle must be intact;
3. Shoulder joint must be anatomically and structurally suited to receive selected implants (i.e., adequate bone stock to allow for firm fixation of implant).

Total shoulder arthroplasty or hemiarthroplasty may be considered medically necessary for EITHER of the following indications:

1. Malignancy involving the glenohumeral joint or surrounding soft tissue;
2. Advanced joint disease of the shoulder due to osteoarthritis, rheumatoid arthritis, avascular necrosis, or post-traumatic arthritis when ALL of the following requirements are met:
 - a. Limited range of motion or crepitus of the glenohumeral joint on physical examination;
 - b. Pain and loss of function of at least 6 months' duration that interferes with daily activities;
 - c. Radiographic evidence of destructive degenerative joint disease as evidence by 2 or more of the following:
 - irregular joint surfaces
 - glenoid sclerosis
 - osteophyte changes
 - flattened glenoid
 - cystic changes in the humeral head
 - joint space narrowing

Hemiarthroplasty may be considered as an option for EITHER of the following indications:

1. Proximal humerus fracture not amenable to internal fixation
2. Advanced joint disease of the shoulder, when criteria are met for total shoulder arthroplasty AND at least one of the following conditions is present:
 - a. Osteonecrosis of the humeral head without glenoid involvement
 - b. Advanced joint disease due to rotator cuff tear arthropathy
 - c. Glenoid bone stock inadequate to support a glenoid prosthesis,

Revision or replacement of a shoulder prosthesis may be considered medically necessary in ANY of the following conditions, when associated with pain and functional impairment:

1. Aseptic loosening of one or more prosthetic components confirmed by imaging.
2. Fracture of one or more components of the prosthesis confirmed by imaging.
3. Periprosthetic infection confirmed by gram stain and culture.
4. Instability of the glenoid or humeral components.
5. Migration of the humeral head.

Contraindications

1. Active infection of the joint.
2. Active systemic bacteremia.
3. Active skin infection (exception recurrent cutaneous staph infections) or open wound within the planned surgical site of the shoulder.
4. Rapidly progressive neurologic disease.

Exclusions (for total shoulder arthroplasty or hemiarthroplasty)

1. Indications other than those addressed in this guideline are considered not medically necessary, including but not limited to the following:
 - a. Glenohumeral osteoarthritis with irreparable rotator cuff tear (see Reverse Arthroplasty indications).
 - b. Total shoulder arthroplasty or hemiarthroplasty under conditions which would result in excessive stress on the implant, including but not limited to Charcot joint and paralytic conditions of the shoulder.

MediSource, MediSource Connect, Child Health Plus, Essential Plan:

MediSource, MediSource Connect, Child Health Plus, and Essential Plan covers shoulder arthroplasty utilizing the Commercial criteria above.

Background:

When medical therapy fails to control dysfunction or pain in the shoulder, reconstructive surgery should be considered. The main indications for surgery are intractable joint pain (with activity or at rest) and the presence of an unacceptable functional decline. Pain or functional declines are ascribed to joint destruction. This must be accompanied by failure of all of the nonsurgical approaches to the management of the arthritis including a change in disease-modifying, immunosuppressive, or biologic drug regimens, the use of more potent analgesics, and rehabilitation therapies.

An evaluation of the peer-reviewed scientific literature, including but not limited to subscription materials, has provided Independent Health the basis for its medical necessity coverage outlined above.

Pre-Authorization Required? Yes No

Preauthorization is required for this service.

Definitions

Hemiarthroplasty is a surgical procedure where the head of the humerus is replaced with a metal ball and stem, similar to the component used in a total shoulder replacement.

Reverse shoulder arthroplasty is a surgical procedure where a metal ball is attached to the shoulder bone and a plastic socket is attached to the upper arm bone. This allows the patient to use the deltoid muscle instead of the torn rotator cuff to lift the arm.

Shoulder joint replacement (arthroplasty) is a surgical procedure where the arthritic joint surfaces are replaced with a highly polished metal ball attached to a stem, and a plastic socket.

References

Related Policies, Processes and Other Documents

N/A

Non-Regulatory references

American Association of Orthopedic Surgeons [web site]. Management of Glenohumeral Joint Osteoarthritis Evidence-Based Clinical Practice Guideline. Available at:

<https://www.aaos.org/globalassets/quality-and-practice-resources/glenohumeral/gjo-cpg.pdf>

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America Academy of Orthopedic Surgeons [web site]. Shoulder Joint Replacement. Reviewed September 2021. Available at: <https://orthoinfo.aaos.org/en/treatment/shoulder-joint-replacement/> Accessed March 1, 2024.

Carter MJ, Mikuls TR, Nayak S, 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, Goodier H, Singh JA, et al. Shoulder replacement surgery for osteoarthritis and rotator cuff tear arthropathy. Cochrane Database Syst Rev. 2020 Apr 21;4(4):CD012879.

Doherty M, Abhishek A. Clinical manifestations and diagnosis of osteoarthritis. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on March 1, 2024).

Favard L, Katz D, Colmar M, 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.

Khan NA, Ghali WA, Cagliero E. Perioperative management of blood glucose in adults with diabetes mellitus. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on March 1, 2024).

Smetana GW, Pfeifer K. Strategies to reduce postoperative pulmonary complications in adults. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. (Accessed on March 1, 2024).

Yong PH, Weinberg L, Torkamani N, et al. The Presence of Diabetes and Higher HbA1c Are Independently Associated With Adverse Outcomes After Surgery. Diabetes Care. 2018 Jun;41(6):1172-1179.

Regulatory References

New York State Department of Health [web site]. New York State Medicaid Program Physician Procedure Codes. Section 5 – Surgery. April 2023. Available at:

<https://www.emedny.org/ProviderManuals/Physician/PDFS/Physician%20Procedure%20Codes%20Sect5.pdf> Accessed: March 1, 2024.

This policy contains medical necessity criteria that apply for this service. Please note that payment for covered services is subject to eligibility criteria, contract exclusions and the limitations noted in the member’s contract at the time the services are rendered.

Version Control

Signature / Approval on File? Yes No

Revision Date	Owner	Notes
5/1/2024	Health Care Services	Revised
1/1/2024	Health Care Services	Revised
8/1/2023	Health Care Services	Reviewed

8/1/2022	Health Care Services	Revised
2/1/2022	Health Care Services	Revised
12/1/2021	Health Care Services	Revised