Cohere Medicare Advantage Policy - Hip Arthroplasty

Clinical Guidelines for Medical Necessity Review

Version: 3
Effective Date: January 16, 2025

Important Notices

Notices & Disclaimers:

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Other Notices:

Guideline Information:

Specialty Area: Disorders of the Musculoskeletal System
Guideline Name: Cohere Medicare Advantage Policy - Hip Arthroplasty
Date of last literature review: 1/14/2025
Document last updated: 1/16/2025
Type: [**X**] Adult (18+ yo) | [**X**] Pediatric (0-17yo)

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Medical Necessity Criteria

Service: Hip Arthroplasty

Benefit Category

Not applicable.

Related CMS Documents

Please refer to the CMS Medicare Coverage Database for the most current applicable CMS National Coverage.[1-7]

- Local Coverage Determination. Total Joint Arthroplasty (L36039)
- Local Coverage Determination. Major Joint Replacement (Hip and Knee). (L33618)
- Local Coverage Determination. Total Joint Arthroplasty. (L33456)
- Local Coverage Determination. Lower Extremity Major Joint Replacement (Hip and Knee). (L36007)
- Local Coverage Determination. Total Joint Arthroplasty. (L39911)
- Local Coverage Determination. Total Hip Arthroplasty. (L34163)
- Local Coverage Determination. Total Hip Arthroplasty. (L36573)

Recommended Clinical Approach

Hip arthroplasty is a surgical intervention to reduce hip pain and restore function by replacing a damaged or diseased hip joint with an artificial prosthesis. It is appropriate in patients with persistent, disabling symptoms despite non-surgical management. Partial hip replacement (hemiarthroplasty) may be indicated when only the femoral side of the hip joint is damaged. Total hip arthroplasty replaces the ball and socket parts of the hip joint in cases of severe damage. If a patient has had a prior hip arthroplasty and presents with pain that may be due to infection, recurrent hip dislocation, aseptic loosening, excessive wear, mechanical failure, or fracture, then revision surgery may be indicated. Hip arthroplasty is generally well-tolerated with appropriate patient selection and confers an improved quality of life.[8-11]

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 hip 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:

- Adverse effects from delayed or denied treatment, such as increased pain and decreased mobility, can worsen patient outcomes. Hip replacement surgery has been shown to be a cost-effective treatment when nonsurgical means do not offer pain relief.[8] Therefore, surgical delay may worsen their outcomes with ongoing persistent pain that could result in opioid dependence, emergency room visits, increased healthcare utilization, and decreased quality of life.[8]
- Risks with inappropriate surgical procedures include infection, bleeding requiring a transfusion, injury to neurovascular structures, anesthetic risk, and need for repeat or additional procedures due to implant failure, periprosthetic fracture, and ongoing pain. The average time to revision of a primary total hip arthroplasty is 8.51 years.[12] If a patient has an inappropriate initial total hip arthroplasty, this can lead to additional surgeries; therefore, careful patient selection is in the patient's best interest.
- Increased healthcare costs and complications from the inappropriate use of emergency services and additional treatments.

The potential clinical benefits of using these criteria include:

- Improved patient outcomes by ensuring timely and appropriate access to hip arthroplasty. In general, careful patient selection confers the best outcomes and can prevent revision surgery.[8,12] The most common indications for hip arthroplasty include pain that cannot be controlled by conservative therapy, functional deficit, and radiologic changes with evidence of joint degeneration.
- Reduction in complications or adverse effects from unnecessary procedures. Given the high rate of revision surgery, with the average time to revision of a primary total hip arthroplasty of only 8.51 years, it is crucial to avoid unnecessary surgery, as in the future, it may result in additional invasive management.[12]

- Appropriate management of orthopaedic trauma. Hip arthroplasty is indicated for adults with a femoral neck fracture. Patients with a hip fracture who have surgery performed within 24 to 48 hours of admission have better outcomes.[9] This criteria allows approval for patients with an acute fracture of the femoral head or neck without requiring any additional treatment in order to expedite their treatment.
- Enhanced overall patient satisfaction with the healthcare experience and return of function. Positive patient-reported outcomes include reduced pain, improved function, and increased quality of life for individuals.

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

➔ **Hip arthroplasty** is considered appropriate if **ANY** of the following is **TRUE**:

- ◆ The procedure is a **total hip arthroplasty** and **ALL** of the following are **TRUE**:
  - **ANY** of the following is true:
    - If a bilateral total hip arthroplasty is performed, documentation of advanced joint disease must be present in both hips[1,4-7]; **OR**
    - Not applicable (i.e., single-hip arthroplasty); **AND**
  - **ANY** of the following is **TRUE:**
    - Advanced joint disease and **ALL** of the following[1,4-7]:
      - ◆ Pain or functional disability[1,4-7]; **AND**

- Failure of conservative management for greater than 3 months, including **ANY** of the following[1,4-7]:
    - Rest or activity restriction as is reasonable[2,4]; **OR**
    - Anti-inflammatory medications or analgesics[2,4]; **OR**
    - Flexibility and muscle-strengthening exercises[2,4]; **OR**
    - Supervised physical therapy[2,4]; **OR**
    - Assistive device use[2,4]; **OR**
    - Therapeutic injections into the hip[2,4]; **OR**
    - Weight reduction as appropriate[2,4]; **OR**
    - The medical record indicates circumstances under which nonsurgical management would be ineffective or counterproductive[2,4]; **AND**
- **ANY** of the following:
    - Radiographic-supported evidence[1-7]; **OR**
    - When conventional radiography is not adequate, magnetic resonance imaging (MRI) or computed tomography (CT) (in situations when MRI is non-diagnostic or not able to be performed)-supported evidence (i.e., subchondral cysts, subchondral sclerosis, periarticular osteophytes, joint subluxation, joint space narrowing, avascular necrosis)[1-7]; **OR**
- Malignancy of the joint involving the bones or soft tissues of the pelvis or proximal femur[4,6-7]; **OR**
- Avascular necrosis[4,6-7]; **OR**
- Fracture of the femoral neck[4,6-7]; **OR**
- Acetabular fracture[4,6-7]; **OR**
- Nonunion or failure of prior hip fracture surgery[4,6-7]; **OR**
- Malunion of acetabular or proximal femur fracture[4,6-7]; **OR**

- The procedure is a **partial hip arthroplasty (hip hemiarthroplasty)** and **ANY** of the following is **TRUE**:

- Displaced femoral neck fractures among adults aged 65 and older[9,13-14]; **OR**
- Acute fracture of the femoral head or neck that is untreatable with open reduction and internal fixation (ORIF)[9]; **OR**
- Fracture dislocation of the hip untreatable with ORIF[8,9]; **OR**
- Avascular necrosis of the femoral head[8,9]; **OR**
- Non-union fracture of the femoral neck[8,9]; **OR**
- Degenerative arthritis of the femoral head only in which the acetabulum does not need replacement[8,9]; **OR**

◆ The procedure is a **replacement/revision of prior arthroplasty** and **ANY** of the following is **TRUE:**

- Loosening of one or both components[1,4-7]; **OR**
- Fracture or mechanical failure of the implant[1,4-7]; **OR**
- Recurrent or irreducible dislocation[1,4-7]; **OR**
- Infection[1,4-7]; **OR**
- Treatment of a displaced periprosthetic fracture[1,4-7]; **OR**
- Clinically significant leg length inequality that is not amenable to conservative treatment[1,4-7]; **OR**
- Progressive or substantial bone loss[1,4-7]; **OR**
- Bearing surface wear resulting in symptomatic synovitis or local bone/tissue reaction[1,4-7]; **OR**
- Clinically significant audible noise[1,4-7]; **OR**
- Adverse local tissue reaction.[1,4-7]

Non-Indications

➔ **Hip Arthroplasty** is not considered appropriate if **ANY** of the following is **TRUE**[4-9,11]:

◆ Active infection of the hip joint[4-7]; **OR**
◆ Active systemic bacteremia[4-7]; **OR**
◆ Active urinary tract or dental infection[4-7]; **OR**
◆ Active skin infection (exception of recurrent cutaneous staph infections)[4-7]; **OR**
◆ Open wound within the planned surgical site of the hip; **OR**
◆ Rapidly progressive neurological disease, unless a concomitant displaced femoral neck fracture is present[4-7]; **OR**
◆ Skeletal immaturity[16]; **OR**
◆ Neuropathic/neurotrophic arthritis[4-7]; **OR**
◆ Absence or relative insufficiency of abductor musculature.[4-7]

Level of Care Criteria

Inpatient or outpatient.

Procedure Codes (CPT/HCPCS)

HCPCS/CPT Code	Code Description
26990	Drainage of abscess or blood accumulation in pelvis or hip joint
26991	Incision of infected fluid-filled sac (bursa) of pelvis or hip joint
27030	Incision of hip joint with drainage
27125	Hemiarthroplasty, hip, partial (eg, femoral stem prosthesis, bipolar arthroplasty)
27130	Replacement of thigh bone and hip joint prosthesis
27132	Conversion of previous replacement of thigh bone and hip joint prosthesis
27134	Revision of thigh bone and hip joint prosthesis
27137	Revision of hip joint prosthesis
27138	Revision of femoral component of total hip arthroplasty; Revision of femoral component of total hip arthroplasty with allograft
27236	Open treatment of femoral fracture, proximal end, neck, internal fixation or prosthetic replacement
27250	Treatment of hip dislocation
27299	Unlisted procedure, pelvis or hip joint

Medical Evidence

Published in 2019, the Hip Fracture Evaluation with Alternatives of Total Hip Arthroplasty (HEALTH) trial, an expertise-based randomized controlled trial, enrolled 1495 patients across 10 countries to determine the most appropriate procedure to surgically manage hip fractures in older adults with displaced femoral neck fractures. Patients aged 50 and older underwent either total hip arthroplasty (THA) or hemiarthroplasty. The study team found similar mortality rates, no significant difference in the incidence of secondary procedures between groups, as well as what was ultimately deemed a "clinically unimportant" improvement among THA recipients as compared to hemiarthroplasty recipients. Therefore, the authors felt there to be limited advantages of THA with a higher risk profile in this patient population. This landmark study began to dismantle the traditional dogma of THA as the standard of care for patients of all ages with displaced femoral neck fractures.[13]

A 2021 meta-analysis of 40 studies comprising 3,561,446 hips found several patient-related risk factors that were associated with a higher risk of periprosthetic joint infection (PJI) after THA. High body mass index (BMI), femoral neck fracture, and opioid use conferred a higher risk of PJI. Interestingly, biological female sex, dislocation/dysplasia, and osteoarthritis were protective factors. The authors noted the importance of reducing the risk of PJI and subsequent revision or other invasive management by careful patient selection and optimization of modifiable risk factors.[17]

The American Academy of Orthopaedic Surgeons (AAOS) has published two guidelines pertaining to hip arthroplasty. *Management of Hip Fractures in Older Adults*, adopted in 2021, recommends arthroplasty over fixation for unstable femoral neck fractures.[9] The authors cite a decreased rate of reoperation among arthroplasty patients, though they note no statistical difference in mortality upon composite analysis of the reference studies.[9] *Management of Osteoarthritis of the Hip*, adopted in 2023, provides a robust set of clinical indications for surgical management of osteoarthritis, including hip arthroplasty.[11] The clinical practice guideline supports the use of NSAIDs to relieve pain and facilitate movement. In addition, it endorses careful patient screening and appropriate optimization in order to improve surgical

outcomes.[11] The AAOS has also issued position statements pertaining to hip arthroplasty. Information statement 1047, published in 2016, acknowledges the increased patient safety risks conferred by tobacco use - including pneumonia, impeded healing, surgical site infection, postoperative cardiopulmonary events, and death.[18] The AAOS states that patients who are active smokers may reduce these risks through cessation of smoking prior to surgery; they also note the special role orthopaedic surgeons play in counseling patients on the benefits of reduced or eliminated tobacco use before surgery. Importantly, unconfirmed cessation is not endorsed as a hard stop to surgery; rather, the surgeon's unique role as an advocate for preoperative smoking cessation is emphasized. Statements 1040 and 1184 discuss the impact of obesity on musculoskeletal conditions.[19,20] Statement 1184 endorses the importance of continued patient-surgeon conversation around the increased surgical risks associated with obesity, including increased complications and rates of hardware failure following hip replacement. Patients with morbid obesity (BMI of 40 or above) are encouraged to participate in a weight loss program, obtain weight reduction resources through their physician, rectify nutritional deficiencies, and consider a delay in surgical treatment if it would facilitate participation in weight loss interventions that may improve surgical outcomes. Statement 1040 reinforces the risks associated with obesity and total joint arthroplasty and encourages adequate patient counseling prior to surgery.

Social determinants of health remain an important area of ongoing orthopaedic surgery research, with recent literature raising questions regarding the healthcare disparities that may be potentiated by care limitations based on obesity and smoking status/nicotine dependence.[21-24] Other ongoing research interrogates the impacts that biological sex, race, and socioeconomic status have on hip arthroplasty utilization and outcomes.[26-30]

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concepts 2022 Oct 20 (pp. 25-43). *Cham: Springer International Publishing.*

Clinical Guideline Revision History/Information

Original Date: May 27, 2024		
Review History		
Version 2	6/10/2024	422.101 Disclaimer added
Version 3	1/15/2025	Annual policy review & restructure: • Improved and expanded references. • Updated recommended clinical approach to the current format. • Medical evidence section and references updated to reflect the current literature and professional society guidelines. • Updated conservative care language to better reflect current standard language • Reordered indications to place total hip arthroplasty first • Conservative management criteria reorganized to better align with CMS guidance.