Evolent Clinical Guideline 1761 for Hip Arthroplasty

Guideline Number: Evolent_CG_1761	**Applicable Codes**	
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Original Date: November 2015	**Last Revised Date:** ~~December 2023~~**November 2024**	**Implementation Date:** July ~~2024~~**2025**

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STATEMENT

General Information

It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.

Purpose

This guideline addresses elective, non-emergent hip arthroplasty (hip replacement) procedures, including total hip arthroplasty, resurfacing arthroplasty, and revision/conversion arthroplasty procedures.

Scope

Arthritis is the most common cause of chronic hip pain and disability. Degenerative, age-related osteoarthritis causes cartilage to wear away and eventually the bones within the joint rub against each other causing pain and stiffness.

Special Note

See legislative language for specific mandates for the State of Washington

GENERAL REQUIREMENTS

- Elective hip arthroplasty may be considered if the following general criteria are met:
  - Hip pain with documented loss of 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, and mechanical catching, locking
  - Individual is medically stable and optimized for surgery, and any treatable comorbidities are adequately medically managed such as diabetes, nicotine addiction, or an excessively high BMI. There should also be a shared decision between the patient and physician to proceed with a total joint replacement when comorbidities exist as it pertains to the increased risk of complications (1)
  - Individual does not have an active local or systemic infection
  - Individual does not have active, untreated drug dependency (including but not limited to narcotics, opioids, muscle relaxants) unless engaged in treatment program
  - Individual has good oral hygiene and does not have major dental work scheduled or anticipated (ideally, within one year of joint replacement), due to increased post-surgical infection risk
- Clinical notes should address:
  - Symptom onset, duration, and severity

- Loss of function and/or limitations
- Type and duration of non-operative management modalities
- Discussion with patient regarding decision making and timing

- Non-operative management must include at least **TWO** or more of the following unless otherwise specified in clinical indications below [(2)]:
  - Rest or activity modifications/limitations
  - Weight reduction for individual 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 injection(s)

INDICATIONS

Total Hip Arthroplasty (THA)

There is no medical necessity to perform THA in individuals with severe radiological disease and no symptoms, except in the case of malignancy.

THA may be considered medically necessary as indicated in either sections 1 or 2 [(1,3,4)]:

- **Section One**
  - There is persistent pain and documented loss of function with radiographic evidence of advanced disease from any of the following:
    - Rheumatoid arthritis
    - Femoral neck fracture
    - Malignancy
    - Dysplasia
    - Avascular necrosis confirmed by imaging (radiographs, MRI, or other advanced imaging)
    - Radiographs demonstrate bone-on-bone articulation
- **Section Two**
  - There is persistent pain and documented loss of function for at least 12 weeks and includes all the following:
    - Physical exam demonstrates findings of hip pathology as evidence by **one or more** of the following **(PE is not required if bone-on-bone narrowing is present on X-ray):**
      - Painful, limited range of motion or antalgic gait
      - Contracture
      - Crepitus

- Leg length difference

- Radiographic findings show evidence of advanced arthritic changes, described as Tönnis grade 2 or 3 [see **Grading Appendix**] or described as X-rays showing advanced changes (e.g., severe narrowing, bone-on-bone compartment collapse, subchondral sclerosis or cysts, osteophyte formation and/or bony deformity etc.)

  X-rays described only as showing 'severe', 'advanced' or 'end-stage' arthritis require more definitive descriptions as stated above (weightbearing X-rays are not required)

  NOTE: MRI should not be the primary radiographic test used to determine the presence or severity of arthritic changes in the joint.

- Failure of at least 12 weeks of non-operative treatment, including at least two of the following
  - Rest or inactivity modifications/limitations
  - Weight reduction for individual with elevated BMI
  - Protected weight-bearing with cane, walker, or crutches
  - Physical therapy modalities
  - Physician supervised exercise program (including home exercise program)
  - Pharmacological treatment: oral/topical NSAIDs, acetaminophen, or analgesics
  - Intra-articular corticosteroid injection
- No corticosteroid injection into the joint within 12 weeks of surgery [1,5,6,7]

Simultaneous Bilateral THA

- **ALL** Requests for simultaneous bilateral total hip replacements should clearly indicate why simultaneous THA is preferable to staged procedures. Associated risks with simultaneous bilateral total hip replacements should also be discussed with the individual and documented in the medical record [8,9]

Absolute Contraindications

- Active infection (local or remote). If a local or remote infection is documented in the patient's history, records should clearly demonstrate that the previous infection had been treated and symptoms have resolved or that the individual has no clinical signs or symptoms of the previous infection at the time of the operation [3]
- Any corticosteroid injection into the joint within 12 weeks of surgery [1,5,6,7]

Relative Contraindications [3,4]

- Prior infection at site (unless aspiration with cultures and serology [CBC with differential, ESR, CRP] demonstrates no infection). If prior infection at site, tissue biopsies should be sent intra-operatively to exclude latent/dormant infection
- Documented allergy to any proposed component
- BMI > 40kg/m^2; without discussion of increased risk conferred by BMI
- Compromised soft tissue envelope

- Uncontrolled comorbidities [10]

Hip Resurfacing Arthroplasty

Hip resurfacing procedures will be reviewed on a case-by-case basis.

Hip resurfacing arthroplasty may be considered medically necessary when **ALL** of the following criteria are met [11,12]:

- Pain and documented loss of function are present for at least 12 weeks
- 12 weeks of non-operative treatment have failed to improve symptoms
- 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 Tönnis grade 2 or 3, or avascular necrosis involving less than 50% of the femoral head [see **Grading Appendix**]
- Male patient is less than 65 years old or female patient is less than 55 years old [13]
- BMI < 40 [14]
- No corticosteroid injection into the joint within 12 weeks of surgery [1,5,6,7]

Absolute Contraindications *(11,12,13,14)*

- Any corticosteroid injection into the joint within 12 weeks of surgery [1,5,6,7]
- Osteoporosis or osteopenia (DEXA scan bone mineral density evaluation)
  - Osteoporosis or poor bone quality may increase the risk of fixation failure or femoral neck fracture after hip resurfacing
  - Other co-morbidities (including medications that contribute to decreased bone mineral density that may contribute to active bone demineralization (glucocorticoid steroids, ~~heparin~~**anticoagulants**, aromatase inhibitors, thiazolidinediones, proton pump inhibitors, loop diuretics~~, cyclosporine~~, antiretrovirals, anti-psychotics, anti-seizures, certain breast cancer drugs, certain prostate cancer drugs, ~~Depo-Provera,~~ **progestin's,** aluminum containing antacids) [15]
- 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 (due to metal ions circulating in blood with potential risk to fetus)
- Chronic renal insufficiency (due to metal ions circulating and potential renal toxicity)

- Metal allergy

Revision/Conversion Arthroplasty

Hip revision/conversion arthroplasty **for a prior hip arthroplasty, fracture ORIF, or ANY prior hip surgery** may be considered medically necessary when the following criteria in either section one or section two are met [16,17]:

- **Section One**
  - Previous removal of infected hip prosthesis*
  - No evidence of current, ongoing, or inadequately treated hip infection (ruled out by normal inflammatory markers (ESR and CRP) or significant improvement in these markers. 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
  - A clear statement by the treating surgeon that infection has been adequately treated
  - Patient is off antibiotics
- **Section Two**
  - When all of the following criteria are met
    - Failed hip arthroplasty as defined by symptomatic or unstable joint upon physical examination with documented persistent, severe, or disabling pain with loss of function and/or instability. **For symptomatic patients for conversion arthroplasty from prior ORIF** or ~~there is persistent pain or~~ **any prior hip surgery,** radiographic evidence of ~~hardware failure from previous hip fracture surgery~~**advanced arthritis (Tönnis grade 2 or 3) is required**
    - Physical exam and radiographic evidence support 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, critical polyethylene wear, or other mechanical **or hardware** failure

      NOTE: MRI is used less often in these circumstances unless it is a metal-on-metal prosthesis and looking for soft-tissue lesions; x-ray, CT, nuclear studies are used more frequently
    - For implant loosening seen on routine X-rays or bone scan, documentation of no current, ongoing, or inadequately treated hip infection, ruled out by normal inflammatory markers (ESR and CRP). **If these markers are elevated, a clear statement by the treating surgeon is required regarding the surgical plan to rule out infection**
    - If the revision is for obvious hardware failure or recurrent dislocations, inflammatory markers are not required
    - **NO** corticosteroid injection into the joint within 12 weeks of surgery [1,5,6,7]

***NOTE**: Removal of infected hip prosthesis and subsequent insertion of antibiotic spacer is **NOT** considered to be a revision arthroplasty

LEGISLATIVE LANGUAGE

Washington

20131114B – Hip Resurfacing (Re-review) [18]

Washington State Health Care Authority Technology Assessment

Health Technology Clinical Committee

Final Findings and Decision

- **HTCC Coverage Determination**
  - Hip Resurfacing is not a covered benefit
- **HTCC Reimbursement Determination**
  - Limitations of Coverage
    - Not applicable
  - Non-Covered Indicators
    - All

CODING AND STANDARDS

Coding

CPT Codes

Total Hip Arthroplasty (THA): 27130, S2118

Revision/Conversion Hip Arthroplasty: 27132, 27134, 27137, 27138

Applicable Lines of Business

☒	CHIP (Children's Health Insurance Program)
☒	Commercial
☒	Exchange/Marketplace
☒	Medicaid
☒	Medicare Advantage

BACKGROUND

~~Revision/Conversion Hip Replacement~~

~~In some cases, the hip prosthesis may wear out or loosen. If loosening is painful, a second surgery, such as a revision or conversion may be necessary. In this procedure some or all of the components of the original replacement prosthesis are removed and replaced with new ones.~~

~~Hemiarthroplasty or partial hip replacement involves the reconstruction of the femoral head but not the acetabulum. This procedure is indicated for select traumatic events, guidelines for which fall outside of the scope of this document.~~

Grading Appendix [19]

Tönnis Classification of Osteoarthritis by Radiographic Changes

Grade	Description
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

POLICY HISTORY

Date	Summary
November 2024	• **This guideline replaces Evolent Clinical Guideline 313 for Hip Arthroplasty** • **THA Indication sections: Section Two: added into the physical exam section that a PE (Physical Exam) is not required if bone-on-bone narrowing is present on X-ray** • **Hip Resurfacing Arthroplasty: absolute contraindications section: replaced specific names of drugs with classification of drugs** • **Revision/conversion Arthroplasty: clarification that if ANY prior hip surgery has been performed and there are now advanced arthritic changes that require replacement surgery in symptomatic patients, the request can be submitted as conversion total hip arthroplasty** • **Revision/Conversion Arthroplasty: Section Two: Added hardware failure to the other indications for revision/conversion hip arthroplasty** • **Non-infected revision sections: added a requirement for clear surgical plan to treat a potential infection if**

Date	Summary
	inflammatory markers are elevated ● **Removed background section on revision/conversion**
December 2023	● Legislative Requirements added for the State of Washington ● Relative contraindications: BMI – removed without attempts at weight loss ● Added Table of Contents ● Reduced Background Section ● Updated References
May 2023	● Addition of references pertaining to the risk of infection following a cortisone injection within 3 months of surgery ● Deleted risk/benefit discussion requirement for revision hip arthroplasty ● Clarification of the definition of failed hip arthroplasty
~~May 2022~~	~~● Deleted:~~ ~~Documented risk and benefit discussion requirement (THA)~~ ~~"Efforts have been made to ensure that the patient is optimally informed and prepared for surgery" (general requirements)~~ ~~Revised:~~ ~~Individual is medically stable and *optimized for surgery*~~ ~~3 months to 12 weeks throughout~~ ~~"patient" to "individual" where appropriate~~

LEGAL AND COMPLIANCE

Guideline Approval

Committee

Reviewed / Approved by Evolent Specialty Clinical Guideline Review Committee

Disclaimer

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covered or non-covered service or drug. Evolent reserves the right to review and update this Clinical Guideline in its sole discretion. Notice of any changes shall be provided as required by applicable provider agreements and laws or regulations. Members should contact their Plan customer service representative for specific coverage information.

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Special Note

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  - Individual does not have an active local or systemic infection
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- Clinical notes should address:
  - Symptom onset, duration, and severity

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- Type and duration of non-operative management modalities
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- Leg length difference

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  NOTE: MRI should not be the primary radiographic test used to determine the presence or severity of arthritic changes in the joint.

- Failure of at least 12 weeks of non-operative treatment, including at least two of the following
  - Rest or inactivity modifications/limitations
  - Weight reduction for individual with elevated BMI
  - Protected weight-bearing with cane, walker, or crutches
  - Physical therapy modalities
  - Physician supervised exercise program (including home exercise program)
  - Pharmacological treatment: oral/topical NSAIDs, acetaminophen, or analgesics
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- No corticosteroid injection into the joint within 12 weeks of surgery [1,5,6,7]

Simultaneous Bilateral THA

- **ALL** Requests for simultaneous bilateral total hip replacements should clearly indicate why simultaneous THA is preferable to staged procedures. Associated risks with simultaneous bilateral total hip replacements should also be discussed with the individual and documented in the medical record [8,9]

Absolute Contraindications

- Active infection (local or remote). If a local or remote infection is documented in the patient's history, records should clearly demonstrate that the previous infection had been treated and symptoms have resolved or that the individual has no clinical signs or symptoms of the previous infection at the time of the operation [3]
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Relative Contraindications [3,4]

- Prior infection at site (unless aspiration with cultures and serology [CBC with differential, ESR, CRP] demonstrates no infection). If prior infection at site, tissue biopsies should be sent intra-operatively to exclude latent/dormant infection
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Hip resurfacing arthroplasty may be considered medically necessary when **ALL** of the following criteria are met [11,12]:

- Pain and documented loss of function are present for at least 12 weeks
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  - Leg length difference
- Imaging demonstrates advanced hip joint pathology of at least Tönnis grade 2 or 3, or avascular necrosis involving less than 50% of the femoral head [see **Grading Appendix**]
- Male patient is less than 65 years old or female patient is less than 55 years old [13]
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  - Osteoporosis or poor bone quality may increase the risk of fixation failure or femoral neck fracture after hip resurfacing
  - Other co-morbidities (including medications that contribute to decreased bone mineral density that may contribute to active bone demineralization (glucocorticoid steroids, anticoagulants, aromatase inhibitors, thiazolidinediones, proton pump inhibitors, loop diuretics, antiretrovirals, anti-psychotics, anti-seizures, certain breast cancer drugs, certain prostate cancer drugs, progestin's, aluminum containing antacids) [15]
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  - A clear statement by the treating surgeon that infection has been adequately treated
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  - When all of the following criteria are met
    - Failed hip arthroplasty as defined by symptomatic or unstable joint upon physical examination with documented persistent, severe, or disabling pain with loss of function and/or instability. For symptomatic patients for conversion arthroplasty from prior ORIF or any prior hip surgery, radiographic evidence of advanced arthritis (Tönnis grade 2 or 3) is required
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  - Non-Covered Indicators
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CODING AND STANDARDS

Coding

CPT Codes

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Applicable Lines of Business

☒	CHIP (Children's Health Insurance Program)
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BACKGROUND

Grading Appendix [19]

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Grade	Description
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POLICY HISTORY

Date	**Summary**
November 2024	• This guideline replaces Evolent Clinical Guideline 313 for Hip Arthroplasty • THA Indication sections: Section Two: added into the physical exam section that a PE (Physical Exam) is not required if bone-on-bone narrowing is present on X-ray • Hip Resurfacing Arthroplasty: absolute contraindications section: replaced specific names of drugs with classification of drugs • Revision/conversion Arthroplasty: clarification that if ANY prior hip surgery has been performed and there are now advanced arthritic changes that require replacement surgery in symptomatic patients, the request can be submitted as conversion total hip arthroplasty • Revision/Conversion Arthroplasty: Section Two: Added hardware failure to the other indications for revision/conversion hip arthroplasty • Non-infected revision sections: added a requirement for clear surgical plan to treat a potential infection if inflammatory markers are elevated • Removed background section on revision/conversion
December 2023	• Legislative Requirements added for the State of Washington • Relative contraindications: BMI – removed without attempts at weight loss • Added Table of Contents

Date	Summary
	● Reduced Background Section ● Updated References
May 2023	● Addition of references pertaining to the risk of infection following a cortisone injection within 3 months of surgery ● Deleted risk/benefit discussion requirement for revision hip arthroplasty ● Clarification of the definition of failed hip arthroplasty

LEGAL AND COMPLIANCE

Guideline Approval

Committee

Reviewed / Approved by Evolent Specialty Clinical Guideline Review Committee

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