

# Surgery of the Hip

**Guideline Number:** MMG057.U  
**Effective Date:** November 1, 2023

[Instructions for Use](#)

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Related Policies
None

## Coverage Rationale

**Surgery of the hip and surgical treatment for femoroacetabular impingement (FAI) syndrome is proven and medically necessary in certain circumstances.** For medical necessity clinical coverage criteria, refer to the InterQual® CP: Procedures:

- Arthroscopy, Diagnostic, +/- Synovial Biopsy, Hip
- Arthroscopy, Surgical, Hip
- Arthroscopy, Surgical, Hip (Pediatric)
- Arthrotomy, Hip
- Hemiarthroplasty, Hip
- Removal and Replacement, Total Joint Replacement (TJR), Hip
- Total Joint Replacement (TJR), Hip

Click [here](#) to view the InterQual® criteria.

**Surgical treatment for femoroacetabular impingement (FAI) syndrome is unproven and not medically necessary in the presence of advanced osteoarthritis (i.e., Tönnis Grade 2 or 3) and/or severe cartilage damage (i.e., Outerbridge Grade III or IV).**

## Documentation Requirements

Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The documentation requirements outlined below are used to assess whether the member meets the clinical criteria for coverage but do not guarantee coverage of the service requested.

Required Clinical Information
<b>Surgery of the Hip</b>
Medical notes documenting the following, when applicable:

## Required Clinical Information

### Surgery of the Hip

- Upon request, we may require the specific diagnostic image(s) that show the abnormality for which surgery is being requested, which may include MRI, CT scan, X-ray, and/or bone scan; consultation with requesting surgeon may be of benefit to select the optimal images
  - **Note:** When requested, diagnostic image(s) must be labeled with:
    - The date taken
    - Applicable case number obtained at time of notification or member's name and ID number on the image(s)
  - Upon request, diagnostic imaging must be submitted via the external portal at [www.uhcprovider.com/paan](http://www.uhcprovider.com/paan); faxes will not be accepted
- Diagnostic imaging report(s)
- Condition requiring procedure
- Severity of pain and details of Functional Disability(ies) interfering with activities of daily living (preparing meals, dressing, driving, walking) using a standard scale, such as the:
  - *Western Ontario and McMaster Universities Arthritis Index (WOMAC)* or
  - *Hip Dysfunction and Osteoarthritis Outcome Score (HOOS)*
- Physician's treatment plan, including pre-op discussion
- Pertinent physical examination of the relevant joint
- Co-morbid medical conditions (cardiovascular diseases, hypertension, diabetes, cancer, pulmonary diseases, neurodegenerative diseases)
- Prior therapies/treatments tried, failed, or contraindicated; include the dates and reason for discontinuation
- Date of previous hip fracture fixation, if applicable
- If the location is being requested as an **inpatient stay**, provide medical notes to support at least **one** of the following:
  - Surgery is bilateral
  - Member has significant co-morbidities; include the list of comorbidities and current treatment
  - Member does not have appropriate resources to support post-operative care after an outpatient procedure; include the barriers to care as an outpatient

In addition to the above, for **femoroacetabular impingement (FAI) syndrome (CPT codes 29914, 29915, and 29916)**, also include radiographic reports of presence and severity of cartilage damage using Tönnis or Outerbridge grading.

## Definitions

**Disabling Pain:** Western Ontario and McMaster Universities Arthritis Index (WOMAC) pain domain > 40. (Quintana, 2009)

**Functional Disability:** Western Ontario and McMaster Universities Arthritis Index (WOMAC) functional limitation domain > 40. (Quintana, 2009)

**Hip Dysfunction and Osteoarthritis Outcome Score (HOOS):** The Hip disability and Osteoarthritis Outcome Score (HOOS) is a self-administered hip-specific questionnaire intended to evaluate symptoms and functional limitations, and it is commonly used to evaluate interventions in individuals with hip dysfunction or hip osteoarthritis. The HOOS consists of 43 questions in five subscales: pain, symptoms, function in daily living, function in sport and recreation and hip-related quality of life. (Nilsdotter, 2011)

### Outerbridge Grades:

- Grade 0: Normal
  - Grade I: Cartilage with softening and swelling
  - Grade II: Partial-thickness defect with fissures on the surface that do not reach subchondral bone or exceed 1.5 cm in diameter
  - Grade III: Fissuring to the level of subchondral bone in an area with a diameter more than 1.5 cm
  - Grade IV: Exposed subchondral bone head
- (Slattery, 2018)

**Significant Radiographic Findings:** Kellgren-Lawrence classification of osteoarthritis grade 3 or 4 – with 3 defined as: definite narrowing of joint space, moderate osteophyte formation, some sclerosis, and possible deformity of bony ends; or 4, defined as: large osteophytes, marked joint space narrowing, severe sclerosis, definite bone ends deformity. (Kohn et al., 2016; Keurentjes et al., 2013; Tilbury et al., 2016)

**Tönnis Classification of Osteoarthritis by Radiographic Changes:**

- Grade 0: No signs of osteoarthritis (OA)
- Grade 1: Increased sclerosis of femoral head or acetabulum, slight joint space narrowing or slight slipping of joint margin, no or slight loss of head sphericity
- Grade 2: Small cysts in femoral head or acetabulum, moderate joint space narrowing, moderate loss of head sphericity
- Grade 3: Large cysts, severe joint space narrowing or obliteration of joint space, severe deformity of the head, avascular necrosis

(Kovalenko, 2018)

**Western Ontario and McMaster Universities Arthritis Index (WOMAC):** The WOMAC is a disease-specific, self-administered questionnaire developed to evaluate patients with hip or knee osteoarthritis. It uses a multi-dimensional scale composed of 24 items grouped into three dimensions: pain, stiffness and physical function. (Quintana, 2009)

## Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this guideline does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

CPT Code	Description
<b>Arthroscopy, Diagnostic, +/- Synovial Biopsy, Hip</b>	
29860	Arthroscopy, hip, diagnostic with or without synovial biopsy (separate procedure)
<b>Arthroscopy, Surgical, Hip</b>	
29861	Arthroscopy, hip, surgical; with removal of loose body or foreign body
29862	Arthroscopy, hip, surgical; with debridement/shaving of articular cartilage (chondroplasty), abrasion arthroplasty, and/or resection of labrum
29863	Arthroscopy, hip, surgical; with synovectomy
<b>Arthrotomy, Hip</b>	
27120	Acetabuloplasty; (e.g., Whitman, Colonna, Haygroves, or cup type)
<b>Hemiarthroplasty, Hip</b>	
27125	Hemiarthroplasty, hip, partial (e.g., femoral stem prosthesis, bipolar arthroplasty)
<b>Removal and Replacement, Total Joint Replacement (TJR), Hip</b>	
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
<b>Femoroacetabular Impingement (FAI) Syndrome</b>	
27299	Unlisted procedure, pelvis or hip joint
29914	Arthroscopy, hip, surgical; with femoroplasty (i.e., treatment of cam lesion)
29915	Arthroscopy, hip, surgical; with acetabuloplasty (i.e., treatment of pincer lesion)

CPT Code	Description
<b>Femoroacetabular Impingement (FAI) Syndrome</b>	
29916	Arthroscopy, hip, surgical; with labral repair
29999	Unlisted procedure, arthroscopy

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HCPCS Code	Description
S2118	Metal-on-metal total hip resurfacing, including acetabular and femoral components

## Clinical Evidence

Clinical studies have shown that certain factors are associated with a subjectively defined fair or poor functional score and/or surgical failure. These poor prognostic factors, although variably reported, include more advanced preoperative osteoarthritis, advanced articular cartilage disease, older age, and more severe preoperative pain. These observations highlight the negative impact of secondary osteoarthritis on the long-term results of surgical intervention.

A systematic review and meta-analysis was conducted by Gohal et al. (2019) to assess the health-related quality of life (HRQL) outcomes after arthroscopic management of FAI. A total of 29 studies (24 case series, 3 case-control studies, 1 retrospective comparative study, and 1 RCT; some with control groups) were included for assessment. Of the 6476 patients (6959 hips), significant improvements were reported in all studies assessing generic HRQL outcomes, including the 12-Item Short Form Health Survey (range of mean postoperative scores, 82.2-89.8), and EuroQOL-5D scores (range of mean postoperative scores, 0.74-0.87) between 12 and 24 months postoperatively. Significant improvements were similarly identified in the hip-specific HRQL outcomes scores, with the majority of studies also reporting improvement between 12 and 24 months postoperatively. Mean improvement in International Hip Outcome Tool-33 scores from preoperative values to postoperative values ranged from 22.7 to 43.2, for studies with follow-up between 12 and 24 months. The authors concluded that hip arthroscopy can lead to significant improvement in generic and hip-specific HRQL outcomes at 12 to 24 months postoperatively in patients with FAI who do not have advanced hip osteoarthritis.

In a meta-analysis performed by Lei et al. (2019), the prognostic value of osteoarthritis (OA) on the overall failure rate, pain, and function of surgical management of femoroacetabular impingement (FAI) was evaluated. Seven studies were identified with 1,129 total patients, with 819 patients in the FAI group and 310 patients in the FAI with OA group. Pooled analyses showed that the overall failure rate was significantly higher in the FAI-OA group than in the FAI group. In addition, the rate of conversion to total hip arthroplasty was significantly higher in the FAI-OA group (37.3%) than in the FAI group (9.7%). The authors concluded that radiographic OA was correlated with higher failure rates, increased conversion to total hip arthroplasty, and worse outcomes after surgical management of FAI.

Sansone et al. (2015) performed a prospective study to evaluate the arthroscopic treatment of FAI in the presence of osteoarthritis (OA) in terms of pain, symptoms, function, physical activity level and quality of life using outcome measures validated for young, active patients with hip symptoms. Seventy-five patients undergoing arthroscopic surgery for FAI, all with preoperative radiological signs of mild to moderate OA (Tonnis grades 1 or 2) were included in this study. All patients completed patient reported outcome measures, including the International Hip Outcome Tool (iHOT-12), Copenhagen Hip and Groin Outcome (HAGOS), EQ-5D, Hip Sports Activity Scale (HSAS) for physical activity level. A visual analogue scale (VAS) for overall hip function, was performed, with radiographic evaluation. At two year follow-up, comparison with the preoperative scores revealed improvements for all measured outcomes; the iHOT-12 (42 versus 65), VAS for global hip function (48 versus 68), HSAS (2.5 versus 3), EQ5D index (0.62 versus 0.76), EQ VAS (69 versus 75) and different HAGOS subscales (54 versus 72, 47 versus 67, 56 versus 75, 40 versus 61, 33 versus 56, 31 versus 55). Fifty-six (82%) patients reported that they were satisfied with the outcome of surgery. The authors concluded that arthroscopic treatment for patients with FAI in the presence of mild to moderate OA resulted in statistically significant and clinically relevant improvements in outcome measures related to pain, symptoms, function, physical activity level and quality of life in the majority of patients.

## U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Surgeries of the hip are procedures and, therefore, not regulated by the FDA. However, devices and instruments used during the surgery may require FDA approval. Refer to the following website for additional information:  
<http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmnm.cfm>. (Accessed July 25, 2023)

## References

- Gohal C, Shamshoon S, Memon M, et al. Health-related quality of life after hip arthroscopy for femoroacetabular impingement: a systematic review and meta-analysis. *Sports Health*. 2019 May/Jun;11(3):209-217.
- Hayes, Inc. Health Technology Brief. Arthroscopic hip surgery for femoroacetabular impingement. Lansdale, PA: Hayes, Inc.; June 16, 2021. Archived June 4, 2022.
- Keurentjes JC, Fiocco M, So-Osman C, et al. Patients with severe radiographic osteoarthritis have a better prognosis in physical functioning after hip and knee replacement: a cohort-study. *PLoS One*. 2013;8(4):e59500.
- Kohn MD, Sassoon AA, Fernando ND. Classifications in brief: Kellgren-Lawrence Classification of Osteoarthritis. *Clin Orthop Relat Res*. 2016 Aug;474(8):1886-93.
- Kovalenko B, Bremjit P, Fernando N. Classifications in brief: Tönnis classification of hip osteoarthritis. *Clin Orthop Relat Res*. 2018 Aug;476(8):1680-1684.
- Lei P, Conaway WK, Martin SD. Outcome of surgical treatment of hip femoroacetabular impingement patients with radiographic osteoarthritis: a meta-analysis of prospective studies. *J Am Acad Orthop Surg*. 2019 Jan 15;27(2):e70-e76.
- Nilsdotter A, Bremander A. Measures of hip function and symptoms: Harris Hip Score (HHS), Hip Disability and Osteoarthritis Outcome Score (HOOS), Oxford Hip Score (OHS), Lequesne Index of Severity for Osteoarthritis of the Hip (LISOH), and American Academy of Orthopedic Surgeons (AAOS) Hip and Knee Questionnaire. *Arthritis Care Res (Hoboken)*. 2011;63 Suppl 11:S200-S207.
- Quintana JM, Bilbao A, Escobar A, et al. Decision trees for indication of total hip replacement on patients with osteoarthritis. *Rheumatology (Oxford)*. 2009 Nov;48(11):1402-9.
- Sansone M, Ahldén M, Jonasson P, et al. Outcome of hip arthroscopy in patients with mild to moderate osteoarthritis-A prospective study. *J Hip Preserv Surg*. 2015 Dec 26;3(1):61-7.
- Slattery C, Kweon CY. Classifications in brief: Outerbridge classification of chondral lesions. *Clin Orthop Relat Res*. 2018 Oct;476(10):2101-2104.
- Tilbury C, Holtslag MJ, Tordoir RL, et al. Outcome of total hip arthroplasty, but not of total knee arthroplasty, is related to the preoperative radiographic severity of osteoarthritis. A prospective cohort study of 573 patients. *Acta Orthop*. 2016 Feb;87(1):67-71.

## Guideline History/Revision Information

Date	Summary of Changes
11/01/2023	<ul style="list-style-type: none"><li>Routine review; no change to coverage guidelines</li><li>Archived previous policy version MMG057.T</li></ul>

## Instructions for Use

This Medical Management Guideline provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this guideline, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Management Guideline is provided for informational purposes. It does not constitute medical advice.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual<sup>®</sup> criteria, to assist us in administering health benefits. UnitedHealthcare West Medical Management Guidelines are intended to be used in connection with the

independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.

Member benefit coverage and limitations may vary based on the member's benefit plan Health Plan coverage provided by or through UnitedHealthcare of California, UnitedHealthcare Benefits Plan of California, UnitedHealthcare of Oklahoma, Inc., UnitedHealthcare of Oregon, Inc., UnitedHealthcare Benefits of Texas, Inc., or UnitedHealthcare of Washington, Inc.