Cohere Medicare Advantage Policy - Interphalangeal Joint Arthroplasty

Clinical Guidelines for Medical Necessity Review

Version: 2
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Important Notices

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Other Notices:

Guideline Information:

Specialty Area: Disorders of the Musculoskeletal System
Guideline Name: Cohere Medicare Advantage Policy - Interphalangeal Joint Arthroplasty

Date of last literature review: 6/10/2024
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Type: [**X**] Adult (18+ yo) | [_] Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Interphalangeal Joint Arthroplasty

Benefit Category
Not applicable.

Recommended Clinical Approach
Hand or foot small joint arthroplasty is a well-established surgery that can provide pain relief, preserve motion, and improve function**.** The metacarpophalangeal joints (MCPs) and proximal interphalangeal joints (PIPs) are typically the only joints of the hand or foot involved when performing these procedures. This guideline relates to interphalangeal joint arthroplasty so will be limited to those procedures and will not address MCP joint arthroplasty.[1-2]

Evaluation of Clinical Benefits and Potential Harms
Cohere Health uses the criteria below to ensure consistency in reviewing the conditions to be met for coverage of interphalangeal joint arthroplasty procedures. This process helps to prevent both incorrect denials and inappropriate approvals of medically necessary services. Specifically, limiting incorrect approvals reduces the risks associated with unnecessary procedures, such as complications from surgery, adverse reactions, and infection.

The potential clinical harms of using these criteria may include:

- Inadequate management of finger or toe pain from osteoarthritis due to inappropriate denials. Adverse effects from delayed or denied treatment, which can worsen patient outcomes, include progression of joint disease and increased pain. Progression of hand osteoarthritis can lead to decreased grip strength which can interfere with activities of daily living. Progression of foot osteoarthritis can lead to increased pain, decreased ambulation, and potential increased medical complications.
- Risks with inappropriate surgical procedures include infection, bleeding, injury to neurovascular structures, anesthetic risk, and the need for repeat or additional procedures due to implant failure. Notermans et al discuss complications of proximal interphalangeal (PIP) joint

arthroplasty.[6] They reviewed 98 patients who had hand surgery and noted their pain score improved significantly from 42 to 65 at 12 months post-surgery. However, the digit range of motion did not improve and reoperations occurred in 13% of patients. This is useful information to discuss preoperatively to assist in shared decision-making with the patient. Olsen et al report that the most effective treatment for foot PIP joint arthritis or hammertoe is a PIP joint arthrodesis, rather than an arthroplasty.[7]

- Increased healthcare costs and complications from the inappropriate use of emergency services and additional treatments.

The clinical benefits of using these criteria include:

- Improved patient outcomes by ensuring timely and appropriate access to interphalangeal joint arthroplasty for appropriate patients with foot or hand osteoarthritis. In the foot, a PIP joint arthroplasty is used to treat a hammertoe or osteoarthritis and in the hand it is used to treat osteoarthritis.
- Reduction in complications and adverse effects from unnecessary procedures. Notermans et al report upwards of 50% of patients experience complications and 13% undergo reoperations when PIP joint arthroplasty is used to treat osteoarthritis in the hand.[6]
- Enhanced overall patient satisfaction and healthcare experience.

This policy includes provisions for expedited reviews and flexibility in urgent cases to mitigate risks of delayed access. Evidence-based criteria are employed to prevent inappropriate denials, ensuring that patients receive medically necessary care. The criteria aim to balance the need for effective treatment with the minimization of potential harms, providing numerous clinical benefits in helping avoid unnecessary complications from inappropriate care.

In addition, the use of these criteria is likely to decrease inappropriate denials by creating a consistent set of review criteria, thereby supporting optimal patient outcomes and efficient healthcare utilization.

Medical Necessity Criteria

Indications

- ➔ **Interphalangeal joint arthroplasty** is considered appropriate if **ALL** of the following are **TRUE**[1-5]:
  - ◆ The patient has finger or toe pain and loss of motion which is interfering with function and activities of daily living; **AND**
  - ◆ Radiographic confirmation of advanced joint disease of the PIP joint, including **ANY** of the following:
    - PIP joint space narrowing; **OR**
    - Osteophytes; **OR**
    - Subchondral sclerosis or cysts; **AND**
  - ◆ Failure of conservative management (e.g., shoe modification, splinting, padding, rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months. Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement.

Non-Indications

- ➔ **Interphalangeal joint arthroplasty** is not considered appropriate if **ANY** of the following is **TRUE**:
  - ◆ Persistent infection at the surgical site; **OR**
  - ◆ Non-reconstructable or irreparable extensor or flexor tendon mechanism; **OR**
  - ◆ Skin defect or loss; **OR**
  - ◆ The procedure is a distal interphalangeal (DIP) joint arthroplasty with implant[3]; **OR**
  - ◆ The procedure is an interphalangeal joint replacement of the thumb.

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

Medical Evidence

Terpstra et al. (2022) provide insights into prominent hand osteoarthritis (OA) therapy guidelines and examine how closely clinical practices align with these guidelines. While there is a general prevalence of utilizing these treatment options in clinical practice, significant variations exist in their application. An optimal balance between non-pharmacological and pharmacological approaches could be enhanced, perhaps by increasing referrals to physical or occupational therapists. However, 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. Future research should focus on identifying additional factors influencing treatment modalities for hand OA and developing strategies to align hand OA management with established guidelines.[4]

Chan et al. (2021) performed a review on 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 employing silicone implants for DIPJ arthroplasty presents a viable alternative to arthrodesis. Arthroplasty facilitates the preservation of joint mobility, alleviates pain, and enhances patient satisfaction. However, the available evidence remains insufficient to designate any specific implant design or surgical approach as definitively superior to others.[3]

Demino et al. conducted a systematic literature review to present postoperative results of different treatment approaches for proximal interphalangeal joint (PIPJ) fracture-dislocations across diverse studies. Outcomes assessed included range of motion (ROM) at the proximal interphalangeal joint (PIPJ), 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). Of the 1679 screened articles, only 48 were included in the analysis. The weighted means of postoperative ROM (in degrees) at final follow-up were as follows: open reduction (84.7, n = 146), percutaneous fixation (86.5, n = 32), dynamic external fixation (81.7, n = 389), extension-block pinning (83.6, n = 85), and hemi-hamate arthroplasty (79.3, n = 52). Dorsal fracture-dislocations,

regardless of the surgical method used, had an average ROM of 83.2 (n = 321), grip strength of 91% (n = 132), and QuickDASH score of 6.6 (n = 59), while pilon injuries had an average ROM of 80.2 (n = 48), grip strength of 100% (n = 13), and QuickDASH score of 11.4 (n = 13). The authors concluded 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 specific treatment method or fracture type consistently produced superior outcomes.[5]

References

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Clinical Guideline Revision History/Information

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