

02-20000-50

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## Subject: Hip Arthroplasty

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<a href="#">Position Statement</a>	<a href="#">Billing/Coding</a>	<a href="#">Reimbursement</a>	<a href="#">Program Exceptions</a>	<a href="#">Definitions</a>	<a href="#">Related Guidelines</a>
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### DESCRIPTION:

Arthroplasty describes the surgical replacement or reconstruction of a joint with implanted devices when the joint has been damaged by an arthritic, traumatic, or malignant process. Individuals with advanced arthritis of the hip may be candidates for either traditional total hip replacement (arthroplasty) or hip resurfacing (hip resurfacing arthroplasty). Each of these procedures is a type of hip replacement.

Total hip arthroplasty describes the reconstruction of the entire joint articular surfaces, including the femoral head and acetabular sides. Hip resurfacing arthroplasty replaces the articular surface of the femoral head with limited removal of femoral bone and the entire surface of the acetabulum.

Revision/conversion hip arthroplasty describes surgical reconstruction due to failure or complication of a previous arthroplasty or reconstruction.

Elective arthroplasty surgery may be considered when pain and documented loss of function cause a diminished quality of life.

### POSITION STATEMENT:

#### **General criteria for elective hip arthroplasty**

Elective hip arthroplasty meets the **definition of medical necessity** when **ALL** of the following are met:

- Deviation from normal hip function, which may include painful weight bearing; painful or inadequate range of motion to accomplish age-appropriate activities of daily living (ADLs) and/or employment; or mechanical catching/locking
- Medically stable with no uncontrolled comorbidities (e.g., diabetes)
- Does not have an active local or systemic infection

- Does not have active, untreated drug dependency (including but not limited to narcotics, opioids, muscle relaxants) unless engaged in treatment program
- Good oral hygiene and does not have major dental work scheduled or anticipated (ideally within one year of joint replacement)

**Clinical notes should address:**

- Symptom onset, duration, and severity
- Loss of function and/or limitations
- Type and duration of non-operative management modalities

Non-operative management must include at least two of the following, unless otherwise specified in clinical indications below:

- Rest or activity modifications/limitations
- Weight reduction with elevated BMI
- Protected weight-bearing with cane, walker or crutches
- Physical therapy modalities
- Physician-supervised exercise program (including home exercise program)
- Pharmacologic treatment: oral/topical NSAIDS, acetaminophen, or analgesics
- Intra-articular corticosteroid injection(s)

**Total Hip Arthroplasty (THA)**

Total hip arthroplasty **meets the definition of medical necessity** for the following:

- Hip pathology due to:
  - Rheumatoid arthritis
  - Femoral neck fracture in the setting of pre-existing arthritis, malignancy, failure of previous surgery, or dysplasia
  - Avascular necrosis, confirmed by imaging

**OR**

- When **ALL** of the following are met:
  - Pain due to advanced osteoarthritis (Kellgren-Lawrence\*\* grade 3 or 4 or Tonnis\*\*\* grade 2 or 3), and documented loss of function that has been present for at least 6 months
  - Failure of at least 3 months of non-operative management
  - Physical exam demonstrates findings of hip pathology as evidenced by one or more of the following:
    - Painful, limited range of motion or antalgic gait
    - Contracture
    - Crepitus
    - Leg length difference

- Imaging demonstrates advanced hip joint arthritis of at least Kellgren-Lawrence\*\* grade 3 or 4, OR Tonnis\*\*\* grade 2 or 3
- No corticosteroid injection into the joint within 3 months of surgery
- There are no contraindications to hip arthroplasty [e.g., allergy to implant metal selected, chronic renal insufficiency, local or remote active infection, female of child-bearing age (applies to metal-on-metal replacements only)]

### **Hip Resurfacing Arthroplasty**

Hip resurfacing arthroplasty **meets the definition of medical necessity** when **ALL** of the following are met:

- Pain and documented loss of function have been present for at least 6 months
- Failure of at least three 3 months of non-operative management
- Physical exam has typical findings of hip pathology as evidenced by one or more of the following:
  - Painful, limited range of motion or antalgic gait
  - Contracture
  - Crepitus
  - Leg length difference
- Imaging demonstrates advanced hip joint pathology of at least Kellgren-Lawrence\*\* grade 3 to 4, or Tonnis\*\*\* grade 2 or 3, or avascular necrosis involving less than 50% of the femoral head
- Male candidate is less than 65 years old, or female candidate is less than 55 years old
- BMI less than 40
- No corticosteroid injection into the joint within 3 months of surgery
- No evidence of any of the following contraindications:
  - Osteoporosis or osteopenia (documented by DEXA scan bone mineral density evaluation)
  - Other co-morbidity [including medications that contribute to decreased bone mineral density (glucocorticoid steroids, heparin, aromatase inhibitors, thiazolidinediones, proton pump inhibitors, loop diuretics, cyclosporine, anti-retrovirals, anti-psychotics, anti-seizures, certain breast cancer drugs, certain prostate cancer drugs, depo-provera, aluminum-containing antacids)]
  - Cystic degeneration at the junction of the femoral head and neck on radiographs or MRI or CT
  - Malignancy at the proximal femur
  - Evidence of current, ongoing, or inadequately treated hip infection, or sepsis
  - Female of child-bearing age
  - Chronic renal insufficiency
  - Metal allergy

## **Total Hip Arthroplasty Revision/Conversion Arthroplasty**

Total hip arthroplasty revision/conversion arthroplasty **meets the definition of medical necessity** for the following indications:

- Previous removal of infected hip prosthesis **AND** no evidence of current, ongoing, or inadequately treated hip infection [ruled out by normal inflammatory markers\* (ESR and CRP)] **AND** off antibiotics

**\*NOTE:** If these inflammatory markers are elevated, further evaluation is required, including an aspiration with synovial fluid WBC count, gram stain and cultures, or an intraoperative frozen biopsy.

**OR**

- When **ALL** of the following are met:
  - Failed hip arthroplasty, defined by symptomatic or unstable joint upon physical exam (documented persistent, severe and disabling pain, loss of function, instability)
  - Physical exam and radiographic evidence supports extensive disease or damage due to fracture, malignancy, osteolysis, other bone or soft-tissue reactive or destructive process, inappropriate positioning of components, recurrent instability, subluxation, dislocation, or other mechanical failure
  - No evidence of current, ongoing, or inadequately treated hip infection [ruled out by normal inflammatory markers\* (ESR and CRP)] **AND** off antibiotics

**\*NOTE:** If these inflammatory markers are elevated, further evaluation is required, including an aspiration with synovial fluid WBC count, gram stain and cultures, or an intraoperative frozen biopsy.

### **\*\*Kellgren-Lawrence Grading System:**

Grade 0: No radiographic features of osteoarthritis

Grade 1: Possible joint space narrowing and osteophyte formation

Grade 2: Definite osteophyte formation with possible joint space narrowing

Grade 3: Moderate multiple osteophytes, definite narrowing of joint space, some sclerosis and possible deformity of bone contour (some sclerosis and cyst formation and deformity of femoral head and acetabulum)

Grade 4: Large osteophytes, marked narrowing of joint space, severe sclerosis and definite deformity of bone contour (increased deformity of the femoral head and acetabulum)

### **\*\*\*Tonnis Classification of Osteoarthritis by Radiographic Changes**

0: No signs of osteoarthritis

1: Mild: Increased sclerosis, slight narrowing of the joint space, no or slight loss of head sphericity

2: Moderate: Small cysts, moderate narrowing of the joint space, moderate loss of head sphericity

3: Severe: Large cysts, severe narrowing or obliteration of the joint space, severe deformity of the head

### **BILLING/CODING INFORMATION:**

#### **CPT Coding**

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
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; acetabular component only, with or without autograft or allograft

#### **HCPCS Coding**

S2118	Metal-on-metal total hip resurfacing, including acetabular and femoral components
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### **REIMBURSEMENT INFORMATION:**

Refer to section entitled [POSITION STATEMENT](#).

### **PROGRAM EXCEPTIONS:**

**Federal Employee Program (FEP):** Follow FEP guidelines.

**State Account Organization (SAO):** Follow SAO guidelines.

**Medicare Advantage products:** The following Local Coverage Determination (LCD) was reviewed on the last guideline review date: Major Joint Replacement (Hip and Knee) (L33618), located at fcso.com.

### **DEFINITIONS:**

No guideline specific definitions apply.

### **RELATED GUIDELINES:**

[Femoroacetabular Impingement \(FAI\) Syndrome Surgery \(Open or Arthroscopic\), 02-20000-35](#)  
[Hip Arthroscopy and Open, Non-Arthroplasty Hip Repair, 02-20000-55](#)  
[Computer-Assisted Navigation for Orthopedic Procedures, 02-20000-30](#)

### **OTHER:**

None applicable.

### **REFERENCES:**

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3. American Academy of Orthopaedic Surgeons (AAOS). OrthoInfo. Hip Resurfacing. Accessed at <http://orthoinfo.aaos.org/topic.cfm?topic=A00586>.
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5. Blue Cross Blue Shield Association Medical Policy Reference Manua. 7.01.80, Hip Resurfacing. September 2015.
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8. Ghomrawi HMK, et al. Appropriateness criteria and elective procedures—total joint arthroplasty. *New England Journal of Medicine* 367.26 (2012): 2467-2469.
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11. InterQual® 2014. CP: Procedures, Adult. Removal and Replacement, Total Joint Replacement (TJR), Hip.
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13. National Imaging Associates, Inc. Hip Arthroplasty, Total and Revision/Conversion Clinical Guideline, 2016.
14. National Imaging Associates, Inc. Hip Arthroplasty, Total and Revision/Conversion Clinical Guideline, 2017.
15. National Imaging Associates, Inc. Hip Arthroplasty, Total and Revision/Conversion Clinical Guideline, 2018.
16. National Imaging Associates, Inc. Hip Arthroplasty, Total and Revision/Conversion Clinical Guideline, 2019.
17. National Institute for Health and Care Excellence (NICE). NICE technology appraisal guidance [TA304]: Total hip replacement and resurfacing arthroplasty for end-stage arthritis of the hip. February 2014. Accessed at <https://www.nice.org.uk/guidance/ta304>.

### **COMMITTEE APPROVAL:**

This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy & Coverage Committee on 06/27/19.

### **GUIDELINE UPDATE INFORMATION:**

10/15/16	New Medical Coverage Guideline.
04/15/17	Revision: updated criteria for total hip arthroplasty and hip resurfacing arthroplasty. Added

	coverage statement (E/I) for patient-specific, gender-specific, and computer-navigated instrumentation. Updated references.
07/15/18	Scheduled review. Added general criteria for elective hip arthroplasty; revised criteria for total hip arthroplasty, hip resurfacing arthroplasty, and total hip arthroplasty revision/conversion. Deleted references to “gender-specific instrumentation” “patient-specific instrumentation” and “computer-navigated instrumentation”. Updated references.
07/15/19	Scheduled review. Revised criteria regarding evidence of resolved infection documentation. Updated references.