

Total Hip Arthroplasty (Replacement)

Disclaimer

Clinical guidelines are developed and adopted to establish evidence-based clinical criteria for utilization management decisions. Clinical guidelines are applicable according to policy and plan type. The Plan may delegate utilization management decisions of certain services to third parties who may develop and adopt their own clinical criteria.

Coverage of services is subject to the terms, conditions, and limitations of a member's policy, as well as applicable state and federal law. Clinical guidelines are also subject to in-force criteria such as the Centers for Medicare & Medicaid Services (CMS) national coverage determination (NCD) or local coverage determination (LCD) for Medicare Advantage plans. Please refer to the member's policy documents (e.g., Certificate/Evidence of Coverage, Schedule of Benefits, Plan Formulary) or contact the Plan to confirm coverage.

Summary

Total hip arthroplasty (THA), or total hip replacement, is the surgical reconstruction or replacement of the entire hip joint, which is composed of the femoral head (ball) and the acetabulum (socket). The components of a total hip arthroplasty implant are the femoral stem, femoral head (bearing surface), acetabular liner (bearing surface), and acetabular shell. There are many conditions that may deteriorate the hip joint, leading to pain and decreased mobility. A detailed musculoskeletal examination should be performed to assess functional level, hip anatomy, specialized leg tests, differential diagnosis, pain patterns, symptoms, and safety.

This guideline does not address partial hip arthroplasty (hip hemiarthroplasty), hip arthroscopy, or hip resurfacing; please refer to MCG criteria for these procedures.

Definitions

"Ambulatory" is a stay in a facility for up to 23 hours.

"Acetabular dysplasia" of the hip is when there are abnormal changes to the orientation (direction or version) or in the shape (inclination or depth) of the acetabulum.

"Avascular necrosis" is osteonecrosis (bone death) when there is alteration of blood supply to the bone. There are numerous causes for avascular necrosis, but in some cases the cause is unknown.

“Developmental dysplasia of the hip (DDH)” is a morphologic acetabular variation that presents briefly after birth and/or in pediatric patients.

“Kellgren-Lawrence System” is a five-grade classification system describing radiographic findings for osteoarthritis (Table 1).

Table 1. Kellgren-Lawrence System for Classifying Osteoarthritis	
Grade	Radiographic Findings
0	No radiographic features of osteoarthritis are present
I	Doubtful joint space narrowing and possible osteophytic lipping
II	Definite osteophytes and possible joint space narrowing
III	Moderate multiple osteophytes, definite joint space narrowing, some sclerosis, and possible deformity of bone contour
IV	Large osteophytes, marked joint space narrowing, severe sclerosis, and definite deformity of bone contour

“Osteoarthritis” (degenerative joint disease) is the most common form of arthritis and occurs when the cartilage cushion over the end of the bone wears away to a varying degree. The primary symptoms are joint pain, stiffness and movement restriction.

“Revision” of total hip replacement is a surgical procedure to replace or reconstruct a prior hip replacement. The need for a revision procedure occurs when the original replacement fails and the patient is symptomatic. The failure may be due to one or more of the following conditions such as infection, instability, or other indications.

“Rheumatoid arthritis” is an autoimmune disease that causes chronic inflammation in joints and tissue. Over time, this inflammation can lead to joint deformity and erosion of bone and cartilage.

“Tönnis classification system” is a grading system with progressive degrees of degenerative changes in the hip (Table 2).

Table 2. Tönnis Classification System for Presence of Osteoarthritis in the Hips	
Grade 0	No signs of osteoarthritis

Grade 1	-Slight narrowing of joint space; and -Slight lipping at joint margin; and -Slight sclerosis of the femoral head or acetabulum
Grade 2	-Small cysts in the femoral head or acetabulum; and -Increasing narrowing of joint space; and -Moderate loss of femoral head sphericity
Grade 3	-Large cysts; and -Severe narrowing or obliteration of the joint space; and -Severe deformity of the femoral head; and -Avascular necrosis

A. Clinical Indications

1. Medical Necessity Criteria for Clinical Review

- a. General Medical Necessity Criteria
- b. Indication-Specific Criteria

2. Level of Care

- a. Level of Care Initial Clinical Review
- b. Level of Care Subsequent Clinical Review

3. Experimental or Investigational / Not Medically Necessary

B. Applicable Billing Codes

C. References

Medical Necessity Criteria for Clinical Review

General Medical Necessity Criteria

(For partial hip arthroplasty, hip arthroscopy, or hip resurfacing, please see MCG criteria)

Total hip arthroplasty (THA) for a unilateral hip is considered medically necessary when ONE of the following criteria is met:

1. The member meets medical necessity for advanced joint disease as indicated by ALL of the following:
 - a. Radiologic or arthroscopic findings of advanced hip joint destruction of ONE of the following:
 - i. Kellgren Lawrence Grade III or IV radiographic findings (Table 1); *or*
 - ii. Tönnis Classification Grade 3 radiographic findings (Table 2); *or*
 - iii. Symptomatic avascular necrosis with the collapse of the femoral head with accompanying radiographic changes; *or*

- iv. Symptomatic inflammatory joint disease (arthropathy) affecting both the femoral head and acetabulum with joint space narrowing, bone-on-bone, with accompanying radiographic changes; *and*
- b. Severe pain persisting in the affected hip that interferes with functional activity or age-appropriate activities for at least 3 months (e.g., ambulation, prolonged standing, ability to sleep); *and*
- c. There has been a failure to decrease pain or improve function after at least a 3-month trial of conservative treatment (non-surgical) which has included ALL of the following:
 - i. Active and ongoing participation in physical therapy (documentation) or a well-documented home exercise program under the supervision of a physical therapist or physician (e.g., lower extremity flexibility and strengthening program, activity modification, and/or weight loss program), unless poorly tolerated or contraindicated; *and*
 - ii. Oral/topical medications (e.g., analgesics, NSAIDs, tumor necrosis factor inhibitors), unless poorly tolerated or contraindicated; *and*
 - iii. No intra-articular steroid injections to the hip within three months before the surgery date; *and*
- d. If there is a separate request for the device, implant or prosthesis that will be inserted during surgery, it must be FDA approved (unless the member is enrolled in an approved clinical trial as defined by the plan benefit); *and*
- e. No contraindication present or the request is not considered Experimental or Investigational, or Not Medically Necessary, as listed in this guideline; *or*
- 2. Failure of previous surgical interventions such as ONE of the following:
 - a. Hip non-union or failure of previous hip fracture surgery; *or*
 - b. Previous femoral or acetabular osteotomy; *or*
 - c. Previous partial hip arthroplasty that needs conversion to total hip arthroplasty; *or*
- 3. Post-traumatic injury (e.g., fracture, infection) causing debilitating hip joint destruction affecting movement, causing pain and stiffness; *or*
- 4. Bone tumor involving the hip or symptomatic or severe hip dysplasia that requires treatment with a total hip arthroplasty as evaluated by the treating surgeon (e.g., advanced adult hip dysplasia or pediatric developmental dysplasia of the hip (DDH)).

Please Note: If the member is a smoker or nicotine product user, it is recommended the member has stopped using within 4 weeks of surgery or has been provided a well-documented education plan on options to quit such as referral to a cessation program, pharmacologic, and over-the-counter treatments.

Indication-Specific Criteria

Simultaneous Bilateral Total Hip Arthroplasty

Total hip arthroplasty for simultaneous bilateral surgery is considered medically necessary if ALL of the following criteria are met:

1. Each hip meets the General Medical Necessity Criteria; *and*
2. Meets the inpatient hospital Level of Care criteria.

Removal or Revision of Total Hip Arthroplasty (THA)

Removal (resection with subsequent reimplantation at a later time or permanent resection arthroplasty with no reimplantation planned) or Revision (members may require one or multi-staged surgeries to complete revision over time)

The removal or revision of a total hip prosthesis is considered medically necessary when ALL of the following criteria are met:

1. The affected hip requested is without a history of prior infection, current or ongoing hip infection (e.g., supporting labs and cultures, no longer on antibiotics, assessment by treating surgeon);
and
2. One of the following conditions exist:
 - a. Bearing surface wear leading to symptomatic synovitis, destruction of local bone, or soft tissue reaction; *or*
 - b. Prosthesis/hardware failure, damage or fracture; *or*
 - c. Loosening of prosthesis, implant or components that is confirmed by imaging; *or*
 - d. Periprosthetic hip fracture; *or*
 - e. Recurrent instability or dislocation of the hip prosthetic; *or*
 - f. The member has functional disability AND persistent pain for more than 6 months; *or*
 - g. Significant leg discrepancy post THA; *or*
3. If the member has an actively infected hip prosthesis or periprosthetic infection, one of the following criteria must be met:
 - a. The member must first have completed medical management (e.g., antibiotics) or interventions such as washouts (including irrigation and debridement) prior to surgery day of inserted prosthesis, i.e., the member must clear out all infection (e.g., negative cultures) prior to the day of planned procedure whether one-stage or two-stage exchange); *or*
 - b. There is documentation for either planned medical or interventional management to address the source of infection prior to revision/replacement of the prosthesis (e.g., debridement of infected tissue, removal of implants and/or insertion of antibiotic impregnated prosthesis); *or*
4. Additional staged surgery is needed as part of a multispecialty approach to any one of the conditions listed above. This could include, but is not limited to, the replacement of impregnated antibiotic spacers, additional joint washouts, and the removal or replacement of hardware.

Level of Care

Level of Care Initial Clinical Review

Ambulatory Surgical Center or Outpatient Hospital

Ambulatory surgical center or outpatient hospital level of care is considered medically necessary for total hip arthroplasty (THA) if ONE of the following indications is met:

1. Unilateral THA; *or*
2. Select ambulatory centers capable of performing bilateral THA, with each hip meeting medical necessity; *or*
3. Staged THA on both hips (each hip must still meet medical necessity, and the procedures are typically staggered between 30-90 days following the first THA); *or*
4. An additional day as an ambulatory or observation level of care might be needed for a safe transition to oral pain medication.

Inpatient Hospital Simultaneous Bilateral Total Hip Arthroplasty

Inpatient hospital level of care for simultaneous bilateral total hip arthroplasty may be considered medically necessary if an ambulatory or outpatient hospital is unable to monitor the member's needs. Furthermore, each hip must meet medical necessity.

Inpatient Hospital Unilateral or Bilateral Total Hip Arthroplasty

Inpatient hospital level of care for unilateral or bilateral total hip arthroplasty (THA) may be considered medically necessary if ONE of the following is met:

1. Non-elective surgery for unilateral or bilateral; *or*
2. For members requesting unilateral or bilateral revision procedures that require an extended stay outside of the ambulatory or outpatient hospital timeframe, or are unable to be discharged and expected to be admitted/transferred to acute or subacute rehab facility (the member must also meet Oscar's utilization review criteria for the rehabilitation facility); *or*
3. The member requires more prolonged postoperative treatment or management for unilateral or bilateral due to comorbidities which may include ANY of the following:
 - a. Need for parenteral bridging anticoagulation
 - b. NYHA class III or IV heart failure
 - c. Pulmonary fibrosis
 - d. Pulmonary hypertension
 - e. History of thromboembolism
 - f. Extensive edema
 - g. Chronic systemic corticosteroid use
 - h. Severely reduced renal function
 - i. Poorly controlled type 1 diabetes
 - j. Recent history of falls
 - k. Significant dementia
 - l. BMI > 40

- m. Age > 70 and an additional comorbidity as listed in this section
- n. Significant movement abnormalities (eg, stroke, Parkinson disease, dependent functional status); *or*
- 4. For a member to meet inpatient level of care for pain management after THA surgery, the member must meet the criteria in MCG Pain Management GRG (PG-PM) criteria for unilateral or bilateral; *or*
- 5. An inpatient admission for a unilateral or bilateral request may be considered medically necessary when the member meets MCG Ambulatory Surgery Exception Criteria (CG-AEC).

Level of Care Subsequent Clinical Review

Inpatient Hospital Subsequent Clinical Review

The Plan considers extension requests for inpatient (IP) level of care medically necessary when the member continues to meet extension criteria in MCG Hip Arthroplasty for milestones of recovery, clinical status is improving during IP stay, and is not ready to be transitioned to an alternative or lower level of care. Extension requests should be based on medical records of progress.

Experimental or Investigational / Not Medically Necessary

The Plan considers the following conditions as contraindications to total hip arthroplasty (THA):

- 1. Active infection in the hip, unless surgery is for revision of THA
- 2. Active wound or skin infection at the planned hip joint for surgery
- 3. Known allergy to components of the implant
- 4. Generalized infection or active illness currently under medical management that would affect surgical risk or outcomes
- 5. The member has not reached skeletal maturity

The following indications are considered not medically necessary:

- 1. Charcot joint
- 2. Customized joint implants, whether total or in part
- 3. Progressive neurologic disease affecting lower extremities or significant muscular atrophy of the hip or leg musculature that would compromise stability
- 4. Severe immunocompromised system
- 5. Vascular insufficiency that would compromise recovery
- 6. Any disease or process that rapidly destroys bone

The following indications are considered experimental, investigational, or unproven:

- 1. Computer-assisted total hip arthroplasty (CA-THA) for surgical navigation uses anatomical landmarks to collect morphologic information to provide intraoperative feedback regarding component positioning and alignment (e.g. OrthoGrid Hip AI).

Applicable Billing Codes

Table 1	
Initial Total Hip Arthroplasty (THA)	
CPT/HCPCS codes considered medically necessary if criteria are met:	
<i>Code</i>	<i>Description</i>
20999	Unlisted procedure, musculoskeletal system, general
27130	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip arthroplasty), with or without autograft or allograft
27132	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft
C1776	Joint device (implantable)

Table 2	
Removal or Revision of Total Hip Arthroplasty (THA)	
CPT/HCPCS codes considered medically necessary if criteria are met:	
<i>Code</i>	<i>Description</i>
27090	Removal of hip prosthesis; (separate procedure)
27091	Removal of hip prosthesis; complicated, including total hip prosthesis, methylmethacrylate with or without insertion of spacer
27134	Revision of total hip arthroplasty; both components, with or without autograft or allograft
27137	Revision of total hip arthroplasty; acetabular component only, with or without autograft or allograft
27138	Revision of total hip arthroplasty; femoral component only, with or without allograft
27286	Arthrodesis, hip joint (including obtaining graft); with subtrochanteric osteotomy

Table 3	
CPT/HCPCS codes <u>not considered medically necessary</u> for indications in this guideline:	
<i>Code</i>	<i>Description</i>
C1776	Joint device (implantable) <u>Due to the broad nature of this code and lack of specificity in certain scenarios, clarification is provided below:</u> - When this code is billed for customized hip implants or devices that are not FDA-approved, then it is considered NOT medically necessary

Table 4	
CPT/HCPCS codes considered experimental or investigational for indications in this guideline:	
<i>Code</i>	<i>Description</i>
0054T	Computer-assisted musculoskeletal surgical navigational orthopedic procedure, with image-guidance based on fluoroscopic images (List separately in addition to code for primary procedure)
0055T	Computer-assisted musculoskeletal surgical navigational orthopedic procedure, with image-guidance based on CT/MRI images (List separately in addition to code for primary procedure)
20985	Computer-assisted surgical navigational procedure for musculoskeletal procedures, image-less (List separately in addition to code for primary procedure)

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