

CIGNA MEDICAL COVERAGE POLICIES - MUSCULOSKELETAL CMM-314: Hip Surgery- Arthroscopic and Open Procedures

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Instructions for use

The following coverage policy applies to health benefit plans administered by Cigna. Coverage policies are intended to provide guidance in interpreting certain standard Cigna benefit plans and are used by medical directors and other health care professionals in making medical necessity and other coverage determinations. Please note the terms of a customer's particular benefit plan document may differ significantly from the standard benefit plans upon which these coverage policies are based. For example, a customer's benefit plan document may contain a specific exclusion related to a topic addressed in a coverage policy.

In the event of a conflict, a customer's benefit plan document always supersedes the information in the coverage policy. In the absence of federal or state coverage mandates, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of:

1. The terms of the applicable benefit plan document in effect on the date of service
2. Any applicable laws and regulations
3. Any relevant collateral source materials including coverage policies
4. The specific facts of the particular situation

Coverage policies relate exclusively to the administration of health benefit plans. Coverage policies are not recommendations for treatment and should never be used as treatment guidelines.

This evidence-based medical coverage policy has been developed by EviCore, Inc. Some information in this coverage policy may not apply to all benefit plans administered by Cigna.

These guidelines include procedures EviCore does not review for Cigna. Please refer to the [Cigna CPT code list](#) for the current list of high-tech imaging procedures that EviCore reviews for Cigna.

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Table of Contents

Guideline	Page
Definitions	3
General Guidelines	6
Arthroscopic or Open Procedures for Fracture, Tumor, Infection, or Foreign Body	8
Labral Repair or Reconstruction	10
Arthroscopic or Open Hip Surgery for Femoroacetabular Impingement (FAI)	13
Arthroscopic or Open Hip Surgery for Avascular Necrosis (AVN)	16
Synovectomy	19
Procedures and Conditions Not Addressed Elsewhere	22
Codes (CMM-314)	25
Evidence Discussion (CMM-314)	27
References (CMM-314)	29

Definitions

Guideline	Page
Definitions.....	4

Definitions

CMM.JT.DF.314

v1.0.2026

CAM Impingement

a type of femoroacetabular impingement (FAI) impingement that is associated with an asymmetric or non-spherical contour of the head or neck of the femur jamming against the acetabulum, resulting in cartilage damage, delamination (detachment from the subchondral bone), and secondary damage to the labrum. Deformity of the head-neck junction that looks like a pistol grip on radiographs is associated with damage to the anterosuperior area of the acetabulum. Symptomatic CAM impingement is found most frequently in young male athletes. A cam-type impingement may occur alone, or more frequently, together with a pincer-type impingement.

Femoroacetabular Impingement (FAI)

an anatomical mismatch between the head of the femur and the acetabulum resulting in compression of the labrum or articular cartilage during flexion. The mismatch can arise from subtle morphologic alterations in the anatomy or orientation of the ball-and-socket components (for example, a bony prominence at the head-neck junction or acetabular over-coverage) with articular cartilage damage initially occurring from abutment of the femoral neck against the acetabular rim, typically at the anterosuperior aspect of the acetabulum. Although hip joints can possess the morphologic features of FAI without symptoms, FAI may become pathologic with repetitive movement and/or increased force on the hip joint. High-demand activities may also result in pathologic impingement in hips with normal morphology. It has been proposed that impingement with damage to the labrum and/or acetabulum is a causative factor in the development of hip osteoarthritis, and that as many as half of cases currently categorized as primary osteoarthritis may have an etiology of FAI.

Non-Surgical Management (with regard to the treatment of lower extremity joint pain)

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 lower extremity joint pain. 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.

Pincer Impingement

a type of FAI impingement that is associated with over-coverage of the acetabulum and is most typically found in women of middle age. In cases of isolated pincer impingement, the labrum is affected primarily, and cartilage damage may be limited to a narrow strip of the acetabular cartilage. A pincer-type impingement may occur alone, or more frequently, together with a cam-type impingement.

Tönnis Angle

the inclination of the weight-bearing portion of the acetabulum.

Tönnis Classification System

a commonly used system 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 femoral head sphericity

General Guidelines

Guideline	Page
General Guidelines.....	7

Hip Surgery- Arthroscopic and Open Procedures

General Guidelines

CMM.JT.GG.314

v1.0.2026

Application of Guideline

- The determination of medical necessity for the performance of arthroscopic or open hip surgery is always made on a case-by-case basis.
- For salvage procedures, refer to **CMM 313: Hip Replacement/Arthroplasty**.

Health Equity Considerations

Health equity is the highest level of health for all individuals; health inequity is the avoidable difference in health status or distribution of health resources due to the social conditions in which individuals are born, grow, live, work, and age. Social determinants of health are the conditions in the environment that affect a wide range of health, functioning, and quality of life outcomes and risks. Examples include the following: safe housing, transportation, and neighborhoods; racism, discrimination, and violence; education, job opportunities, and income; access to nutritious foods and physical activity opportunities; access to clean air and water; and language and literacy skills.

Arthroscopic or Open Procedures for Fracture, Tumor, Infection, or Foreign Body

Hip Surgery- Arthroscopic and Open Procedures

Guideline	Page
Arthroscopic or Open Procedures for Fracture, Tumor, Infection, or Foreign Body.....	9

Arthroscopic or Open Procedures for Fracture, Tumor, Infection, or Foreign Body

CMM.JT.IN.314

v1.0.2026

- Arthroscopic or open hip surgery may be considered **medically necessary** when surgery is being performed for fracture, tumor, infection, or foreign body that has led to, or will likely lead to, progressive destruction.

Hip Surgery- Arthroscopic and Open Procedures

Labral Repair or Reconstruction

Guideline	Page
Labral Repair or Reconstruction Indications.....	11
Labral Repair or Reconstruction Non-Indications.....	12

Hip Surgery- Arthroscopic and Open Procedures

Labral Repair or Reconstruction Indications

CMM.JT.IN.314

v1.0.2026

Labral repair or reconstruction to address labral pathology is considered **medically necessary** when ALL of the following criteria have been met:

- Imaging shows BOTH of the following findings:
 - advanced diagnostic study is conclusive for labral pathology amenable to surgical management
 - presence of Tönnis Grade 0-1 osteoarthritis
- Physical exam demonstrates findings supporting intra-articular hip pathology with ANY of the following positive provocative tests:
 - anterior impingement sign (i.e., groin-dominant hip pain with forced hip flexion, adduction, and internal rotation)
 - FABER test (i.e., hip or groin pain with forced flexion, abduction, and external rotation)
 - Fitzgerald test (i.e., hip or groin pain with extension, internal rotation, and adduction from forced hip flexion, abduction, and external rotation or with extension, external rotation, and abduction from forced hip flexion, adduction, and internal rotation)
- Symptoms include mechanical symptoms of the hip (e.g., catching, locking, or giving way) associated with groin-dominant hip pain that significantly limits activities
- Failure of provider-directed non-surgical management for at least three (3) months' duration AND which must include the following (unless contraindicated):
 - an image-guided intra-articular hip injection with local anesthetic (with or without corticosteroid) to which there was a positive response (i.e., any degree of pain reduction achieved within two (2) weeks after the injection)

Labral Repair or Reconstruction Non-Indications

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Not Medically Necessary

- Labral repair or reconstruction is considered **not medically necessary** for ANY other indication or condition.
- Labral repair or reconstruction is considered **not medically necessary** if there is presence of Tönnis Grade 2-3 osteoarthritis.

Arthroscopic or Open Hip Surgery for Femoroacetabular Impingement (FAI)

Hip Surgery- Arthroscopic and Open Procedures

Guideline	Page
Arthroscopic or Open Hip Surgery for Femoroacetabular Impingement (FAI) Indications.....	14
Arthroscopic or Open Hip Surgery for Femoroacetabular Impingement (FAI) Non-Indications.....	15

Arthroscopic or Open Hip Surgery for Femoroacetabular Impingement (FAI) Indications

CMM.JT.IN.314

v1.0.2026

Arthroscopic or open hip surgery for femoroacetabular impingement (FAI) is considered **medically necessary** when ALL of the following criteria have been met:

- Imaging shows BOTH of the following findings:
 - femoroacetabular impingement confirmed on x-ray, MRI, or CT with ANY of the following findings:
 - alpha angle >50°
 - pistol grip deformity
 - decrease of femoral head-neck offset
 - acetabular retroversion (i.e., crossover sign, ischial spine sign)
 - coxa profunda
 - presence of Tönnis Grade 0-1 osteoarthritis
- Physical exam demonstrates BOTH of the following findings:
 - positive anterior impingement sign (i.e., groin-dominant hip pain with forced hip flexion, adduction, and internal rotation)
 - limited passive hip internal rotation
- Failure of provider-directed non-surgical management for at least three (3) months' duration AND which must include the following (unless contraindicated):
 - an image-guided intra-articular hip injection with local anesthetic (with or without corticosteroid) to which there was a positive response (i.e., any degree of pain reduction achieved within two (2) weeks after the injection)
- Symptoms include groin-dominant hip pain that is worsened by flexion (e.g., squatting or prolonged sitting) and that significantly limits activities

Arthroscopic or Open Hip Surgery for Femoroacetabular Impingement (FAI) Non-Indications

CMM.JT.NI.314

v1.0.2026

Not Medically Necessary

- Arthroscopic or open hip surgery for femoroacetabular impingement (FAI) is considered **not medically necessary** for ANY other indication or condition, including ANY of the following radiographic findings:
 - joint space narrowing less than 2mm along the sourcil
 - presence of Tönnis Grade 2-3 osteoarthritis
 - severe femoral retroversion or anteversion with gait abnormality
 - broken Shenton line
 - inclination Tönnis angle $>13^{\circ}$ - 15°

Hip Surgery- Arthroscopic and Open Procedures

Arthroscopic or Open Hip Surgery for Avascular Necrosis (AVN)

Hip Surgery- Arthroscopic and Open Procedures

Guideline	Page
Arthroscopic or Open Hip Surgery for Avascular Necrosis (AVN) Indications.....	17
Arthroscopic or Open Hip Surgery for Avascular Necrosis (AVN) Non-Indications.....	18

Arthroscopic or Open Hip Surgery for Avascular Necrosis (AVN) Indications

CMM.JT.IN.314

v1.0.2026

Arthroscopic or open hip surgery for avascular necrosis (AVN) of the femoral head is considered **medically necessary** when ALL of the following criteria have been met:

- ONE of the following hip procedures is planned:
 - core decompression
 - varus rotational osteotomy
 - valgus flexion osteotomy
 - curettage and bone grafting through the Mont trapdoor technique or the Merel D'Aubigne light bulb technique
 - free vascularized fibular graft (FVFG)
- Imaging findings required based on procedure type:
 - For core decompression:
 - MRI or x-ray findings of cystic or sclerotic changes without subchondral fracture of the femoral head (i.e., pre-collapse)
 - For varus rotational osteotomy:
 - MRI findings of a small lesion in which the lesion can be rotated away from a weight-bearing surface
 - For valgus flexion osteotomy:
 - MRI findings of anterolateral disease
 - For curettage and bone grafting through the Mont trapdoor technique or the Merel D'Aubigne light bulb technique:
 - MRI findings of pre-collapse
 - For free vascularized fibular graft (FVFG):
 - MRI findings of EITHER pre-collapse or collapsed avascular necrosis of the femoral head in young individuals with a reversible etiology
- ANY of the following symptoms or physical exam findings:
 - deep groin pain
 - pain associated with movement or weight-bearing
 - limited rotation of hip in both extension and flexion
 - antalgic gait
 - mechanical symptoms of the hip (e.g., catching, locking, or giving way) associated with groin-dominant hip pain that significantly limits activities

Arthroscopic or Open Hip Surgery for Avascular Necrosis (AVN) Non- Indications

CMM.JT.NI.314

v1.0.2026

Not Medically Necessary

- Arthroscopic or open hip surgery for avascular necrosis (AVN) of the femoral head is considered **not medically necessary** for ANY other indication or condition.

Hip Surgery- Arthroscopic and Open Procedures

Synovectomy

Guideline	Page
Synovectomy Indications.....	20
Synovectomy Non-Indications.....	21

Synovectomy Indications

CMM.JT.IN.314

v1.0.2026

Synovectomy is considered **medically necessary** when ALL of the following criteria have been met:

- MRI or CT arthrogram shows evidence of synovitis
- Presence of ANY of the following conditions:
 - inflammatory arthritis (i.e., rheumatoid arthritis, gout, pseudogout, psoriatic arthritis)
 - pigmented villonodular synovitis (PVNS)
 - synovial chondromatosis
 - Lyme synovitis
 - hemochromatosis
 - recurrent hemarthrosis (e.g., secondary to sickle cell anemia, bleeding diathesis, etc.)
- Physical exam demonstrates EITHER of the following findings:
 - limited range of motion
 - evidence of joint swelling/effusion
- Symptoms include function-limiting pain (e.g., 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 provider-directed non-surgical management for at least three (3) months' duration

Synovectomy Non-Indications

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v1.0.2026

Not Medically Necessary

- Synovectomy is considered **not medically necessary** for ANY other indication or condition.

Procedures and Conditions Not Addressed Elsewhere

Hip Surgery- Arthroscopic and Open Procedures

Guideline	Page
Procedures and Conditions Not Addressed Elsewhere Indications.....	23
Procedures and Conditions Not Addressed Elsewhere Non-Indications.....	24

Procedures and Conditions Not Addressed Elsewhere Indications

CMM.JT.IN.314

v1.0.2026

Arthroscopic or open hip surgery is considered **medically necessary** for ANY of the following:

- acute fracture of the hip (femoral or acetabular)
- malunion of a previous fracture
- acute or post-traumatic injury in which there is a correlation between physical exam and diagnostic imaging findings confirming a condition which is reasonably suspected of producing the individual's severe pain and limitation in function
- tumor, infection, foreign body, or other deformity (e.g., in conjunction with a periacetabular osteotomy for hip dysplasia) that has led to or will likely lead to progressive destruction
- synovial biopsy
- irrigation and debridement of an intra-articular joint space infection
- removal of a radiographically-confirmed ossification or osteochondral loose body

Procedures and Conditions Not Addressed Elsewhere Non-Indications

CMM.JT.NI.314

v1.0.2026

Not Medically Necessary

- Arthroscopic or open hip surgery is considered **not medically necessary** for ANY other indication or condition.
- Based on lack of scientific evidence of efficacy and safety, "in-office" diagnostic arthroscopy (e.g., Mi-Eye™, VisionScope®) is considered **not medically necessary**.

Experimental, Investigational, or Unproven (EIU)

- Capsular plication is considered **experimental, investigational, or unproven**
- Anterior inferior iliac spine/subspinous decompression is considered **experimental, investigational, or unproven**.

Codes (CMM-314)

Guideline	Page
Codes (CMM-314).....	26

Hip Surgery- Arthroscopic and Open Procedures

Codes (CMM-314)

CMM.JT.PC.314

v1.0.2026

The inclusion of any code in this table does not imply that the code is under management or requires prior authorization. Refer to the applicable health plan for management details. Prior authorization of a code listed in this table is not a guarantee of payment. The Certificate of Coverage or Evidence of Coverage policy outlines the terms and conditions of the member's health insurance policy.

Code	Code Description/Definition
27033	Arthrotomy, hip, including exploration or removal of loose or foreign body
27175	Treatment of slipped femoral epiphysis; by traction, without reduction
29860	Arthroscopy, hip, diagnostic with or without synovial biopsy (separate procedure)
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
29914	Arthroscopy, hip, surgical; with femoroplasty (i.e. treatment of cam lesion)
29915	Arthroscopy, hip, surgical; with acetabuloplasty (i.e. treatment of pincer lesion)
29916	Arthroscopy, hip, surgical; with labral repair

Hip Surgery- Arthroscopic and Open Procedures

Evidence Discussion (CMM-314)

Guideline	Page
Evidence Discussion (CMM-314).....	28

Hip Surgery- Arthroscopic and Open Procedures

Evidence Discussion (CMM-314)

CMM.JT.ED.314

v1.0.2026

Hip Synovectomy

Indications for synovectomy of the hip can be confirmed by history, symptoms, physical examination, diagnostic studies, and imaging.^{74,85} Risks are increased by the fact that the procedure is more complicated by the anatomy of the hip as compared to that of other commonly operated joints.⁷⁴

Surgical infection, bleeding, joint surface damage, joint stiffness, and damage to neurovascular structures are not uncommon. Besides the usual complications of surgery and anesthesia, extravasation of fluid, extrusion of intra-articular bodies, damage to the blood supply of the femoral head, and capsular instability can occur.^{85,87}

Given the potential for significant complications, proper patient selection per evidence-based guidelines is crucial to minimize the risk-benefit ratio and to best ensure patient safety.⁴⁰

References (CMM-314)

Guideline	Page
References (CMM-314).....	30

References (CMM-314)

CMM.JT.RF.314

v1.0.2026

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