Hip Arthroplasty



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Medicare Advantage Medical Coverage Policy

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Disclaimer

Change Summary

The Coverage Summaries are reviewed by the iCare Medicare Utilization Management Committee. Policies in this document may be modified by a member's coverage document. Clinical policy is not intended to preempt the judgment of the reviewing medical director or dictate to health care providers how to practice medicine. Health care providers are expected to exercise their medical judgment in rendering appropriate care. Identification of selected brand names of devices, tests and procedures in a medical coverage policy is for reference only and is not an endorsement of any one device, test, or procedure over another. Clinical technology is constantly evolving, and we reserve the right to review and update this policy periodically. References to CPT® codes or other sources are for definitional purposes only and do not imply any right to reimbursement or guarantee of claims payment. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any shape or form or by any means, electronic, mechanical, photocopying or otherwise, without permission from iCare.

Related Medicare Advantage Medical/Pharmacy Policies

None

Related Documents

Please refer to CMS website for the most current applicable National Coverage Determination (NCD)/Local Coverage Determination (LCD)/Local Coverage Article (LCA)/CMS Online Manual System/Transmittals.

Туре	Title	ID Number	Jurisdiction Medicare Administrative Contractors (MACs)	Applicable States/Territories
LCD LCA	Total Hip Arthroplasty	<u>L34163</u> <u>A57683</u>	JE - Noridian Healthcare Solutions, LLC	CA, HI, NV, American Samoa, Guam, Northern Mariana Islands
LCD LCA	Total Hip Arthroplasty	L36573 A57684	JF - Noridian Healthcare Solutions, LLC	AK, AZ, ID, MT, ND, OR, SD, UT, WA, WY
LCD LCA	Total Joint Arthroplasty	<u>L36039</u> <u>A57428</u>	J6 - National Government Services, Inc. (Part A/B MAC) JK - National Government Services, Inc. (Part A/B MAC)	IL, MN, WI CT, NY, ME, MA, NH, RI, VT
LCD LCA	Total Joint Arthroplasty	<u>L33456</u> <u>A56777</u>	JJ - Palmetto GBA (Part A/B MAC) JM - Palmetto GBA (Part A/B MAC)	AL, GA, TN NC, SC, VA, WV
LCD LCA	Lower Extremity Major Joint Replacement (Hip and Knee)	<u>L36007</u> <u>A56796</u>	JH - Novitas Solutions, Inc. (Part A/B MAC) JL - Novitas Solutions, Inc. (Part A/B MAC)	AR, CO, NM, OK, TX, LA, MS DE, D.C., MD, NJ, PA
LCD LCA	Major Joint Replacement (Hip and Knee)	<u>L33618</u> <u>A57765</u>	JN - First Coast Service Options, Inc. (Part A/B MAC)	FL, PR, U.S. VI

Description

<u>Total hip arthroplasty</u> (THA) is a surgical technique which involves the removal of the damaged articular surfaces on the hip which are then replaced with an artificial prosthesis consisting of acetabular, bearing and femoral components. A metal stem is placed into the hollow center of the femur replacing the damaged femoral head. The femoral stem may be either cemented or press fit into the bone. A metal or ceramic ball is placed on the upper part of the stem to replace the damaged femoral head (the ball) that was removed. The damaged cartilage surface of the socket (acetabulum) is removed and replaced with a

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metal socket. A plastic or ceramic liner is inserted between the new prosthetic ball and socket to allow for a smooth gliding surface.

<u>Partial hip replacement</u>, also called hip hemiarthroplasty, is a surgical technique where only the femoral head of the damaged hip joint is replaced. The acetabulum or hip socket is not replaced. The prostheses may be unipolar or bipolar. A unipolar prosthesis has a one piece fixed head design where the hip movement occurs between the prosthesis and the acetabulum. A bipolar prosthesis has an additional artificial joint or bearing between the stem and head component of the prosthesis that swivels during movement helping to reduce the amount of wear and tear on the new joint.

Hip resurfacing arthroplasty (HRA), also known as metal on metal (MOM) hip resurfacing and hemiresurfacing arthroplasty, may be considered as an alternative to conventional total hip arthroplasty. HRA does not remove the femoral head and neck or bone from the femur allowing for conversion to a THA, when necessary. The resurfacing procedure is designed for younger, active individuals (typically less than 65 years of age) with viable bone in the proximal femur who are likely to outlive the prosthesis used in the THA procedure.

Hip resurfacing arthroplasty can either be categorized as a partial (hemi) or total resurfacing:

- Partial HRA is the removal of the damaged surface of the femoral head, which is then resurfaced with a metal shell. The socket is left intact.
- **Total HRA** involves both the femoral shell and the acetabulum (socket) cup. A metal shell is placed over the head of the femur as in a partial HRA; however, the damaged surface of the hip socket is also resurfaced.

Examples of US Food & Drug Administration (FDA) approved hip resurfacing systems include, but may not be limited to, Birmingham hip resurfacing system and the Cormet hip resurfacing system.

Coverage Determination

iCare follows the CMS requirement that only allows coverage and payment for services that are reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member except as specifically allowed by Medicare.

In interpreting or supplementing the criteria above and in order to determine medical necessity consistently, iCare may consider the criteria contained in the following:

Total Hip Arthroplasty

Total Hip Arthroplasty will be considered medically reasonable and necessary when the following requirements are met:

- Absence of contraindications; AND
- The device is FDA-approved;

AND one of the following:

- Advanced joint disease demonstrated by:
 - Radiographic supported evidence or when conventional radiography is not adequate, magnetic resonance imaging (MRI) and/or computed tomography (CT) (in situations when MRI is nondiagnostic or not able to be performed) supported evidence (subchondral cysts, subchondral sclerosis, periarticular osteophytes, joint subluxation, severe joint space narrowing, avascular necrosis) ^{4,5}; AND
 - Pain that cannot be adequately controlled despite optimal conservative treatment or functional disability from injury due to trauma or arthritis of the joint ^{4,5}; AND
 - History of unsuccessful conservative treatment or non-surgical medical management that is clearly
 documented in the pre-procedure medical record. Non-surgical medical management is usually
 implemented for 3 months or more to assess effectiveness. Conservative treatment, as clinically
 appropriate for the patient's current episode of care, typically includes one or more of the following:
 anti-inflammatory medications, analgesics, or therapeutic injections when appropriate, with physical
 therapy or assist devices; OR

When the procedure is indicated for advanced joint disease, in addition to the above items, all of the following shall be documented in the Medical Record.

The documentation should demonstrate a history of a reasonable attempt (typically 3 months or more) at conservative therapy as appropriate for the patient in the current episode of care. For example, documented trial of NSAIDs or contraindication to such therapy and documented supervised physical therapy.³

- Acetabular fracture; OR
- Avascular necrosis (osteonecrosis of femoral head); OR
- Chronic dislocation of hip; OR
- Developmental dysplasia of hip; OR
- Failed previous femoral or acetabular osteotomy; OR
- Failed previous hip fracture fixation; OR

- Fracture of the femoral neck; OR
- Hemophilic arthropathy with contracture in the hip; OR
- Malignancy of the joint involving the bones or soft tissues of the pelvis or proximal femur; **OR**
- Malunion of acetabular or proximal femur fracture; OR
- Nonunion or failure of previous hip fracture surgery; **OR**
- Protrusio acetabuli deformity (medial femoral head migration limiting hip motion); OR
- Revision of hip arthrodesis 4, 10, 16

<u>Indications for Replacement/Revision of Total Hip Arthroplasty</u>

Replacement/Revision of THA will be considered medically reasonable and necessary when the following requirements are met:

- Loosening of one or both components; OR
- Fracture or mechanical failure of the implant; **OR**
- Recurrent or irreducible dislocation; **OR**
- Infection; OR
- Treatment of a displaced periprosthetic fracture; OR
- Clinically significant leg length inequality not amenable to conservative management; OR
- Progressive or substantial bone loss; OR
- Bearing surface wear leading to symptomatic synovitis or local bone or soft tissue reaction; OR
- Clinically significant audible noise; OR
- Adverse local tissue reaction ^{4,5}

Partial Hip Arthroplasty

Partial Hip Arthroplasty will be considered medically reasonable and necessary when the following requirements are met:

- Absence of contraindications; AND
- Acetabulum is intact; AND
- 65 years of age or older; AND
- The device is FDA-approved;

AND one of the following:

- Impacted fracture, partially displaced, completely displaced fracture or comminuted fracture of the femoral neck or femoral head is present and surgical fixation is not considered a reasonable option; **OR**
- Nondisplaced intracapsular fracture of the femoral head is present and surgical fixation is not considered
 a reasonable option ¹¹

Hip Resurfacing Arthroplasty

Members may be eligible under the Plan for **partial or total hip resurfacing arthroplasty** for the following indications:

- Absence of contraindications; AND
- Failure of 3 months of conservative treatment under the direction of a healthcare professional with ALL of the following:
 - Activity/lifestyle modifications; AND
 - Ambulatory assistive device if medically appropriate; AND
 - Intra-articular steroid injection if medically appropriate and not contraindicated. Intra-articular steroid injections should be avoided three months prior to partial or total hip resurfacing arthroplasty; AND
 - Nonsteroidal anti-inflammatory drugs (NSAIDs) if medically appropriate and not contraindicated.;
 AND
 - Physical therapy with home exercise program (HEP); AND
- Normal proximal femoral bone geometry and bone quality; AND
- Physically active individuals who is 65 years of age or younger; AND
- The device is FDA-approved; AND

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• Individuals who would otherwise receive a traditional primary THR, but is likely to live longer than the traditional device is expected to last;

AND one of the following:

- Avascular necrosis with less than 50 percent involvement of the femoral head; OR
- Dysplasia/developmental dislocation of the hip; OR
- Inflammatory arthritis (eg, rheumatoid arthritis); OR
- Noninflammatory degenerative joint disease (eg, osteoarthritis, traumatic arthritis) ^{9,25,26}

Revision/Replacement of HRA, Partial Hip Arthroplasty

Members may be eligible under the Plan for **replacement or revision of previous total or resurfacing hip arthroplasty** for the following indications:

Absence of multiple uncontrolled comorbid medical conditions (eg, diabetes);

AND one of the following:

- Aseptic loosening of prosthesis; OR
- Bearing surface wear leading to symptomatic synovitis or local bone or soft tissue reaction; OR
- Fracture or mechanical failure of implant; OR
- Leg length discrepancy when source is mechanical and correctable by surgery; OR
- Periprosthetic fracture; OR
- Periprosthetic infection; OR
- Recurrent prosthetic dislocation not responsive to a reasonable course of nonsurgical care (closed reduction); OR
- Tissue or systemic reaction to metal implant

The use of the criteria in this Medicare Advantage Medical Coverage Policy provides clinical benefits highly likely to outweigh any clinical harms. Services that do not meet the criteria above are not medically necessary and thus do not provide a clinical benefit. Medically unnecessary services carry risks of adverse outcomes and may interfere with the pursuit of other treatments which have demonstrated efficacy.

Coverage Limitations

<u>US Government Publishing Office. Electronic code of federal regulations: part 411 – 42 CFR § 411.15 - Particular services excluded from coverage</u>

Total Hip Arthroplasty

Total Hip Arthroplasty will not be considered medically reasonable and necessary with any of the following contraindications:

- Active infection of the hip joint or active systemic bacteremia; OR
- Active urinary tract or dental infection; OR
- Active skin infection (exception recurrent cutaneous staph infections) or open wound within the planned surgical site of the hip; **OR**
- Rapidly progressive neurological disease except in the clinical situation of a concomitant displaced femoral neck fracture

The following conditions are relative contraindications to total hip replacement and if such surgery is performed in the presence of these conditions, it is expected that the rationale for proceeding with the surgery under such circumstances is clearly documented in the medical record:

- Absence or relative insufficiency of abductor musculature; OR
- Any process that is rapidly destroying bone; OR
- Neurotrophic arthritis ^{4,5}

Partial Hip Arthroplasty

Partial Hip Arthroplasty will not be considered medically reasonable and necessary with any of the following contraindications:

- Active infections (local or systemic); OR
- Allergy to components of the implant (eg, alumina, chromium or cobalt); OR
- BMI greater than 40; OR
- Charcot joint; OR

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- Inadequate bone stock that would not support implant unless the procedure is for a fracture indication;
 OR
- Inflammatory arthropathy (eg, rheumatoid arthritis); OR
- Multiple uncontrolled comorbid medical conditions (eg, diabetes); OR
- Noninflammatory arthropathy (eg, avascular necrosis, osteoarthritis or post traumatic arthritis); OR
- Suppressed immune system due to disease or high doses of corticosteroids; OR
- Vascular insufficiency, significant muscular atrophy of the leg or neuromuscular disease severe enough to compromise implant stability or postoperative recovery

Hip Resurfacing Arthroplasty

Hip Resurfacing Arthroplasty will not be considered medically reasonable and necessary for any of the following contraindications:

- Active infection (local or systemic); OR
- Allergy to components of the implant (eg, alumina, chromium or cobalt); OR
- Bone stock inadequate to support the device due to conditions such as osteoporosis, osteonecrosis or avascular necrosis with greater than 50 percent involvement of the femoral head or fluid-filled cavities greater than one centimeter in the femoral head; OR
- BMI greater than 40; OR
- Implants which are metal-on-polyethylene; OR
- Inactive and/or older individual who may be unlikely to require revision of a traditional THA; OR
- Multiple uncontrolled comorbid medical conditions; OR
- Significantly impaired function of the kidneys (glomerular filtration rate [GFR] less than 60 mL/min/1.73 m²); OR
- Suppressed immune system due to disease or high doses of corticosteroids; OR
- Vascular insufficiency, significant muscular atrophy of the leg or neuromuscular disease severe enough to compromise implant stability or postoperative recovery ^{9, 18, 25,26}

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Coding Information

Any codes listed on this policy are for informational purposes only. Do not rely on the accuracy and inclusion of specific codes. Inclusion of a code does not guarantee coverage and/or reimbursement for a service or procedure.

CPT® Code(s)	Description	Comments
27090	Removal of hip prosthesis; (separate procedure)	
27091	Removal of hip prosthesis; complicated, including total hip prosthesis, methylmethacrylate with or without insertion of spacer	
27125	Hemiarthroplasty, hip, partial (eg, 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	
CPT® Category III Code(s)	Description	Comments
No code(s) ide	entified	
HCPCS Code(s)	Description	Comments
No code(s) ide	entified	

References

- American Academy of Orthopaedic Surgeons (AAOS). Management of osteoarthritis of the hip evidence based clinical practice guideline. https://www.aaos.org. Published March 13, 2017. Accessed September 14, 2022.
- 2. Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD). Lower Extremity Major Joint Replacement (Hip and Knee) (L36007). https://www.cms.gov. Published October 1, 2015. Updated November 14, 2019. Accessed September 18, 2023.

- 3. Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD). Major Joint Replacement (L33618). https://www.cms.gov. Published October 1, 2015. Updated January 8, 2019. Accessed September 18, 2023.
- 4. Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD). Total Hip Arthroplasty (L34163). https://www.cms.gov. Published October 1, 2015. Updated December 1, 2019. Accessed August 30, 2023.
- 5. Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD). Total Hip Arthroplasty (L36573). https://www.cms.gov. Published September 7, 2016. Updated December 1, 2019. Accessed August 30, 2023.
- 6. Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD). Total Joint Arthroplasty (L33456). https://www.cms.gov. Published October 1, 2015. Updated June 15, 2023. Accessed September 18, 2023.
- 7. Centers for Medicare & Medicaid Services (CMS). Local Coverage Determination (LCD). Total Joint Arthroplasty (L36039). https://www.cms.gov. Published December 1, 2015. Updated October 10, 2019. Accessed September 18, 2023.
- 8. ClinicalKey. Ferri F. Osteonecrosis. In: Ferri F. J. *Ferri's Clinical Advisor 2023*. Elsevier; 2023:1103.e2-1103.e7. https://www.clinicalkey.com. Accessed September 14, 2022.
- 9. ClinicalKey. Ford M. Surface replacement hip arthroplasty. In: Azar, F, Beaty J. *Campbell's Operative Orthopaedics*. 14th ed. Elsevier; 2021:334-347.e2. https://www.clinicalkey.com. Accessed September 14, 2022.
- 10. ClinicalKey. Harkess JW, Crockarell JR. Arthroplasty of the hip. In: Azar F, Beaty J. *Campbell's Operative Orthopaedics*. 14th ed. Elsevier; 2021:178-333.e16. https://www.clinicalkey.com. Accessed September 14, 2022.
- 11. ClinicalKey. Weinlein JC. Fractures and dislocations of the hip. In: Azar F, Beaty J. *Campbell's Operative Orthopaedics*.14th ed. Elsevier; 2021:2909-2957.e11. https://www.clinicalkey.com. Accessed September 14, 2022.
- 12. ECRI Institute. Clinical Evidence Assessment. Outpatient total and partial hip replacement surgery. https://www.ecri.org. Published September 20, 2017. Updated June 3, 2020. Accessed September 14, 2022.
- 13. Hayes, Inc. Evidence Analysis Research Brief. Total joint arthroplasty revision for patients with elevated chromium or cobalt levels. https://evidence.hayesinc.com. Published July 22, 2022. Accessed September 15, 2022.

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- 14. Hayes, Inc. Medical Technology Directory. Comparative effectiveness review of minimally invasive total hip arthroplasty. https://evidence.hayesinc.com. Published December 14, 2017. Updated January 28, 2022. Accessed September 15, 2022.
- 15. Hayes, Inc. Medical Technology Directory (ARCHIVED). Metal-on-metal hip resurfacing arthroplasty versus total hip replacement for osteoarthritis. https://evidence.hayesinc.com. Published November 15, 2018. Updated February 10, 2020. Accessed September 28, 2022.
- 16. MCG Health. Hip arthroplasty. 27th edition. https://www.mcg.com. Accessed September 27, 2023.
- 17. MCG Health. Hip: displaced fracture of the femoral neck, hemiarthroplasty. 27th edition. https://www.mcg.com. Accessed September 27, 2023.
- 18. MCG Health. Hip resurfacing. 27th edition. https://www.mcg.com. Accessed September 27, 2023.
- 19. UpToDate, Inc. Chronic complications and age related comorbidities in people with hemophilia. https://www.uptodate.com. Updated August 2022. Accessed September 15, 2022.
- 20. UpToDate, Inc. Complications of hip arthroplasty. https://www.uptodate.com. Updated August 2022. Accessed September 15, 2022.
- 21. UpToDate, Inc. Management of hip osteoarthritis. https://www.uptodate.com. Updated August 18, 2022. Accessed September 15, 2022.
- 22. UpToDate, Inc. Overview of surgical therapy of knee and hip osteoarthritis. https://www.uptodate.com. Updated August 1, 2022. Accessed September 15, 2022.
- 23. UpToDate, Inc. Total hip arthroplasty. https://www.uptodate.com. Updated August 2022. Accessed September 15, 2022.
 - 24. US Food & Drug Administration (FDA). FDA Executive Summary Memorandum. Metal-on-metal hip implant systems. https://www.fda.gov. Published 2012. Accessed November 20, 2012.
 - 25. US Food & Drug Administration (FDA). Summary of safety and effectiveness data: Birmingham hip resurfacing (BHR) system. https://www.fda.gov. Published September 8, 2005. Accessed November 20, 2012.
 - 26. US Food & Drug Administration (FDA). Summary of safety and effectiveness data: Cormet hip resurfacing system. https://www.fda.gov. Published February 22, 2007. Accessed November 20, 2012.

Change Summary