Manipulation under anesthesia (hip and elbow)

Clinical Policy ID: CCP.1245

Recent review date: 7/2026

Next review date: 11/2027

Policy contains: Adhesive capsulitis; arthrofibrosis, elbow; hip; lumbopelvic pain; manipulation under anesthesia.

AmeriHealth Caritas has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas' clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered, on a case by case basis, by AmeriHealth Caritas when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. AmeriHealth Caritas' clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. AmeriHealth Caritas' clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, AmeriHealth Caritas will update its clinical policies as necessary. AmeriHealth Caritas' clinical policies are not guarantees of payment.

Coverage policy

Manipulation under anesthesia for elbow and hip conditions is investigational/not clinically proven and, therefore, not medically necessary.

Limitations

No limitations were identified during the writing of this policy.

Alternative covered services

Conservative medical management including:

- Physical therapy.
- Occupational therapy.
- Pain management program.
- Standard chiropractic manipulation.
- Prescription drug therapy.

Background

Manipulation under anesthesia is a non-invasive technique aimed at reducing pain and improving range of motion. It consists of manipulation and stretching procedures performed while an individual receives anesthesia (e.g., conscious sedation, general anesthesia). Manipulation under anesthesia is most often used for patients refractory to conservative treatment, and cases with the presence of intersegmental and/or global recalcitrant motion restrictions. A chiropractor, osteopathic physician, or medical physician may perform this type of manipulation with an anesthesiologist and operating room nurse in attendance (Gordon, 2014).

Follow-up care occurs seven to 10 days after manipulation, allowing pre-rehabilitation and formal rehabilitation for three to six weeks. Measurement of progress after manipulation under anesthesia includes subjective and objective changes, such as pain index, range of motion, muscle mass, muscle contractility, nerve conduction studies, and radiography results (Gordon, 2014).

Manipulation under anesthesia for the elbow has been proposed for heterotopic ossification, although other nonsurgical interventions may be preferred (Patiño, 2024), and for lumbopelvic pain, including after hip surgery (Taber, 2014).

Findings

Guidelines

Although guidelines from the National Academy of Manipulation Under Anesthesia Providers were issued in 2001, they included no standards for patient selection (DiGiorgi, 2018).

An American College of Occupational and Environmental Medicine practice guideline on elbow disorders does not mention manipulation under anesthesia as a treatment option (Hegmann, 2013)

A guideline from the National Institute for Health and Care Excellence (2022) on osteoarthritis establishes a clear hierarchy for non-pharmacological management. The guideline designates therapeutic exercise, weight management, and patient education as the core treatments for the condition. In contrast, manual therapy, which includes manipulation and mobilization, is positioned as a secondary, adjunctive option that should be considered for hip osteoarthritis only when used together with therapeutic exercise. Additionally, the guideline explicitly recommends against using manual therapy as a standalone intervention, citing insufficient evidence to support its use alone. Instead, manual therapy is described as a conditional modality intended to support participation in the primary exercise program.

Evidence reviews

Summaries of articles in the professional literature addressing manipulation under anesthesia for elbow and hip conditions are presented here:

Elbow

A review of 45 patients assessed the effects of manipulation under anesthesia for elbow stiffness, given an average of 115 days after surgery or injury. The increase in average flexion arc was 57.9 degrees to 83.7 degrees 10 years after pre-manipulation flexion. Improvement in elbow flexion arc of motion was statistically significant ($P < .001$), with significantly greater average improvements in those who underwent manipulation within three months of surgery/injury, i.e., 38.3 degrees to 3.1 degrees (Spitler, 2018).

A Cochrane review of manipulation under anesthesia for elbow dislocations included two trials. One of these (n = 50) showed better, but statistically insignificant results for manipulation three days post reduction compared with cast immobilization. The second study (n = 30) had similar results – superior, but statistically insignificant. Both studies were methodologically flawed and potentially biased (Taylor, 2012).

Aside from these, only two articles in the literature address post-trauma manipulation under anesthesia of the elbow, using samples of 12 (Ek, 2016) and 12 (Rotman, 2019). Each of these involve adults; one study of pediatric patients (n = 13) showed manipulation under anesthesia to be effective for post-traumatic arthrofibrosis (Rane, 2020). Several others are case studies and are not cited here.

A recent article from the British Elbow and Shoulder Society lists manipulation under anesthesia as one of the acceptable options for post-traumatic elbow stiffness (Zhang, 2020). Another article states that the treatment for a stiff elbow should be used within six months of the injury or surgery (Mellema, 2016).

Hip

Few references addressing manipulation under anesthesia for hip pain, from trauma and other sources, are included in the medical literature. Several early reviews were case studies involving one patient. Another article found that among 37 patients with total hip arthroplasties, none required manipulation under anesthesia, unlike two of 78 after total or uni-compartmental knee arthroplasties (Shah, 2018).

A study of 18 patients requiring manipulation under anesthesia examined five types of lumbopelvic pain, including hip pain. Clinically meaningful reduction in low back pain disability was observed in 16 of the 18 patients (Taber, 2014).

In 2022, we updated the references. No policy changes are warranted.

In 2023, we updated the references and found no newly published, relevant literature to add to the policy. No policy changes are warranted.

In 2025, we updated the document with a guideline from National Institute for Health and Care Excellence (2022). No policy changes were warranted.

In 2026, no new relevant literature was found. No policy changes were warranted.

References

On June 3, 2026, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were “musculoskeletal manipulations” (MeSH), “anesthesia” (MeSH), “manipulation, orthopedic” (MeSH), “manipulation under anesthesia,” “elbow,” and “hip.” We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

DiGiorgi D, Cerf JL, Bowerman DS. Outcomes indicators and a risk classification system for spinal manipulation under anesthesia: A narrative review and proposal. *Chiropr Man Therap*. 2018;26:9. Doi: 10.1186/s12998-018-0177-z. eCollection 2018.

Ek ET, Paul SK, Hotchkiss RN. Outcomes after operative treatment of elbow contractures in the pediatric and adolescent population. *J Shoulder Elbow Surg*. 2016;25(12):2066-2070. Doi: 10.1016/j.jse.2016.09.008.

Gordon R, Cremata E, Hawk C. Guidelines for the practice and performance of chiropractic and manual therapies. *Chiropr Man Ther*. 2014;22:7. Doi: 10.1186/2045-709X-22-7.

Hegmann KT, Hoffman HE, Belcourt RM, et al. ACOEM practice guidelines: Elbow disorders. *J Occup Environ Med.* 2013;55(11):1365-1374. Doi: 10.1097/JOM.0b013e3182a0d7ec.

Mellema JJ, Lindenhovius AL, Jupiter JB. The posttraumatic stiff elbow: An update. *Curr Rev Musculoskeletr Med*. 2016;9(2):190-198. Doi: 10.1007/s12178-016-9336-9.

National Institute for Health and Care Excellence. Osteoarthritis in over 16s: diagnosis and management. Published October 19, 2022. https://www.nice.org.uk/guidance/ng226.

Patiño JM, Saenz VP. Stiff Elbow. In: *StatPearls* [Internet]. Treasure Island (FL): StatPearls Publishing; 2024 Jan-. https://www.ncbi.nlm.nih.gov/books/NBK459268/. Updated August 8, 2023.

Rane AA, Garcia BN, Wang AA. Closed manipulation under anesthesia for pediatric post-traumatic elbow arthrofibrosis. *J Shoulder Elbow Surg*. 2020;29(2):340-346. Doi: 10.1016/j.jse.2019.10.004.

Rotman D, Factor S, Schermann H, et al. Manipulation under anesthesia for the postsurgical stiff elbow: A case series and review of literature. *Eur J Orthop Surg Traumatol*. 2019;29(8):1679-1685. Doi: 10.1007/s00590-019-02492-6.

Shah RR, Cipparrone NE, Gordon AC, Raab DJ, Bresch JR, Shah NA. Is it safe? Outpatient total joint arthroplasty with discharge to home at a freestanding ambulatory surgical center. *Arthroplast Today*. 2018;4(4):484-487. Doi: 10.1016/j.artd.2018.08.002.

Spitler CA, Doty DH, Johnson MD, et al. Manipulation under anesthesia as a treatment of posttraumatic elbow stiffness. *J Orthop Trauma*. 2018;32(8):e304-e308. Doi: 10.1097/BOT.0000000000001222.

Taber DJ, James GD, Jacon A. Manipulation under anesthesia for lumbopelvic pain: A retrospective review of 18 cases. *J Chiropr Med*. 2014;13(1):28-34. Doi: 10.1016/j.jcm.2014.01.008.

Taylor F, Sims S, Theis JC, Herbison GP. Interventions for treating acute elbow dislocations in adults. *Cochrane Database Syst Rev*. 2012 Apr 18;2012(4):CD007908. Doi: 10.1002/14651858.CD007908.pub2.

Zhang D, Nazarian A, Rodriguez EK. Post-traumatic elbow stiffness: Pathogenesis and current treatments. *Shoulder Elbow*. 2020;12(1):38-45. Doi: 10.1177/1758573218793903.

Policy updates

7/2016: initial review date and clinical policy effective date: 10/2016

7/2017: Policy references updated.

7/2018: Policy references updated.

7/2019: Policy references updated. Policy ID changed to CCP.1245.

7/2020: Policy references updated, due to the shift from a broader range of body parts to just hip and elbow.

7/2021: Policy references updated.

7/2022: Policy references updated.

7/2023: Policy references updated.

7/2024: Policy references updated.

7/2025: Policy references updated.

7/2026: Policy references updated.

Related codes

Below are the most commonly submitted codes for the service(s)/item(s) subject to this policy CCP.1245 .This is not an exhaustive list of codes. Providers are expected to consult the appropriate coding manuals and bill accordingly.

Code	Code description
24300	Manipulation, elbow, under anesthesia
27275	Manipulation, hip joint, requiring general anesthesia