

Evidence Discussion (CMM 313: Hip Replacement/Arthroplasty)

Hip replacement surgery is an effective treatment when non-surgical means do not provide adequate relief of osteoarthritic pain. However, there are risks to hip replacement surgery which include but are not limited to infection, neurovascular injury, fracture, instability, prosthetic failure, deep vein thrombosis, pulmonary embolus and even death. [1] Because of the risk of these significant complications, proper patient selection is critical to minimize the risk benefit ratio. Hip osteoarthritis can be treated with a variety of methods to manage pain and improve function. The American Academy of Orthopaedic Surgeons (AAOS) has developed Clinical Practice Guidelines and Appropriate Use Criteria for the management of osteoarthritis of the hip to guide both nonsurgical and surgical treatment and provide risk assessment tools to help ensure patients receive treatment that is appropriate, safe and effective. [2,3] Conservative treatment is recommended by the AAOS Appropriate Use Criteria (AUC) for the Management of Osteoarthritis of the Hip for multiple clinical scenarios. [7] Treatment recommendations in the AAOS AUC are based on multiple variables including but not limited to ambulatory capacity and radiographic severity of osteoarthritis. [7] The duration of provider-directed non-surgical management allows for preoperative optimization of reasonably modifiable medical and behavioral health comorbidities. [4]

Hip resurfacing arthroplasty conserves bone and may have better functional outcomes than THA, but THA is superior in terms of implant survival. Hip resurfacing is supported for individuals age 64 years or younger. [5,6]

Hip replacement surgery has been shown to have unacceptably high rates of failure and increased morbidity and mortality in certain patient groups wherein the risk of surgery far outweighs the benefit and surgery is contraindicated. [8] The literature has documented higher complication rates in patients with active local or systemic infection. [12, 13] Higher complications rates are also seen in renal dialysis patients and it has also been recommended that patients on dialysis who are on a transplant list should await arthroplasty until transplant has taken place. [11]

Revision hip replacement surgery is necessary for a variety of reasons both in the short term and long term after the primary procedure. Revision surgery is associated with an increased risk of complications which can be minimized by proper patient selection and optimization prior to the primary procedure as well as the revision procedure. [9, 10, 14, 15] The American Joint Replacement Registry (AJRR): 2023 Annual Report indicated the most common diagnoses for all hip revisions were infection, mechanical complications, instability, aseptic loosening, pain, fracture and osteolysis [14]

Although the use of any coverage criteria includes the possible risk of delayed care, EviCore firmly believes the benefits of our evidence based criteria best ensure patient safety and highly outweigh any clinical harms.

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