



CLINICAL GUIDELINES

CMM-313: Hip Replacement Arthroplasty Guidelines

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EviCore
By **EVERNORTH**

EviCore healthcare Clinical Decision Support Tool Diagnostic Strategies: This tool addresses common symptoms and symptom complexes. 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 Replacement/Arthroplasty**Definitions****General Guidelines****Hip Resurfacing Arthroplasty****Hip Replacement****Revision of Hip Replacement****Salvage Procedures****Procedure (CPT®) Codes (CMM-313)****References (CMM-313)**

Definitions

- **Hip Arthroplasty:** an orthopaedic surgical procedure during which the articular surface of the hip joint is replaced, remodeled, or realigned.
- **Hip Replacement:** a form of arthroplasty that includes the surgical replacement of the hip joint with a prosthesis.
- **Hip Resurfacing Arthroplasty (HRA)** (also called metal-on-metal [MoM] hip resurfacing and hemi-resurfacing arthroplasty): a surgical technique that 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 metal hemisphere that fits into a metal acetabular cup or into the acetabulum respectively. The technique conserves femoral bone and 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 for younger individuals. Hip resurfacing arthroplasty may be either a partial HRA (i.e., hemi-hip resurfacing, hemi-resurfacing or femoral head resurfacing arthroplasty [FHRA]) or a total HRA.
- **Non-Surgical Management** (with regard to the treatment of hip osteoarthritis): any provider-directed non-surgical treatment, which has been demonstrated in the scientific literature as efficacious and/or is considered reasonable care in the treatment of hip pain from osteoarthritis. The types of treatment involved can include, but are not limited to, the following: relative rest/activity modification; weight loss; supervised physiotherapy modalities and therapeutic exercises; prescription and non-prescription medications; assistive devices; and/or, intra-articular injections.
- **Partial Hip Replacement** (also called hip hemi-arthroplasty): a surgical technique where only the femoral head (the ball) of the damaged hip joint is replaced. The acetabulum (the socket) is not replaced.
- **Prosthesis:** an artificial device used to replace a structural element within a joint to improve and enhance function.
- **Revision of Hip Replacement (Partial or Total):** surgical reconstruction or replacement due to failure or complications of previous hip replacement.
- **Tönnis Classification System:** a system commonly used to describe the presence of osteoarthritis in the hips on plain x-rays with grading as follows:
 - ◆ **Grade 0:** No signs of osteoarthritis
 - ◆ **Grade 1:** Sclerosis of the joint with slight joint space narrowing and osteophyte formation, and no or slight loss of femoral head sphericity
 - ◆ **Grade 2:** Small cysts in the femoral head or acetabulum with moderate joint space narrowing and moderate loss of femoral head sphericity
 - ◆ **Grade 3:** Large cysts in the femoral head or acetabulum, severe joint space narrowing or obliteration of the joint space, and severe deformity and loss of sphericity of the femoral head

- **Total Hip Replacement:** a surgical technique that involves the removal of the damaged hip joint which is then 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.

General Guidelines

Application of Guideline

- The determination of medical necessity for the performance of hip resurfacing and replacement (partial or total) is always made on a case-by-case basis.
- Until the scientific literature is more definitive, the type of bearing surface (e.g., metal-on-metal; ceramic-on-ceramic; metal-on-polyethylene) should be determined by the treating surgeon and the individual following a frank discussion explaining the pros and cons of each bearing surface.
- For individuals with significant medical conditions or co-morbidities, the risk/benefit of hip arthroplasty procedures should be clearly documented in the medical record.
- For non-resurfacing and non-replacement treatment of avascular necrosis of the femoral head refer to **CMM-314: Hip Surgery – Arthroscopic and Open Procedures**
- For the advanced imaging indications prior to hip resurfacing and hip replacement surgery refer to **MS-12: Osteoarthritis** and **MS-24: Hip**
- For advanced imaging indications following hip replacement surgery refer to **MS-16: Post-Operative Joint Replacement Surgery** and **MS-24: Hip**

Hip Resurfacing Arthroplasty

Partial Hip Resurfacing Arthroplasty Indications

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

- Individual is age 64 years or younger
- Imaging shows **EITHER** of the following findings:
 - ◆ Osteoarthritis primarily affecting the femoral head with joint space narrowing on weight-bearing radiographs
 - ◆ Avascular necrosis of the femoral head **and** there is less than 50% involvement of the femoral head

- Symptoms include **BOTH** of the following:
 - ◆ Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
 - **Criteria exception:** Three (3) months of function-limiting pain is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate (e.g., collapse of the femoral head, inflammatory arthritis, advanced dysplasia).
 - ◆ Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
- Failure of at least three (3) months of provider-directed non-surgical management
 - ◆ **Criteria exception:** Three (3) months of provider-directed non-surgical management is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate (e.g., collapse of the femoral head, inflammatory arthritis, advanced dysplasia).
 - ◆ **Note:** It is incumbent on the surgeon to preoperatively optimize reasonably modifiable medical and behavioral health comorbidities.

Partial Hip Resurfacing Arthroplasty Non-Indications

- Partial hip resurfacing arthroplasty is considered **not medically necessary** for **ANY** other indication, condition, or when **ANY** of the following are present:
 - ◆ Osteoarthritis affecting both the femoral head and the acetabulum with joint space narrowing on weight-bearing radiographs
 - ◆ Inflammatory arthropathy affecting both the femoral head and acetabulum
 - ◆ Avascular necrosis of the femoral head involving more than 50% of the femoral head
 - ◆ Skeletal immaturity
 - ◆ Active local or systemic infection
 - ◆ Vascular insufficiency, significant muscular atrophy of the hip or leg musculature, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
 - ◆ Charcot joint

Total Hip Resurfacing Arthroplasty Indications

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

- Individual is age 64 years or younger
- Imaging shows **EITHER** of the following findings:
 - ◆ Osteoarthritis or an inflammatory arthropathy affecting **BOTH** the femoral head and the acetabulum, with joint space narrowing on weight-bearing radiographs
 - ◆ Avascular necrosis of the femoral head with possible acetabular surface involvement **and** there is less than 50% involvement of the femoral head

- Symptoms include **BOTH** of the following:
 - ◆ Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
 - **Criteria exception:** Three (3) months of function-limiting pain is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate (e.g., collapse of the femoral head, inflammatory arthritis, advanced dysplasia).
 - ◆ Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
- Failure of at least three (3) months of provider-directed non-surgical management
 - ◆ **Criteria exception:** Three (3) months of provider-directed non-surgical management is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate (e.g., collapse of the femoral head, inflammatory arthritis, advanced dysplasia).
 - ◆ **Note:** It is incumbent on the surgeon to preoperatively optimize reasonably modifiable medical and behavioral health comorbidities.

Total Hip Resurfacing Arthroplasty Non-Indications

- Total hip resurfacing arthroplasty is considered **not medically necessary** for **ANY** other indication, condition, or when **ANY** of the following are present:
 - ◆ Avascular necrosis of the femoral head involving more than 50% of the femoral head
 - ◆ Skeletal immaturity
 - ◆ Active local or systemic infection
 - ◆ Vascular insufficiency, significant muscular atrophy of the hip or leg musculature, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
 - ◆ Charcot joint
 - ◆ Individuals undergoing dialysis who are on a renal transplant list

Hip Replacement

Partial Hip Replacement Indications

Partial hip replacement is considered **medically necessary** for **ANY** of the following conditions when **ALL** of the associated criteria have been met:

Femoral Head/Neck Fracture

- Imaging shows a fracture of the femoral head or femoral neck
- Conservative management **or** surgical fixation is not considered a reasonable option

Avascular Necrosis (AVN)

- Imaging shows avascular necrosis with collapse of the femoral head
- Symptoms include **BOTH** of the following:
 - ◆ Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
 - **Criteria exception:** Three (3) months of function-limiting pain is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate.
 - ◆ Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or their demands of employment
- Failure of at least three (3) months of provider-directed non-surgical management
 - ◆ **Criteria exception:** Three (3) months of provider-directed non-surgical management is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate.
 - ◆ **Note:** It is incumbent on the surgeon to preoperatively optimize reasonably modifiable medical and behavioral health comorbidities.

Partial Hip Replacement Non-Indications

- Partial hip replacement is considered **not medically necessary** for **ANY** other indication, condition, or when **ANY** of the following are present:
 - ◆ Active local or systemic infection
 - ◆ Vascular insufficiency, significant muscular atrophy of the leg, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
 - ◆ Charcot joint
 - ◆ Inflammatory arthropathy affecting **BOTH** the femoral head and acetabulum

Total Hip Replacement Indications

Total hip replacement is considered **medically necessary** for **ANY** of the following conditions when **ALL** of the associated criteria have been met:

Femoral Head/Neck Fracture

- Imaging shows a fracture of the femoral head or femoral neck
- Conservative management **or** surgical fixation is not considered a reasonable option

Osteoarthritis, Avascular Necrosis (AVN), Inflammatory Arthropathy

- Imaging shows **ANY** of the following findings:
 - ◆ Tönnis grade 2 or 3 osteoarthritis
 - ◆ Avascular necrosis with collapse of the femoral head
 - ◆ Inflammatory arthropathy affecting both the femoral head and acetabulum with joint space narrowing
- Symptoms include **BOTH** of the following:
 - ◆ Function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for at least three (3) months duration
 - **Criteria exception:** Three (3) months of function-limiting pain is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate.
 - ◆ Loss of hip function which interferes with the ability to carry out age-appropriate activities of daily living and/or demands of employment
- Failure of at least three (3) months of provider-directed non-surgical management
 - ◆ **Criteria exception:** Three (3) months of provider-directed non-surgical management is **not required** when the medical record clearly documents why provider-directed non-surgical management is inappropriate.
 - ◆ **Note:** It is incumbent on the surgeon to preoperatively optimize reasonably modifiable medical and behavioral health comorbidities.

Total Hip Replacement Non-Indications

- Total hip replacement is considered **not medically necessary** for **ANY** other indication, condition, or when **ANY** of the following are present:
 - ◆ Active local or systemic infection
 - ◆ Vascular insufficiency, significant muscular atrophy of the leg, or neuromuscular disease severe enough to compromise implant stability or post-operative recovery
 - ◆ Individuals undergoing dialysis who are on a renal transplant list

Revision of Hip Replacement

Revision of Hip Replacement (Partial or Total) Indications

Revision of hip replacement is considered **medically necessary** for an individual who has previously undergone a partial or total hip replacement when **ANY** of the following post-operative conditions are present:

- Recurrent prosthetic dislocation/subluxation not responsive to a reasonable course of non-surgical care
- Aseptic loosening
- Periprosthetic infection
- Periprosthetic fracture
- Instability of the implant (e.g., disassembly, modular neck failure)
- Leg length discrepancy
- Osteolysis without eccentric wear (wear of elevated rim liner without wear superiorly)
- Elevated serum metal levels as diagnosis for adverse local tissue reaction (ALTR) secondary to corrosion
- Unexplained function-limiting pain at short distances (e.g., walking less than ¼ mile, limiting activity to two city blocks, the equivalent to walking the length of a shopping mall) for greater than six (6) months unresponsive to provider-directed non-surgical management

Revision of Hip Replacement (Partial or Total) Non-Indications

- Revision of hip replacement is considered **not medically necessary** for **ANY** other indication or condition.

Isolated Head and Polyethylene Liner Exchange (IPE) Indications

Isolated head and polyethylene liner exchange (IPE) is considered medically necessary for **ANY** of the following post-operative conditions when **ALL** of the associated criteria have been met:

- Eccentric polyethylene wear (with or without osteolysis):
 - ◆ Individual is symptomatic
 - ◆ Implants are well-fixed and in an acceptable position
- Acute post-operative periprosthetic joint infection (including hematogenous infection):
 - ◆ Implants are well-fixed
- Dislocation/instability:
 - ◆ Treatment includes **BOTH** of the following:
 - Conversion to a liner with higher offset, larger head size, dual-mobility, constrained liner
 - Conversion of failed metal-on-metal (MoM) or ceramic-on-ceramic (CoC) bearing surface to metal-on-polyethylene (MoP) or ceramic-on-polyethylene (CoP) bearing surface

Isolated Head and Polyethylene Liner Exchange (IPE) Non-Indications

- Isolated head and polyethylene liner exchange (IPE) is considered **not medically necessary** for **ANY** other indication or condition.

Salvage Procedures

Salvage Procedures Indications

Salvage procedures (e.g., Girdlestone acetabuloplasty, hip joint arthrodesis) are considered **medically necessary** when performed as a surgical alternative in certain individuals for whom primary hip replacement or revision of hip replacement is not a reasonable surgical option due to **ANY** of the following conditions:

- Chronic infection, osteomyelitis, or persistent periprosthetic infection
- Individual with a pre-existing ambulatory dysfunction or that is non-ambulatory
- Presence of co-morbidities or diseases which would preclude the performance of a successful hip replacement
- Inadequate bone stock (e.g., severe osteoporosis or following tumor resection when there is insufficient bone remaining to support a joint replacement)
- Recurrent instability/dislocation of the replaced hip
- Aseptic loosening of the replaced hip with no other practical surgical options
- Inability to pursue a successful reimplantation

Salvage Procedures Non-Indications

- Salvage procedures are considered **not medically necessary** for **ANY** other indication or condition.

Procedure (CPT®) Codes (CMM-313)

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 required.	
CPT®	Code Description/Definition
27090	Removal of hip prosthesis; (separate procedure)
27091	Removal of hip prosthesis; complicated, including total hip prosthesis, methylmethacrylate with or without insertion of spacer
27122	Acetabuloplasty; resection, femoral head (e.g., Girdlestone procedure)
27125	Hemiarthroplasty, hip, partial (e.g. femoral stem prosthesis, bipolar Arthroplasty)
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; femoral component only, with or without allograft
27284	Arthrodesis, hip joint (including obtaining graft);
27286	Arthrodesis, hip joint (including obtaining graft);with subtrochanteric osteotomy
HCPCS Level II	Code Description/Definition
S2118	Metal-on-metal total hip resurfacing, including acetabular and femoral components
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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