cohere h e A L T H

Cohere Medicare Advantage Policy -Hip Arthroscopy

Clinical Guidelines for Medical Necessity Review

Version: 3 Revision Date: January 23, 2025

Important Notices

Notices & Disclaimers:

<u>GUIDELINES SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE</u> NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION MAKING OF END USERS.

Cohere Health, Inc. ("<u>Cohere</u>") has published these clinical guidelines to determine medical necessity of services (the "<u>Guidelines</u>") for informational purposes only, and solely for use by Cohere's authorized "<u>End Users</u>". These Guidelines (and any attachments or linked third party content) are not intended to be a substitute for medical advice, diagnosis, or treatment directed by an appropriately licensed healthcare professional. These Guidelines are not in any way intended to support clinical decision making of any kind; their sole purpose and intended use is to summarize certain criteria Cohere may use when reviewing the medical necessity of any service requests submitted to Cohere by End Users. Always seek the advice of a qualified healthcare professional regarding any medical questions, treatment decisions, or other clinical guidance. The Guidelines, including any attachments or linked content, are subject to change at any time without notice. This policy may be superseded by existing and applicable Centers for Medicare & Medicaid Services (CMS) statutes.

©2025 Cohere Health, Inc. All Rights Reserved.

Other Notices:

HCPCS® and CPT® copyright 2025 American Medical Association. All rights reserved.

Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

HCPCS and CPT are registered trademarks of the American Medical Association.

Guideline Information:

Specialty Area: Disorders of the Musculoskeletal System **Guideline Name:** Cohere Medicare Advantage Policy - Hip Arthroscopy

Literature review current through: 1/21/2025 Document last updated: 1/23/2025 Type: [X] Adult (18+ yo) | [_] Pediatric (0-17yo)

Table of Contents

Important Notices	2
Table of Contents	3
Medical Necessity Criteria	4
Service: Hip Arthroscopy	4
Benefit Category	4
Related CMS Documents	4
Recommended Clinical Approach	4
Evaluation of Clinical Benefits and Potential Harms	4
Medical Necessity Criteria	6
Indications	6
Non-Indications	8
Level of Care Criteria	8
Procedure Codes (CPT/HCPCS)	8
Medical Evidence	
References	12
Clinical Guideline Revision History/Information	18

Medical Necessity Criteria

Service: Hip Arthroscopy

Benefit Category Not Applicable

Related CMS Documents

Please refer to the <u>CMS Medicare Coverage Database</u> for the most current applicable CMS National Coverage.

• There are no applicable NCDs and/or LCDs for hip arthroscopy.

Recommended Clinical Approach

Hip arthroscopy is a minimally invasive procedure that offers visualization of the hip joint through an instrument known as an arthroscope. Hip arthroscopy is useful for clinically complex cases with an unclear diagnosis and can also be used to collect biopsies to assess for synovial disease. Injuries to the hip may also be repaired during arthroscopy, including labral tears and acute trauma resulting in loose bodies within the hip joint. The torn labrum may be repaired by removing labral pieces and then suturing the tear. Femoroacetabular impingement (FAI) is another common indication for hip arthroscopy. It causes pain and limits activity because of the abnormal shape of the bones of the hip, which developed improperly during childhood skeletal growth. In general, arthroscopy is well-tolerated, safe, and leads to improved function and quality of life.¹

Evaluation of Clinical Benefits and Potential Harms

Cohere Health uses the criteria below to ensure consistency in reviewing the conditions to be met for coverage of hip arthroscopy procedures. This process helps to prevent both incorrect denials and inappropriate approvals of medically necessary services. Specifically, limiting incorrect approvals reduces the risks associated with unnecessary procedures, such as complications from surgery, adverse reactions, and infection.

The potential clinical harms of using these criteria may include:

- Inadequate management of hip conditions, potentially resulting in progressive degenerative joint disease, worsening pain, or impaired mobility. Decreased mobility can result in medical comorbidities. An undertreated, unstable hip labral tear can lead to early degenerative changes within the hip joint, leading to chronic pain and placing patients at risk for possible opioid dependency.¹
- Risks with inappropriate surgical procedures include infection, bleeding, injury to neurovascular structures, injury to the articular cartilage, implant (anchor) migration, anesthetic risk, and the need for repeat or additional procedures.¹ Other risks include iatrogenic injury due to intraoperative traction, damage due to misplaced anchors, fluid extravasation, avascular necrosis of the femoral head, adhesions, fracture of the femoral head, and tendinitis.¹ If a patient has an inappropriate hip arthroscopy, this can lead to additional complications, necessitating further invasive management; therefore, careful patient selection is in the patient's best interest.
- Increased healthcare costs and complications from the inappropriate use of emergency services and additional treatments.

The potential clinical benefits of using these criteria may include:

- Improved patient outcomes by ensuring timely and appropriate access to hip arthroscopy for managing those hip pathologies that are best treated through hip arthroscopy. Hip arthroscopy is minimally invasive, decreases the risk of neurovascular injury, and requires a shorter recovery time as compared to open procedures. By appropriately managing intra-articular abnormalities within the hip joint, further joint damage can be prevented or slowed.
- Reduction in adverse effects of non-indicated, unnecessary procedures. It is crucial to avoid unnecessary surgery, as in the future, it may result in additional invasive management.
- Appropriate management of acute orthopaedic trauma and acute infection. Early arthroscopic repair is indicated for adults with certain traumatic injuries and infections to optimize outcomes. These criteria allow for approval of patients with acute trauma or infection of the hip joint without requiring any additional treatment so as to expedite their treatment.
- Enhanced overall patient satisfaction with the healthcare experience and return of function. Positive patient-reported outcomes include

reduced pain, improved function, and increased quality of life for individuals.

This policy includes provisions for expedited reviews and flexibility in urgent cases to mitigate risks of delayed access. Evidence-based criteria are employed to prevent inappropriate denials, ensuring that patients receive medically necessary care. The criteria aim to balance the need for effective treatment with the minimization of potential harms, providing numerous clinical benefits in helping avoid unnecessary complications from inappropriate care.

In addition, the use of these criteria is likely to decrease inappropriate denials by creating a consistent set of review criteria, thereby supporting optimal patient outcomes and efficient healthcare utilization.

Medical Necessity Criteria

Indications

- → Hip arthroscopy is considered appropriate when ALL of the following are TRUE:
 - **ANY** of the following is true:
 - Acute pathology (infection, trauma, gluteal tear) which is exempt from conservative care^{1,15}; OR
 - Failure of conservative management for greater than 3 months, including **ALL** of the following^{1,15}:
 - Anti-inflammatory medications, analgesics, or prescription medications (e.g., oral steroids, narcotics, neuropathic pain medications) if not contraindicated;
 AND
 - Physical therapy or physician-directed home exercise program; AND
 - **ANY** of the following:
 - Corticosteroid injection if medically appropriate; OR
 - Corticosteroid injection is contraindicated; OR
 - **ANY** of the following is **TRUE**:
 - **Diagnostic hip arthroscopy** is considered appropriate if the patient has a source of hip pain with an unclear diagnosis, and **ANY** of the following is **TRUE**^{1,15}:

- Loose bodies; OR
- Chondral lesion; OR
- Synovial disease; OR
- Adhesive capsulitis; **OR**
- **Trochanteric bursectomy** is considered appropriate when the patient has **ANY** of the following^{1,15}:
 - Trochanteric bursitis (greater trochanteric pain syndrome); OR
 - Snapping hip syndrome; **OR**
 - Gluteal tendinopathy; OR
- **Gluteal repair** is considered appropriate when the patient has **ANY** of the following^{1,15}:
 - Snapping hip syndrome; **OR**
 - Deep gluteal syndrome (piriformis syndrome); **OR**
 - Greater trochanteric pain syndrome; **OR**
 - Gluteal tendinopathy; OR
- Arthroscopic labral debridement is considered appropriate when labral degeneration is visible on advanced imaging¹¹⁵; OR
- Arthroscopic osteochondroplasty is considered appropriate when ALL of the following are TRUE^{1,15,17}:
 - Positive impingement sign with pain (hip is flexed to 90 degrees, adducted, and internally rotated); AND
 - Moderate to severe persistent hip or groin pain that limits activity and is worse with hip flexion; AND
 - Advanced imaging demonstrates ANY of the following:
 - Femoroacetabular impingement (FAI) impingement with evidence of CAM impingement (alpha angle greater than 50 degrees); OR
 - Pincer impingement (coxa profunda or acetabular retroversion); OR
 - Subspine impingement²; **OR**
 - Ischiofemoral impingement^{2.3}; OR
 - Residual impingement remains after first arthroscopy^{1,4}; OR

- Arthroscopic labral repair is considered appropriate if a labral tear can be repaired based on advanced imaging findings^{1,15,16,18}; OR
- Other arthroscopic intervention is considered appropriate for ANY of the following:
 - Sciatic nerve entrapment^{1,5}; **OR**
 - Ligamentum teres disorder^{1.6}; **OR**
 - Psoas tendon disorder¹; **OR**
 - Atraumatic instability that is felt to be resolvable with arthroscopic capsular plication^{13,14}; **OR**
 - Proximal hamstring injury indicated by ANY of the following^{1,7-9}:
 - 2-tendon injury with greater that 2 centimeters of retraction; OR
 - ♦ 3-tendon injury; OR
 - Acute infection/joint sepsis¹; **OR**
 - Acute trauma with associated findings on imaging (e.g. loose body noted after hip dislocation)¹; OR
 - Acute gluteal tear (partial or full-thickness) within three months of injury.¹¹⁰

Non-Indications

- → Hip arthroscopy is not considered appropriate when ANY of the following is TRUE:
 - Ankylosis of the hip¹⁵; **OR**
 - Advanced hip osteoarthritis (Tönnis grade 2 or 3).

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

HCPCS Code	Code Description/Definition	
27299	Unlisted procedure, pelvis or hip joint	
29860	Diagnostic arthroscopy of hip joint; Diagnostic arthroscopy of hip joint with synovial biopsy	
29861	9861 Surgical arthroscopy of hip with removal of foreign body Surgical arthroscopy of hip with removal of loose body	

29862	Surgical arthroscopy of hip with debridement of articular cartilage; Surgical arthroscopy of hip with debridement of articular cartilage, abrasion arthroplasty, and resection of labrum; Surgical arthroscopy of hip with debridement of articular cartilage, and abrasion arthroplasty; Surgical arthroscopy of hip with shaving of articular cartilage, abrasion arthroplasty, and resection of labrum	
29863	Surgical arthroscopy of hip with synovectomy	
29914	Surgical arthroscopy of hip with femoroplasty; Surgical arthroscopy of hip with femoroplasty for cam lesion	
29915	Surgical arthroscopy of hip with acetabuloplasty; Surgical arthroscopy of hip with acetabuloplasty for pincer lesion	
29916	Surgical arthroscopy of hip with labral repair	
29999	Unlisted arthroscopic procedure	

Medical Evidence

As compared to traditional open procedures, hip arthroscopy is minimally invasive, decreases the risk of neurovascular injury, and requires a shorter recovery time. A 2023 systematic review of patients aged 50 years and older saw these benefits persist among an older population, albeit alongside a pronounced risk for revision surgery and subsequent total hip arthroplasty (THA). The systematic review consisted of 6,696 patients across 17 studies who underwent primary hip arthroscopy between 2015 and 2021. Up to 10.8% of patients underwent surgical revision, while up to 34% experienced ultimate conversion to THA. The authors concluded that, although postoperative patient-reported outcomes were significantly improved as compared to baseline, careful patient selection is particularly important for patients of advanced age in order to appropriately weigh the very real risk of eventual revision or conversion to THA.¹²

Conducted in 2018, the UK FASHION study was an assessor-blinded, randomized controlled trial involving 348 patients with femoroacetabular hip impingement syndrome (FAI), 171 of whom underwent hip arthroscopy, while the other 177 were treated with conservative care alone. The authors found that hip arthroscopy conferred a significant improvement in quality of life at one year after surgical intervention. They noted that these results solidified the use of arthroscopy to treat FAI, which has grown in clinical popularity in recent years.¹¹

A 2021 systematic review addressed the role of hip arthroscopy in the management of gluteal tendinopathy. The authors evaluated 27 studies, including 6 randomized controlled trials, with an aggregate of 1103 patients. Bursectomy was felt to be a valuable treatment option for patients who failed conservative measures. Surgical repair of partial-thickness and full-thickness gluteal tears was encouraged to be considered early in the course of injury due to the lack of data regarding nonoperative treatment of grade 3 and grade 4 (partial; full) tendinopathy.¹⁰

The American Association of Orthopaedic Surgeons (AAOS) has issued position statements pertaining to hip arthroscopy. Information statement 1047, published in 2016, acknowledges the increased patient safety risks

conferred by tobacco use - including increased ventilatory support, myocardial infarction, cardiac arrest, cerebrovascular accident, sepsis, and death.¹⁹ The AAOS states that patients who are active smokers may reduce these risks through cessation of smoking prior to surgery; they also note the special role orthopaedic surgeons play in counseling patients on the benefits of reduced or eliminated tobacco use before surgery. Importantly, unconfirmed cessation is not endorsed as a hard stop to surgery; rather, the surgeon's unique role as an advocate for preoperative smoking cessation is emphasized. Statements 1040 and 1184 discuss the impact of obesity on musculoskeletal conditions.^{20,21} Patients with morbid obesity (BMI of 40 or above) are encouraged to participate in a weight loss program, obtain weight reduction resources through their physician, rectify nutritional deficiencies, and consider a delay in surgical treatment if it would facilitate participation in weight loss interventions that may improve surgical outcomes. Statement 1040 notes that individuals with obesity face an increased risk for sports injuries, and that when such injuries are treated arthroscopically, the procedure may be more technically difficult because of the loss of superficial landmarks. Questions remain as to whether functional results are affected by obesity. Further, the authors note the risks associated with general anesthesia for patients with obesity and emphasize the importance of adequate patient positioning and padding to avoid pressure ulcers, nerve palsies, and compartment syndromes, which are more common among obese patients. In general, obesity is associated with greater risk of premature complications and mortality during the perioperative period. The AAOS endorses compassionate, risk-informed patient counseling for obese patients who are considering surgery. Careful screening and appropriate referral to nutrition or endocrine care is also endorsed. Statement 1184 reinforces the risks associated with obesity in the setting of orthopaedic care and similarly encourages adequate patient counseling prior to surgery.

Social determinants of health remain an important area of ongoing orthopaedic surgery research, with recent literature raising questions regarding the healthcare disparities that may be potentiated by care limitations based on obesity and smoking status/nicotine dependence.²²⁻²⁴ Other ongoing research interrogates the impacts that biological sex, race, and socioeconomic status have on hip arthroscopy utilization and outcomes.²⁵⁻³⁴

References

- 1. Phillips BB, Mihalko MJ. Arthroscopy of the Lower Extremity. Azar FM, Beaty JH, editors. In: *Campbell's Operative Orthopaedics*. 14th ed. Philadelphia, PA: Elsevier; 2021:2576-2662.e8.
- 2. Ryan MK. Addressing Extra-Articular Impingement in the Athlete. Operative Techniques in Sports Medicine. 2024 Sep 1;32(3):151109.
- Wu WT, Chang KV, Mezian K, Naňka O, Ricci V, Chang HC, Wang B, Hung CY, Özçakar L. Ischiofemoral impingement syndrome: clinical and imaging/guidance issues with special focus on ultrasonography. *Diagnostics*. 2022 Dec 31;13(1):139.
- 4. Gwathmey FW, Jones KS, Thomas Byrd JW. Revision hip arthroscopy: findings and outcomes. *Journal of hip preservation surgery*. 2017 Dec;4(4):318-23.
- 5. Perets I, Rybalko D, Mu BH, Friedman A, Morgenstern DR, Domb BG. Hip arthroscopy: extra-articular procedures. *Hip International*. 2019 Jul;29(4):346-54.
- Knapik DM, Farivar D, Kunze KN, Gilat R, Nho SJ, Chahla J. Indications and outcomes after ligamentum teres reconstruction: a systematic review. *Arthroscopy, Sports Medicine, and Rehabilitation*. 2021 Jun 1;3(3):e939-49.
- Ahmad CS, Redler LH, Ciccotti MG, Maffulli N, Longo UG, Bradley J. Evaluation and management of hamstring injuries. *The American journal of sports medicine*. 2013 Dec;41(12):2933-47.
- 8. Fletcher AN, Cheah JW, Nho SJ, Mather RC. Proximal hamstring injuries. *Clinics in Sports Medicine*. 2021 Apr 1;40(2):339-61.
- Allahabadi S, Salazar LM, Obioha OA, Fenn TW, Chahla J, Nho SJ. Hamstring injuries: a current concepts review: evaluation, nonoperative treatment, and surgical decision making. *The American Journal of Sports Medicine*. 2024 Mar;52(3):832-44.
- Ladurner A, Fitzpatrick J, O'Donnell JM. Treatment of gluteal tendinopathy: a systematic review and stage-adjusted treatment recommendation. *Orthopaedic Journal of Sports Medicine*. 2021 Jul 29;9(7):23259671211016850.
- 11. Griffin DR, Dickenson EJ, Wall PD, et al. Hip arthroscopy versus best conservative care for the treatment of femoroacetabular impingement syndrome (UK FASHION): a multicentre randomised controlled trial. *The*

Lancet. 2018 Jun 2;391(10136):2225-35. DOI: 10.1016/S0140-6736(18)31202-9

- 12. Shanmugaraj A, Kumar MV, Al Naji O, Simunovic N, Philippon MJ, Ayeni OR. Hip arthroscopy improves outcomes with moderate conversion to total hip arthroplasty rates in patients aged 50 years or older: a systematic review. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2023 Jun 1;39(6):1539-51.
- Kalisvaart MM, Safran MR. Hip instability treated with arthroscopic capsular plication. *Knee Surgery, Sports Traumatology, Arthroscopy*. 2017 Jan;25:24-30.
- 14. Maldonado DR, Chen JW, Yelton MJ, Rosinsky PJ, Shapira J, Brayboy C, Lall AC, Domb BG. Achieving successful outcomes of hip arthroscopy in the setting of generalized ligamentous laxity with labral preservation and appropriate capsular management: a propensity matched controlled study. *The American Journal of Sports Medicine*. 2020 Jun;48(7):1625-35.
- Ross JR, Larson CM, Bedi A. Indications for hip arthroscopy. Sports Health. 2017 Sep/Oct;9(5):402-413. doi: 10.1177/1941738117712675. PMID: 28678628; PMCID: PMC5582699.
- Groh MM, Herrera J. A comprehensive review of hip labral tears. *Curr Rev Musculoskelet Med*. 2009 Jun;2(2):105–17. doi: 10.1007/s12178-009-9052-9. PMID: 19468871; PMCID: PMC2697339.
- Wilson AS, Cui Q. Current concepts in management of femoroacetabular impingement. World J Orthop. 2012 Dec 18;3(12):204–11. doi: 10.5312/wjo.v3.i12.204. PMID: 23362464; PMCID: PMC3557322.
- Woyski D, Mather RC. Surgical treatment of labral tears: Debridement, repair, reconstruction. *Curr Rev Musculoskelet Med*. 2019 Sep;12(3):291-299. doi: 10.1007/s12178-019-09575-1. PMID: 31346980; PMCID: PMC6684681.
- 19. American Academy of Orthopaedic Surgeons. Information Statement 1047: Tobacco Use and Orthopaedic Surgery. Published February 2016. Accessed January 3, 2025.

https://www.aaos.org/globalassets/about/bylaws-library/informationstatements/1047-tobacco-use-and-orthopaedic-surgery-3.pdf.

20. American Academy of Orthopaedic Surgeons. Information Statement 1040: Obesity and Musculoskeletal Care. Published June 2022. Accessed January 3, 2025. https://www.aaos.org/globalassets/about/bylaws-library/informationstatements/1040-obesity-and-musculoskeletal-care.pdf.

21. American Academy of Orthopaedic Surgeons. Information Statement 1184: The Impact of Obesity on Bone and Joint Health. Published March 2015. Accessed January 3, 2025.

https://www.aaos.org/contentassets/1cd7f41417ec4dd4b5c4c48532183 b96/1184-the-impact-of-obesity-on-bone-and-joint-health1.pdf.

- 22. Anaspure OS, Patel S, Baumann AN, Lenz T, Pascual-Leone N, Anastasio AT, Lau BC. Examining the role of smoking on clinical outcomes after arthroscopic surgery of the hip: a systematic review and meta-analysis. *European Journal of Orthopaedic Surgery & Traumatology*. 2025 Dec;35(1):1-7.
- 23.Lee MS, Jimenez AE, Owens JS, Curley AJ, Paraschos OA, Maldonado DR, Lall AC, Domb BG. Comparison of outcomes between nonsmokers and patients who discontinued smoking 1 month before primary hip arthroscopy: a propensity-matched study with minimum 2-year follow-up. *Orthopaedic Journal of Sports Medicine*. 2022 Jun 8;10(6):23259671221097372.
- 24.Emara AK, Grits D, Samuel LT, Acuña AJ, Rosneck JT, Kamath AF. Hip Arthroscopy in smokers: A systematic review of patient-reported outcomes and complications in 18,585 cases. *The American Journal of Sports Medicine*. 2021 Mar;49(4):1101-8.
- 25.Niehaus R, Zingg PO, Hoch A, Luttenberger M, Stefan R. Hip arthroscopy versus total hip arthroplasty—A study on patients with obesity above 40 years of age. *Clinical Obesity*. 2023 Oct;13(5):e12590.
- 26.Kuroda Y, Hashimoto S, Saito M, Hayashi S, Nakano N, Matsushita T, Niikura T, Kuroda R, Matsumoto T. Obesity is associated with less favorable outcomes following hip arthroscopic surgery: a systematic review and meta-analysis. *Knee Surgery, Sports Traumatology, Arthroscopy*. 2021 May;29:1483-93.
- 27. Gupta A, Redmond JM, Hammarstedt JE, Stake CE, Domb BG. Does obesity affect outcomes in hip arthroscopy? A matched-pair controlled study with minimum 2-year follow-up. *The American Journal of Sports Medicine*. 2015 Apr;43(4):965-71.
- 28.Lee JS, Rachala RR, Gillinov SM, Siddiq BS, Dowley KS, Cherian NJ, Martin SD. Relationship Between Neighborhood-Level Socioeconomic Status and Functional Outcomes After Hip Arthroscopy. *The American Journal of Sports Medicine*. 2024 Oct;52(12):3054-64.

- 29. Amen TB, Chatterjee A, Rudisill SS, Joseph GP, Nwachukwu BU, Ode GE, Williams III RJ. National Patterns in Utilization of Knee and Hip Arthroscopy: An Analysis of Racial, Ethnic, and Geographic Disparities in the United States. *Orthopaedic Journal of Sports Medicine*. 2023 Aug 16;11(8):23259671231187447.
- 30.Buerba RA, Dalton J, Sadhwani S, Schulz W, Atte AC, Vyas D. Hip Arthroscopy Utilization Disparities and Complications Amongst Ethnic Groups. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*. 2024 Oct;61:00469580241282644.
- 31. Gillinov SM, LaPorte ZL, Lee JS, Siddiq BS, Dowley KS, Cherian NJ, Eberlin CT, Kucharik MP, Martin SD. Social determinants of health disparities increase 5-year revision rates but not postoperative complications after primary hip arthroscopy. *Arthroscopy: The Journal of Arthroscopic* & *Related Surgery*. 2024 Aug 20.
- 32. Saks BR, Ouyang VW, Domb ES, Jimenez AE, Maldonado DR, Lall AC, Domb BG. Equality in hip arthroscopy outcomes can be achieved regardless of patient socioeconomic status. *The American Journal of Sports Medicine*. 2021 Dec;49(14):3915-24.
- 33.Parvaresh K, Rasio JP, Wichman D, Chahla J, Nho SJ. The influence of body mass index on outcomes after hip arthroscopy for femoroacetabular impingement syndrome: five-year results in 140 patients. *The American Journal of Sports Medicine*. 2021 Jan;49(1):90-6.
- 34.McCormack TJ, Vopat ML, Rooker J, Tarakemeh A, Baker J, Templeton KJ, Mulcahey MK, Mullen SM, Schroeppel JP, Vopat BG. Sex-based differences in outcomes after hip arthroscopic surgery for femoroacetabular impingement: a systematic review. *Orthopaedic Journal of Sports Medicine*. 2022 Nov 24;10(11):23259671221137857.
- 35.Kyin C, Maldonado DR, Go CC, Shapira J, Lall AC, Domb BG. Mid-to long-term outcomes of hip arthroscopy: a systematic review. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2021 Mar 1;37(3):1011-25.
- 36.Snaebjörnsson T, Anari SS, Lindman I, Desai N, Stålman A, Ayeni OR, Öhlin A. Most elite athletes who underwent hip arthroscopy for femoroacetabular impingement syndrome did not return to the same level of sport, but the majority were satisfied with the outcome of surgery. *Arthroscopy, Sports Medicine, and Rehabilitation*. 2022 Jun 1;4(3):e899-906.
- 37. Nawabi DH, Bedi A, Tibor LM, Magennis E, Kelly BT. The demographic characteristics of high-level and recreational athletes undergoing hip

arthroscopy for femoroacetabular impingement: a sports-specific analysis. *Arthroscopy: The Journal of Arthroscopic & Related Surgery.* 2014 Mar 1;30(3):398-405.

- 38.National Institute for Health and Care Excellence (NICE). Osteoarthritis in over 16s: Diagnosis and management [NG226]. Published October 19, 2022. Accessed July 1, 2024. www.nice.org.uk/guidance/ng226.
- 39.Briggs KK, Bolia IK. Hip arthroscopy: an evidence-based approach. *The Lancet*. 2018 Jun 2;391(10136):2189-90. DOI: 10.1016/S0140-6736(18)31218-2
- 40.Zhu Y, Su P, Xu T, Zhang L, Fu W. Conservative therapy versus arthroscopic surgery of femoroacetabular impingement syndrome (FAI): a systematic review and meta-analysis. *J Orthop Surg Res*. 2022 Jun 3;17(1):296. https://doi.org/10.1186/s13018-022-03187-1
- 41. Mok TN, He QY, Teng Q, et al. Arthroscopic hip surgery versus conservative therapy on femoroacetabular impingement syndrome: a meta-analysis of RCTs. *Orthopaedic surgery*. 2021 Aug;13(6):1755-64. https://doi.org/10.1111/os.13099
- 42. Mansell NS, Rhon DI, Meyer J, Slevin JM, Marchant BG. Arthroscopic surgery or physical therapy for patients with femoroacetabular impingement syndrome: a randomized controlled trial with 2-year follow-up. *Am J Sports Med.* 2018 May;46(6):1306-14. https://doi.org/10.1177/0363546517751912
- 43. Anzillotti G, Iacomella A, Grancagnolo M, Bertolino EM, Marcacci M, Sconza C, Kon E, Di Matteo B. Conservative vs. surgical management for femoro-acetabular impingement: a systematic review of clinical evidence. *J Clin Med* 2022 Oct 2;11(19):5852. https://doi.org/10.3390/jcm11195852
- 44.Shahpari O, Mortazavi J, Ebrahimzadeh MH, Bagheri F, Mousavian A. Role of hip arthroscopy in the treatment of avascular necrosis of the hip: a systematic review. *Archives of Bone and Joint Surgery*. 2022 Jun;10(6):480.
- 45.Yee C, Wong M, Cohen D, et al. Labral tears and chondral lesions are common comorbidities identified during endoscopic repair of gluteal tendon tears for greater trochanteric pain syndrome: a systematic review. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2023 Mar 1;39(3):856-64. https://doi.org/10.1016/j.arthro.2022.06.031
- 46.Suarez-Ahedo C, Camacho-Galindo J, López-Reyes A, et al. A comprehensive review of hip arthroscopy techniques and outcomes. *SAGE Open Medicine*. 2024 Jan;12:20503121231222212. https://doi.org/10.1177/20503121231222212

- 47. Awad MA, Bajwa AK, Slaunwhite E, Logan KJ, Wong IH. Indications for hip arthroscopy in pediatric patients a systematic review. *Journal of Hip Preservation Surgery*. 2019 Dec;6(4):304–15.
- 48.Patricio Cordeiro TT, Rocha EA, Scattone Silva R. Effects of exercise-based interventions on gluteal tendinopathy. Systematic review with meta-analysis. *Scientific Reports*. 2024 Feb 9;14(1):3343.
- 49.Cargnelli S, Catapano M, Peterson D, et al. Efficacy of hip arthroscopy for the management of septic arthritis: a systematic review. *Arthroscopy: The Journal of Arthroscopic & Related Surgery*. 2015 Jul 1;31(7):1358-70.
- 50.Balato G, de Matteo V, Ascione T, et al. Management of septic arthritis of the hip joint in adults. A systematic review of the literature. *BMC Musculoskeletal Disorders*. 2021 Nov;22:1-3.

Clinical Guideline Revision History/ Information

Original Date: May 22, 2024				
Review History				
Version 2	6/10/2024	422.101 Disclaimer added		
Version 3	1/23/2025	 Annual policy review & restructure: Adjusted Recommended Clinical Approach to current format Added indications for gluteal repair and hip bursectomy based on physician feedback Updated with new standardized MSK criteria regarding conservative management Removed weight reduction requirement Added indication: Acute infection/joint sepsis Added indication: Acute trauma with findings documented on imaging (e.g. loose body noted after hip dislocation) Added indication: acute gluteal tear within 3 months of injury Added indication for revision arthroscopy Added indication for sciatic nerve entrapment Added indication for sciatic nerve entrapment Added indication for sciatic nerve entrapment Added indication for ligamentum teres disorder Added indication for capsular plication 		

	Updated referencesUpdated medical evidence section
--	---