Total Hip Arthroplasty (Replacement)

Summary

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

This guideline does not address partial hip arthroplasty (hip hemiarthroplasty), hip arthroscopy, or hip resurfacing, please see MCG criteria.

Definitions

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

"Avascular necrosis" is spontaneous 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.

"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 cartilage gradually wears down and affected bones no longer have the cushion of protective tissue. The primary symptoms are joint pain, stiffness and movement restriction.

"Revision" of total hip replacement is when surgery is needed to replace or reconstruct prior hip replacement due to failure, infection, instability or other indications.

"Rheumatoid arthritis" is an autoimmune disease causing chronic inflammation in joints and tissue. Over long periods of time, the inflammation can cause joint deformity, bone and cartilage erosion.

"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

Clinical Indications

General Clinical Indications

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

Total hip arthroplasty 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 a 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 based on the indications listed below; *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 or dysplasia involving the hip that requires excision.

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.

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

1. Each hip meets medical necessity for criteria under General Clinical Indications; *and*
2. Meets the inpatient hospital Levels of Care criteria (see below).

Removal or Revision of Total Hip Arthroplasty
Removal (resection with subsequent reimplantation at a later time or permanent resection arthroplasty with no reimplantation planned) or Revision (members may require 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. In the affected hip requested without history of prior infection, no 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:
    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*; 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.

Levels of Care

Ambulatory Surgical Center, Outpatient Hospital

The following indications are appropriate for ambulatory surgical centers and outpatient hospital level of care:

- Unilateral THA
- Select ambulatory centers with capability to perform bilateral THA and each hip must meet medical necessity
- Staged THA on both hips (request for each hip still needs to meet medical necessity and staggered typically between 30-90 days following the first total hip joint replacement).
- An additional day as an ambulatory or observation level of care might be needed for a safe transition to oral pain medication.

Inpatient Hospital

Inpatient hospital level of care 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.

The member may also meet inpatient hospital level of care for unilateral or bilateral hip replacement if ONE of the following are met:

- Non-elective surgery for unilateral or bilateral; *or*
- 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*
- The member requires more prolonged postoperative treatment or management for unilateral or bilateral due to comorbidities which may include ANY of the following:
    - need for parenteral bridging anticoagulation
    - NYHA class III or IV heart failure
    - pulmonary fibrosis
    - pulmonary hypertension
    - history of thromboembolism

    - extensive edema
    - chronic systemic corticosteroid use
    - severely reduced renal function
    - Poorly controlled type 1 diabetes
    - recent history of falls
    - Significant dementia
    - BMI > 40
    - Age > 70 and an additional comorbidity as listed in this section
    - Significant movement abnormalities (eg, stroke, Parkinson disease, dependent functional status); *or*
- 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*
- 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).

Extension Requests

The Plan considers extension requests for inpatient 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:

- Active infection in the hip, unless surgery is for revision for THA
- Active wound or skin infection at the planned hip joint for surgery
- Allergy to components of the implant
- Generalized infection, active illness under medical managementThe member has not reached skeletal maturity

The following indications are considered not medically necessary:

- Charcot joint
- Customized total or partial hip implant
- Progressive neurologic disease affecting lower extremities or significant muscular atrophy of the hip or leg musculature that would compromise stability
- Severe immunocompromised system
- Vascular insufficiency that would compromise recovery
- Any disease or process that rapidly destroys bone

The following indications are considered experimental/investigational/unproven:

- 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 (HCPCS/CPT Codes)

Service(s) name	
Initial THA CPT/HCPCS Codes considered medically necessary if criteria are met:	
Code	*Description*
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)
Removal or Revision for THA considered medically necessary if criteria are met:	
Code	*Description*
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

CPT/HCPCS codes *not* considered medically necessary or considered experimental or investigational:	
Code	*Description*
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)
C1776	Joint device (implantable) • Due to the broad nature of this code and lack of specificity in certain scenarios, clarification is provided below: • When this code is billed for customized hip implant, or devices not FDA approved, then it is considered NOT medically necessary.

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