

Cohere Medicare Advantage Policy - Knee Open or Arthroscopic Bursectomy

Clinical Guidelines for Medical Necessity Review

Version:

Effective Date: March 20, 2025

Important Notices

Notices & Disclaimers:

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

Cohere Health, Inc. ("Cohere") has published these clinical guidelines to determine the medical necessity of services (the "Guidelines") for informational purposes only, and solely for use by Cohere's authorized "End Users". 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 This policy may be superseded by existing and applicable Centers for Medicare & Medicaid Services (CMS) statutes.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 - Knee Open or Arthroscopic

Bursectomy

Date of last literature review: 3/18/2025 Document last updated: 3/19/2025

Type: $[\underline{\mathbf{X}}]$ Adult (18+ yo) | $[\underline{\mathbf{X}}]$ Pediatric (0-17 yo)

Table of Contents

Important Notices	2
Medical Necessity Criteria	4
Service: Knee Open or Arthroscopic Bursectomy	4
Benefit Category	4
Related CMS Documents	4
Recommended Clinical Approach	4
Evaluation of Clinical Harms and Benefits	4
Medical Necessity Criteria	6
Indications	6
Non-Indications	6
Level of Care Criteria	6
Procedure Codes (CPT/HCPCS)	6
Medical Evidence	7
References	9
Clinical Guideline Revision History/Information	10

Medical Necessity Criteria

Service: Knee Open or Arthroscopic Bursectomy

Benefit Category

Not applicable.

Please Note: This may not be an exhaustive list of all applicable Medicare benefit categories for this item or service.

Related CMS Documents

There are no applicable NCDs and/or LCDs for knee open or arthroscopic bursectomy. Please refer to the <u>CMS Medicare Coverage Database</u> for the most current applicable CMS National Coverage.

Recommended Clinical Approach

Prepatellar bursitis, the inflammation of the bursa in front of the kneecap, may result from repetitive injury, acute trauma, or inflammatory conditions, including gout, syphilis, tuberculosis, or rheumatoid arthritis.¹ Often, prepatellar bursitis can be treated with aspiration, immobilization, and antibiotic therapy—in the case of septic bursitis—or with non–steroidal anti–inflammatory drugs for non–septic bursitis.¹² An open or endoscopic knee bursectomy may be necessary when conservative treatment fails. An endoscopic bursectomy is a minimally invasive surgery, typically performed as an outpatient procedure, in which a small incision is made to remove the bursa, resulting in restored or improved function and pain relief. After surgery, patients should forego vigorous physical exertion for 2 weeks.³

Evaluation of Clinical Harms and Benefits

Cohere Health uses the criteria below to ensure consistency in reviewing the conditions to be met for coverage of knee open or arthroscopic bursectomy. 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, infections, and prolonged recovery times.

The potential clinical harms of using these criteria may include:

- A retrospective analysis of 536 patients treated for traumatic lesions of the olecranon and prepatellar bursa found a 6.3% and 6.7% rate of infections and wound healing disturbances, respectively. Other, less common complications included keloid scar formation, hematoma, seroma, recurrent bursitis, and swelling.⁴
- Other studies have found that patients undergoing a knee bursectomy are at risk of surgical site morbidities, including sub-optimal healing of the incision, decreased sensation, atrophic skin changes, and tenderness or pain around the scarring.^{3,5-7}
- Increased healthcare costs and complications from the inappropriate use of emergency services and additional treatments.

The clinical benefits of using these criteria include:

- A systematic review conducted by Brown et al. (2021) to establish the optimal management for prepatellar bursitis found that endoscopic knee bursectomy was associated with improved patient morbidity, restored range of motion, and reduced pain.²
- Enhanced overall patient satisfaction and healthcare experience.

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

- → A knee open or arthroscopic bursectomy is considered appropriate if ANY of the following is TRUE¹⁻⁸:
 - Failure of conservative management (e.g., rest, analgesics, physical therapy, oral or injectable corticosteroids) must be documented for a period of greater than 3 months.
 Documentation should include detailed evidence of the measures taken, rather than solely a physician's statement; OR
 - ◆ Suspected septic prepatellar knee bursitis/infection when symptoms have not improved significantly within 36-48 hours after initiation of antibiotic treatment.

 9

Non-Indications

- → A knee open or arthroscopic bursectomy is not considered appropriate if ANY of the following is TRUE:
 - There are no published contraindications.

Level of Care Criteria

Inpatient or Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
27340	Excision, prepatellar bursa

Disclaimer: G, S, I, and N Codes are non-covered per CMS guidelines due to their experimental or investigational nature.

Medical Evidence

Brown et al (2022) performed a systematic review to determine the optimal treatment for prepatellar bursitis. It included 10 studies (702 patients) comparing endoscopic and open bursectomy and assessing the duration of antibiotics. The primary outcome was recurrence after 1 year. Results showed no significant difference in recurrence between endoscopic and open bursectomy or surgical complications. Endoscopic bursectomy offered shorter hospital stays and lower postoperative pain risk. Antibiotic treatment for less than 8 days did not significantly increase recurrence compared to longer treatment. The study suggests endoscopic bursectomy as a viable option for septic and aseptic prepatellar bursitis. There is no significant improvement in recurrence or hospital stay with antibiotic treatment exceeding 7 days for septic bursitis.²

Uçkay et al (2017) conducted a randomized trial to analyze the optimal surgical approach for patients with septic bursitis. A total of 164 patients were randomized to receive either 1-stage or 2-stage bursectomy, along with 7 days of oral antibiotic therapy post-surgery. Of these patients, 130 had elbow bursitis, and 34 had patellar bursitis. The results showed 22 treatment failures overall, with a slightly lower rate in the 1-stage group (10%) than in the 2-stage group (16%), though this difference was not statistically significant. Recurrent infections were observed in a small percentage of patients, some caused by the same pathogen and others by a different pathogen. However, outcomes favored the 1-stage approach in terms of lower rates of wound dehiscence for elbow bursitis (1 out of 66 vs 9 out of 64), shorter median hospital stay (4.5 vs 6.0 days), reduced nurses' workload, and lower total costs. The conclusion drawn was that for adults with moderate to severe septic bursitis requiring hospitalization, bursectomy with primary closure and 7 days of antibiotic therapy was safe, effective, and cost-saving. Additionally, the study suggested that using a 2-stage approach may be associated with a higher risk of wound dehiscence for olecranon bursitis than the 1-stage approach.⁸

Baumbach et al (2015) reported on a study to develop a treatment algorithm for olecranon and prepatellar bursitis, which are common conditions predominantly affecting middle-aged male patients. About one-third of cases were septic, while two-thirds were non-septic, with treatment approaches varying internationally. A literature review identified 52 relevant papers. Differentiation between septic and non-septic bursitis relied on clinical presentation, bursal aspirate, and blood sampling analysis. Bursal aspirate criteria included purulence, glucose ratio, white cell count, cell type, Gram staining, and culture – general treatment for both types involved bursal aspiration, NSAIDs, and PRICE. In non-septic cases with high demands,

intrabursal steroid injection might be considered. Septic bursitis requires antibiotic therapy. Surgical intervention like incision, drainage, or bursectomy were reserved for severe, refractory, or chronic/recurrent cases. The authors concluded that immediate bursectomy lacked sufficient evidence support and suggested a conservative approach based on bursal aspirate differentiation between septic and non-septic bursitis.⁹

References

- 1. Huang YC, Yeh WL. Endoscopic treatment of prepatellar bursitis. *Int Orthop*. 2011;35(3):355-358. doi:10.1007/s00264-010-1033-5
- 2. Meade TC, Briones MS, Fosnaugh AW, et al. Surgical outcomes in endoscopic versus open bursectomy of the septic prepatellar or olecranon bursa. *Orthopedics*. 2019;42(4):e381-e384. doi:10.3928/01477447-20190321-04
- 3. Aaron DL, Patel A, Kayiaros S, et al. Four common types of bursitis: Diagnosis and management. *J Am Acad Orthop Surg*. 2011;19(6):359-367. doi:10.5435/00124635-201106000-00006
- 4. Raas C, Attal R, Kaiser P, et al. Treatment and outcome with traumatic lesions of the olecranon and prepatellar bursa: A literature review apropos a retrospective analysis including 552 cases. *Arch Orthop Trauma Surg.* 2017;137(6):823-827. doi:10.1007/s00402-017-2690-2
- 5. Luk WCB, Lui TH. Endoscopic resection of prepatellar bursa. *Arthrosc Tech.* 2020;9(7):e1057-e1060. doi:10.1016/j.eats.2020.04.003
- 6. Dillon JP, Freedman I, Tan JS, et al. Endoscopic bursectomy for the treatment of septic pre-patellar bursitis: A case series. *Arch Orthop Trauma Surg.* 2012;132(7):921-925. doi:10.1007/s00402-012-1494-7
- 7. Brown OS, Smith TO, Parsons T, et al. Management of septic and aseptic prepatellar bursitis: A systematic review. *Arch Orthop Trauma Surg*. 2022;142(10):2445-2457. doi:10.1007/s00402-021-03853-9
- Uçkay I, von Dach E, Perez C, et al. One- vs 2-stage bursectomy for septic olecranon and prepatellar bursitis: A prospective randomized trial. *Mayo Clin Proc*. 2017 Jul;92(7):1061-1069. doi: 10.1016/j.mayocp.2017.03.011
- 9. Baumbach SF, Lobo CM, Badyine I, et al. Prepatellar and olecranon bursitis: literature review and development of a treatment algorithm. *Arch Orthop Trauma Surg*. 2014;134(3):359-370. doi:10.1007/s00402-013-1882-7

Clinical Guideline Revision History/Information

Original Date: March 20, 2025			
Review History			