Prior Authorization Review Panel
MCO Policy Submission

A separate copy of this form must accompany each policy submitted for review.
Policies submitted without this form will not be considered for review.

Plan: PA Health & Wellness (PHW)	**Submission Date: 08/01/2022**
Policy Number: PA.CP.MP.148	**Effective Date: 01/01/18** **Revision Date: 07/27/2022**
Policy Name: Radial Head Implant	

Type of Submission – Check all that apply:

- ☐ **New Policy**
- ☐ **Revised Policy***
- ☐ **Annual Review – No Revisions**
- ☐ **Statewide PDL**
- ☒ **Retiring Policy**

***All revisions to the policy must be highlighted using track changes throughout the document.**

Please provide any clarifying information for the policy below:

This policy is being retired.

Name of Authorized Individual (Please type or print):	**Signature of Authorized Individual:**
Dr. Craig A. Butler, MD.	Craig A Butler MD

Clinical Policy: Radial Head Implant

Reference Number: PA.CP.MP.148
Effective Date: 01/18
Date of Last Review: Retire 10/2023

Coding Implications

Description
Radial head implant, or arthroplasty, was developed for the treatment of complex radial head fractures, and severe arthritic conditions causing radial head joint destruction.

Policy/Criteria

I. It is the policy of Pennsylvania Health and Wellness® (PHW) that radial head implants are **medically necessary** when meeting the following:

A. Has one of the following indications:
1. Type III comminuted fractures of the radial head or fracture is deemed irreparable intraoperatively; or
2. Radiographic evidence of radial head joint destruction, too far advanced to benefit from radial head excision and synovectomy, with demonstrated resistance or failure of conservative medical treatment;

B. Has none of the following contraindications:
1. Untreated or unresolved elbow sepsis within the past 12 months;
2. Previous fascial or other interpositional arthroplasty, or previous hinged arthroplasty with the use of a capitellocondylar implant;
3. Excessive bone loss on either side of the joint or poorly functioning flexor or extensor mechanism.

II. It is the policy of PHW that radial head implants are **not medically necessary** for any other indications than those specified above.

Background
Radial Head Fractures
Radial head and neck fractures are common and occur in about 30% of elbow fractures. The following modified Mason classification is frequently used to describe the fractures[1,2]:

- Mason Type I – nondisplaced fractures (displacement $\leq$ 2 mm);
- Mason Type II – displaced fractures > 2 mm;
- Mason Type III – comminuted fractures in which bone is broken, splintered or crushed into a number of pieces. Treatment includes excision, operative fixation and replacement arthroplasty;
- Mason Type IV – radial head fracture with associated elbow fracture/dislocation.

Immediate orthopedic evaluation is necessary for any individual with an open fracture, neurovascular compromise, or fracture dislocation. Immediate reduction is critical in patients who present with a radial head or neck fracture with elbow dislocation. The longer the joint is allowed to remain dislocated, the more difficult the reduction, and the greater the risk of avascular necrosis.[2-4]

Studies

The peer-reviewed evidence for optimal management of Mason type III radial head fractures is unclear since there is difficulty performing randomized controlled trials due to the small number of these types of fractures. Type III comminuted fractures often do poorly with open reduction internal fixation, especially when there are more than three fragments. Additionally, there is a risk of posterior interosseous nerve injury with this procedure. Although many of the studies related to radial head implants are small, these types of prostheses are noted as an acceptable option in cases of Type III comminuted fractures. Many of these fractures will have a ligamentous injury between the radius and ulna shaft in the forearm, which are termed Essex-Lopresti injuries. Excision of a radial head fracture that has an associated Essex Lopresti injury will cause very significant shortening and wrist morbidity.[5-8]

The radial head implant is also beneficial in patients with rheumatoid arthritis with radiographic evidence of joint destruction that is too far advanced to benefit from radial head excision and synovectomy. In patients with rheumatoid arthritis, arthroplasty should be considered only after conservative medical treatment has failed, including, pharmacologic therapy consisting of combinations of salicylates, nonsteroidal anti-inflammatory drugs, disease modifying antirheumatic drugs, and/or glucocorticoids for 3-6 months.[9]

In summary, multicenter, long-term, evidence-based, peer-reviewed studies or clinical trials would be helpful to assess the benefits and/or problems associated with radial head implants.[1] Additional randomized control trials for the management of Mason type III fractures are needed to fully evaluate the benefits and long-term clinical outcomes of radial head implants.[6]

Coding Implications

This clinical policy references Current Procedural Terminology (CPT®). CPT® is a registered trademark of the American Medical Association. All CPT codes and descriptions are copyrighted 2022, American Medical Association. All rights reserved. CPT codes and CPT descriptions are from the current manuals and those included herein are not intended to be all-inclusive and are included for informational purposes only. Codes referenced in this clinical policy are for informational purposes only. Inclusion or exclusion of any codes does not guarantee coverage. Providers should reference the most up-to-date sources of professional coding guidance prior to the submission of claims for reimbursement of covered services.

CPT® Codes	Description
24366	Arthroplasty, radial head; with implant

HCPCS Codes	Description
N/A	

ICD-10-CM Diagnosis Codes that Support Coverage Criteria

ICD-10-CM Code	Description
M06.821	Other specified rheumatoid arthritis , right elbow
M06.822	Other specified rheumatoid arthritis, left elbow

ICD-10-CM Code	Description
S52.121(A-S)	Displaced fracture of head of right radius
S52.122(A-S)	Displaced fracture of head of left radius

Reviews, Revisions, and Approvals	Date	Approval Date
References reviewed and updated.	06/18	08/18
Reorganized without clinical impact: moved "history of previous elbow sepsis," "Previous fascial or other interpositional arthroplasty…," and "Excessive bone loss…" from the not medically necessary statement to contraindications section in I. Clarified that any of the previous arthroplasties alone are contraindications, and that extensive bone loss **or** poor flexion **or** extension mechanisms are contraindications. References reviewed and updated.	12/18	01/19
Added in I.A.1 "or fracture is considered irreparable intraoperatively" and in I.B.1 changed history of sepsis to untreated or unresolved sepsis in past 12 months. Specialty review.	10/19	
References reviewed and updated.	06/2021	
Annual Review. Replaced "member" with "member/enrollee" in all instances. Changed "Review Date" in policy header to "Date of Last Revision," and "Date" in the revision log header to "Revision Date." Updated background with no impact on criteria. References reviewed and updated. Specialist reviewed.	7/28/2022	
This policy is being retired.	10/2023	**10/26/2023**

References

1. Kodde IF, Kaas L, Flipsen M, van den Bekerom MP, Eygendaal D. Current concepts in the management of radial head fractures. *World J Orthop*. 2015;6(11):954-960. Published 2015 Dec 18. doi:10.5312/wjo.v6.i11.954
2. Slabaugh M. Radial head and neck fractures in adults. UpToDate. www.uptodate.com. Updated September 29, 2021. Accessed April 15, 2022.
3. American Academy of Orthopedic Surgeons. Radial Head Fractures of the Elbow. https://orthoinfo.aaos.org/en/diseases--conditions/radial-head-fractures-of-the-elbow. Last reviewed November 2021. Accessed April 19, 2022.
4. Rabin SI. Radial Head Fractures and Dislocations Treatment & Management. Medscape. https://emedicine.medscape.com/article/1240337-treatment. April 20, 2020. Accessed April 19, 2022.
5. Marsh JP, Grewal R, Faber KJ, Drosdowech DS, Athwal GS, King GJ. Radial Head Fractures Treated with Modular Metallic Radial Head Replacement: Outcomes at a Mean Follow-up of Eight Years. *J Bone Joint Surg Am*. 2016;98(7):527-535. doi:10.2106/JBJS.15.00128
6. Miller G, Humadi A, Unni R, Hau R. Surgical management of Mason type III radial head fractures. *Indian J Orthop*. 2013;47(4):323-332. doi:10.4103/0019-5413.114907

7. Moghaddam A, Raven TF, Dremel E, Studier-Fischer S, Grutzner PA, Biglari B. Outcome of Radial Head Arthroplasty in Comminuted Radial Head Fractures: Short and Midterm Results. *Trauma Mon*. 2016;21(1):e20201. Published 2016 Feb 6. doi:10.5812/traumamon.20201
8. Carità E, Donadelli A, Cugola L, Perazzini P. Radial head prosthesis: results overview. *Musculoskelet Surg*. 2017;101(Suppl 2):197-204. doi:10.1007/s12306-017-0492-x
9. Sanchez-Sotelo J. Elbow rheumatoid elbow: surgical treatment options. *Curr Rev Musculoskelet Med*. 2016;9(2):224-231. doi:10.1007/s12178-016-9328-9