Cohere Medicare Advantage Policy - Interphalangeal Joint Arthroplasty

Clinical Policy for Medical Necessity Review

Version: 3
Revision: May 29, 2025

Important Notices

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Other Notices:

Policy Information:

Specialty Area: Musculoskeletal Care
Policy Name: Interphalangeal Joint Arthroplasty
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17 yo)

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Medical Necessity Criteria

Service: Interphalangeal Joint Arthroplasty

Related CMS Documents

Please refer to the CMS Medicare Coverage Database for the most current applicable CMS National Coverage.

- There are no applicable NCDs and/or LCDs for interphalangeal joint arthroplasty.

Description

Interphalangeal joint (i.e., hand or foot small joint) arthroplasty is a well-established surgery that can provide pain relief, preserve motion, and improve function of the hand or foot.[1-3] During an interphalangeal joint arthroplasty, tendons may be split or removed to access and replace the damaged joint.[1] Surgeons may use silicone, metal, pyrocarbon, or ceramic implants in a lateral, dorsal, or volar (i.e., side, upper, or palm/sole, respectively) approach.[2] All surgical techniques have shown improved postoperative grip and pinch strength, which are important factors in evaluating functional status. [2] Recovery may include immobilization of the hand or foot, then exercises to regain and improve function, including physical therapy, may be recommended.[1]

Medical Necessity Criteria

Indications

Interphalangeal joint arthroplasty is considered appropriate if **ALL** of the following are **TRUE**:

- **ANY** of the following:
  - Current nicotine user with no product use for 6 weeks; and **ANY** of the following[4,5]:
    - Negative urine (cotinine) lab test within 30 days; **OR**
    - Surgery is urgently required due to documented reason; **OR**
  - No history of nicotine product use within the last 12 months; **OR**

    - No lifetime history of nicotine product use, **AND**
- The patient has finger or toe pain and loss of motion, which is interfering with function and activities of daily living (ADLs)[6]; **AND**
- Radiographic confirmation with image report of advanced joint disease of the proximal interphalangeal (PIP) joint, including **ANY** of the following[3]:
    - Joint degeneration, such as PIP joint space narrowing or bone deformities[7]; **OR**
    - Osteophytes[7,8]; **OR**
    - Subchondral sclerosis or cysts[7,8]; **OR**
    - Fracture-dislocations or fracture-subluxations[9,10]; **AND**
- **ANY** of the following:
    - Failure of conservative management for greater than 3 months, including **ALL** of the following[6,11]:
        - Anti-inflammatory medications, non-opioid analgesics, or prescription medications (e.g., oral steroids, neuropathic pain medications) if not contraindicated; **OR**
        - Physical therapy, including a physician-directed home exercise program; **OR**
        - Orthotics (e.g., shoe modification, splinting, or padding); **OR**
        - **ANY** of the following:
            - Corticosteroid injection if medically appropriate; **OR**
            - Documentation that corticosteroid injection is contraindicated; **OR**
    - The patient's severe disability or deformity is significantly affecting their ability to perform ADLs.[9,10]

Non-Indications

Interphalangeal joint arthroplasty is not considered appropriate if **ANY** of the following is **TRUE**:

- Persistent infection at the surgical site[12]; **OR**
- Skin defect or loss[13]; **OR**
- The procedure is a distal interphalangeal (DIP) joint arthroplasty with implant[8]; **OR**
- The procedure is an interphalangeal joint replacement of the thumb.[14]

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
26535	Arthroplasty, interphalangeal joint; each joint
26536	Arthroplasty, interphalangeal joint; with prosthetic implant, each joint

Disclaimer: S Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Evaluation of Clinical Harms and Benefits

Clinical determinations for Medicare Advantage beneficiaries are made in accordance with 42 CFR 422.101 guidance outlining CMS's required approach to decision hierarchy in the setting of NCDs/LCDs identified as being "not fully established." When clinical coverage criteria are "not fully established" Medicare Advantage organizations are instructed to create publicly accessible clinical coverage criteria based on widely accepted clinical guidelines and/or scientific studies backed by a robust clinical evidence base. Clinical coverage criteria provided by Cohere Health in this manner include coverage rationale and risk/benefit analysis.

The potential clinical harms of using these criteria for interphalangeal joint arthroplasty may include:

- Adverse effects from delayed or denied treatment, such as progression of joint disease and increased pain. Progression of hand osteoarthritis may lead to decreased grip strength, and progression of foot osteoarthritis may lead to decreased ambulation, both of which can interfere with activities of daily living.[3,15]

The clinical benefits of using these criteria for interphalangeal joint arthroplasty may include:

- Improved patient selection, resulting in better long-term outcomes. Ideal candidates should generally not have excess weight (BMI greater than or equal to 40), diabetes mellitus, nicotine abuse, or alcohol abuse, as these patients may be the most at risk of infection at the surgical site.[12]
- Maintenance of rigorous patient safety standards aligned to best available evidence. For example, there is limited evidence that interphalangeal joint arthroplasty is appropriate for the thumb.[14] Patients with osteoarthritis or other joint disorders of the thumb who undergo interphalangeal joint replacement are at risk for osteolysis, which may lead to loosening of the prosthesis, or bone formation around the joint, which may cause blockage.[14]

Medical Evidence

Terpstra et al. (2022) provide insight into prominent hand osteoarthritis therapy guidelines and examine how closely clinical practices align with these guidelines. Significant variations exist in the application of treatment options. An optimal balance between non-pharmacological and pharmacological approaches could be enhanced by increasing referrals to physical or occupational therapists. It is advised to consider guidelines from organizations such as the European Alliance of Associations for Rheumatology (EULAR), OsteoArthritis Research Society International (OARSI), and American College of Rheumatology (ACR) for referral, alongside embracing a multidisciplinary treatment strategy. EULAR recommends reserving surgical interventions for patients with severe disability or deformity or when conservative care modalities have not been successful.[6]

Chan et al. (2021) reviewed distal interphalangeal joint (DIPJ) arthroplasty. The authors examine surgical techniques, implant varieties, clinical outcomes, and associated complications. A comprehensive search across five databases from inception to April 18, 2020 yielded insights suggesting that silicone implants for DIPJ arthroplasty may present a viable alternative to arthrodesis (i.e., joint fusion). Arthroplasty can facilitate the preservation of joint mobility, alleviate pain, and enhance patient satisfaction. However, the available evidence remains insufficient to designate any specific implant design or surgical approach as definitively superior.[8]

Demino et al. (2021) conducted a systematic literature review to present postoperative results of different treatment approaches for proximal interphalangeal (PIP) joint fracture-dislocations. Outcomes assessed included range of motion (ROM) at the PIP joint, grip strength (as a percentage of the contralateral hand), and Quick Disabilities of the Arm, Shoulder, and Hand (QuickDASH) scores. Articles were categorized by the surgical method used (e.g., open reduction, percutaneous fixation, dynamic external fixation, extension-block pinning, and hemi-hamate arthroplasty). A total of 48 articles including data from 746 hands (735 patients) were reviewed. Results showed that percutaneous fixation led to the highest postoperative ROM at final follow-up, while extension-block pinning resulted in the greatest grip strength. Dorsal fracture-dislocations generally exhibited

higher average ROM and lower QuickDASH scores, whereas pilon fractures showed higher grip strength. However, no surgical approach or fracture type consistently produced superior outcomes. The authors concluded that surgical treatment requires careful decision-making based on considerations such as fracture type, joint space area, and fracture size.[9]

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Clinical Guideline Revision History/Information

Original Date: May 24, 2024		
Review History		
Version 2	6/10/2024	422.01 Disclaimer Added
Version 3	05/29/2025	Annual review. No changes to procedure codes. Updated standard language for nicotine and conservative care indications. Broadened “PIP joint space narrowing” to “Joint degeneration, such as PIP joint space narrowing or bone deformities.” Added indication for “fracture-dislocations or fracture-subluxations.” Added indication for cases in which patients cannot undergo 3 months of conservative care: “the patient’s severe disability or deformity is significantly affecting their ability to perform ADLs.” Removed non-indication: “Non-reconstructable or irreparable extensor or flexor tendon mechanism.” Literature review showed that extensor mechanism dysfunction is a common reason for reoperation, but small joint replacements may still provide pain relief and maintain range of motion. Evaluation of extensor or flexor mechanisms should be left to the physician. Literature review - Description, Harms & Benefits, and Medical Evidence sections updated (including references).