



# CLINICAL GUIDELINES

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## CMM-313 ~ Hip Arthroplasty- Total and Partial

Version 19.0 | Effective August 11, 2017



eviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. Imaging requests for individuals with atypical symptoms or clinical presentations that are not specifically addressed will require physician review. Consultation with the referring physician, specialist and/or individual's Primary Care Physician (PCP) may provide additional insight.

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## **CMM-313~Hip Arthroplasty- Total and Partial**

<b>CMM-313.1 Definition</b>	<b>3</b>
<b>CMM-313.2 General Guidelines</b>	<b>3</b>
<b>CMM-313.3 Indications and Non-Indications</b>	<b>4</b>
<b>CMM-313.4 Procedure (CPT®) Codes</b>	<b>8</b>
<b>CMM-313.5 References</b>	<b>9</b>

## **CMM-313~Hip Arthroplasty- Total and Partial**

### **CMM-313.1 Definition**

**Hip resurfacing arthroplasty (HRA)**, also called metal-on-metal (MOM) hip resurfacing and hemiresurfacing arthroplasty, is a surgical technique which involves the removal of diseased cartilage and bone from the head of the femur, and the replacement of the surface of the femoral head with a hollow metal hemisphere that fits into the acetabulum of the pelvis. This hemisphere fits into a metal acetabular cup. The technique conserves femoral bone, maintains normal femoral loading and stresses. Because of bone conservation, it may not compromise future total hip replacements. Hip resurfacing arthroplasty has been promoted as an alternative to total hip replacement or for younger individuals, to watchful waiting. Hip resurfacing arthroplasty may be either a partial HRA (i.e., hemi-hip resurfacing, hemiresurfacing or femoral head resurfacing arthroplasty [FHRA]) or a total HRA.

**Total hip replacement** is a surgical technique which involves the removal of the femoral head and neck and the femoral canal (marrow space) is reamed-out. The damaged hip joint is replaced with an artificial prosthesis composed of two or three different components: 1) the head that replaces the original femoral head, 2) the femoral component (a metal stem placed into the femur), and 3) the acetabular component that is implanted into the acetabulum. The stem may be secured using bone cement or press-fit for the bone to grow into it.

**Tonnis grading** system is commonly used to describe the presence of osteoarthritis in the hips with grading as follows:

- Grade 0: no signs of osteoarthritis
- Grade 1: sclerosis of the joint with minimal joint space narrowing and osteophyte formation
- Grade 2: small cysts in the femoral head or acetabulum with moderate joint space narrowing
- Grade 3: advanced arthritis with large cysts in the femoral head or acetabulum, joint space obliteration, and severe deformity of the femoral head.

### **CMM-313.2 General Guidelines**

Until the scientific literature is more definitive, the type of implant to be utilized, such as metal-on-metal, ceramic-on-ceramic, metal-on-polyethylene, should be determined by the treating surgeon and the patient following a frank discussion explaining the pros and cons of each implant type.

## **CMM-313.3 Indications and Non-Indications**

### **Partial Hip Resurfacing Arthroplasty**

Partial hip resurfacing arthroplasty **is considered medically necessary** when all of the following criteria have been met:

- Chronic severe, disabling pain for at least three (3) months in duration
- Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
- Presence of either degenerative arthritis primarily affecting the femoral head with joint space narrowing on weight-bearing radiographs, or osteonecrosis (avascular necrosis) of the femoral head when the disease is detected early and there is less than 50% involvement of the femoral head
- Individual is a candidate for a total hip replacement and is expected to live longer than a total hip replacement device is likely to last
- Age 64 years or younger
- Failure of nonsurgical management (e.g., ice, relative rest/activity modification, weight loss, medications (e.g. anti-inflammatory) for at least three months.

Partial hip resurfacing arthroplasty **is considered not medically necessary** when any of the following criteria has been met:

- Degenerative arthritis affecting both the femoral head and the acetabular surface with joint space narrowing on weight-bearing radiographs
- Osteonecrosis (avascular necrosis) of the femoral head involving more than 50% of the femoral head
- Individual is skeletally immature
- Individual has an active hip infection, or other significant persistent or untreated infection or is septic
- Individual has one or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity or mortality (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; abnormal serum electrolyte levels)
- Individual has a history of vascular insufficiency, significant muscular atrophy of the hip or leg musculature, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
- Individual has inadequate bone stock to support the device
- Individual is immunosuppressed
- Individual is morbidly obese (BMI  $\geq$  40).

### **Total Hip Resurfacing Arthroplasty**

Total hip resurfacing arthroplasty **is considered medically necessary** when all of the following criteria have been met:

- Chronic severe, disabling pain for at least six (6) months duration
- Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment

- Presence of degenerative arthritis with joint space narrowing affecting both the femoral head and the acetabular joint on weight-bearing radiographs, an inflammatory arthropathy or osteonecrosis (avascular necrosis) of the femoral head with possible acetabular surface involvement when the disease is detected early and there is less than 50% involvement of the femoral head
- Age 64 years or younger
- Individual is a candidate for a total hip replacement and is expected to live longer than a total hip replacement device is likely to last
- Failure of non-surgical management (e.g., ice, relative rest/activity modification, weight loss, bracing, medications [e.g., anti-inflammatories], injections [steroid] and/or physical therapy) for at least three months.

Total hip resurfacing arthroplasty **is considered not medically necessary** when any of the following criteria has been met:

- Osteonecrosis (avascular necrosis) of the femoral head involving more than 50% of the femoral head
- Individual is skeletally immature
- Individual has current or history of persistent infection or is septic
- Individual has one or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity or mortality (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; and abnormal serum electrolyte levels)
- Individual has a history of vascular insufficiency, significant muscular atrophy of the hip or leg musculature, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
- Individual has inadequate bone stock to support the device
- Individual has moderate to severe renal insufficiency
- Individual is immunosuppressed
- Individual is receiving high doses of corticosteroids
- Individual is morbidly obese (BMI  $\geq$  40).

### **Partial Hip Arthroplasty (Replacement)**

Partial hip arthroplasty is **considered medically necessary** as treatment for a femoral neck or head fracture that is not amenable to internal fixation.

Partial hip arthroplasty **is considered medically necessary** when all of the following criteria have been met:

- Tonnis Grade 3 osteoarthritis
- History of chronic severe, disabling pain for at least six (6) months in duration
- Loss of hip function secondary to osteoarthritis which interferes with the ability to carry out age-appropriate activities of daily living and/or their demands of employment
- Failure of non-surgical management (e.g., ice, relative rest/activity modification, weight loss, bracing, medications [e.g., anti-inflammatories], injections [steroid] and/or physical therapy) for at least three months.

Partial hip arthroplasty **is considered medically necessary** in an individual age 65 years or older who has suffered a non-displaced intracapsular fracture where surgical fixation is not considered a reasonable option.

Partial hip arthroplasty **is considered medically necessary** as treatment for an impacted fracture, partially displaced fracture, completely displaced or comminuted fracture of the femoral neck where conservative management or surgical fixation is not considered a reasonable option.

Partial hip arthroplasty **is considered not medically necessary** when any of the following criteria have been met:

- Individual has an active local or systemic infection
- Individual has one or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity or mortality (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; and abnormal serum electrolyte levels)
- Individual demonstrates a significant loss of musculature, neuromuscular compromise or vascular deficiency in the affected limb, rendering the procedure unjustifiable
- Individual demonstrates severe instability secondary to advanced loss of osteochondral structure.

### **Total Hip Arthroplasty (Replacement)**

Total hip arthroplasty **is considered medically necessary** when all of the following criteria have been met:

- Tonnis Grade 3 osteoarthritis
- Chronic, severe, disabling pain for at least six (6) months in duration
- Loss of hip function secondary to osteoarthritis which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
- Failure of non-surgical management (e.g., ice, relative rest/activity modification, weight loss, bracing, medications [e.g., anti-inflammatories], injections [steroid] and/or physical therapy) for at least three months.

Based on the increased risk of serious complications (cardiac complications, pulmonary complications, and mortality) simultaneous bilateral total hip replacement **is considered not medically necessary**.

### **Total Hip Revision**

Total Hip Revision **is considered medically necessary** when both of the following criteria have been met:

- Individual has previously undergone a partial or total hip arthroplasty and has developed chronic severe, disabling pain and a documented loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment

- Individual demonstrates any of the following:
  - Recurrent prosthetic dislocation not responsive to a reasonable course of non-surgical care
  - Instability of the components
  - Aseptic loosening
  - Infection
  - Periprosthetic fracture
  - Persistent hip pain of unknown etiology not responsive to a period of non-surgical care for six (6) months.

Total Hip Revisions **is considered not medically necessary** when any of the following criteria have been met:

- Individual has an active local or systemic infection
- Individual has one or more uncontrolled or unstable medical conditions that would significantly increase the risk of morbidity or mortality (e.g., cardiac, pulmonary, liver, genitourinary, or metabolic disease; hypertension; and abnormal serum electrolyte levels)
- Individual demonstrates a significant loss of musculature (in particular hip abductor musculature), neuromuscular compromise or vascular deficiency in the affected limb
- Individual demonstrates osteoporosis or other osseous abnormalities which would make the likelihood of a poor outcome more probable
- Individual demonstrates poor skin coverage
- Individual demonstrates severe instability secondary to advanced loss of osteochondral structure.

## **CMM-313.4 Procedure (CPT®)**

This guideline relates to the CPT® code set below. Codes are displayed for informational purposes only.

Any given code's inclusion on this list does not necessarily indicate prior authorization is

<b>CPT®</b>	<b>Code Description/Definition</b>
<b>27090</b>	Removal of hip prosthesis; (separate procedure)
<b>27091</b>	Removal of hip prosthesis; complicated, including total hip prosthesis, methylmethacrylate with or without insertion of spacer
<b>27120</b>	Acetabuloplasty; (e.g. Whitman, Colonna, Haygroves, or cup type)
<b>27122</b>	Acetabuloplasty; resection, femoral head (e.g. Girdlestone procedure)
<b>27125</b>	Hemiarthroplasty, hip, partial (e.g. femoral stem prosthesis, bipolar Arthroplasty)
<b>27130</b>	Arthroplasty, acetabular and proximal femoral prosthetic replacement (total hip Arthroplasty), with or without autograft or allograft
<b>27132</b>	Conversion of previous hip surgery to total hip arthroplasty, with or without autograft or allograft
<b>27134</b>	Revision of total hip arthroplasty; both components, with or without autograft or allograft
<b>27137</b>	Revision of total hip Arthroplasty; acetabular component only, with or without autograft or allograft
<b>27138</b>	Revision of total hip Arthroplasty; femoral component only, with or without allograft
<b>27280</b>	Arthrodesis, sacroiliac joint (including obtaining graft)
<b>27282</b>	Arthrodesis, symphysis pubis (including obtaining graft)
<b>27284</b>	Arthrodesis, hip joint (including obtaining graft);
<b>27286</b>	Arthrodesis, hip joint (including obtaining graft);with subtrochanteric osteotomy

This list may not be all inclusive and is not intended to be used for coding/billing purposes. The final determination of reimbursement for services is the decision of the health plan and is based on the individual's policy or benefit entitlement structure as well as claims processing rules.

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