Manipulation Under Anesthesia

Policy Number: ANESTHESIA 004.26
Effective Date: February 1, 2025

➲ Instructions for Use

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Related Policies

- Manipulative Therapy
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Coverage Rationale

Manipulation under anesthesia (MUA) is proven and medically necessary for:

- Knee joint for Arthrofibrosis following total knee arthroplasty, knee surgery, or fracture
- Shoulder joint for adhesive capsulitis (frozen shoulder) when certain criteria are met. For medical necessity clinical coverage criteria, refer to the InterQual® CP: Procedures, Manipulation Under Anesthesia, Shoulder.

  Click here to view the InterQual® criteria.

MUA is unproven and not medically necessary for all other conditions (whether for single or serial manipulations), including but not limited to the following, due to insufficient evidence of efficacy:

- Ankle
- Finger
- Hip joint or adhesive capsulitis of the hip
- Knee joint - any condition other than for Arthrofibrosis following total knee arthroplasty, knee surgery, or fracture
- Pelvis
- Spine
- Temporomandibular joint (TMJ)
- Toe
- Wrist

This policy does not apply to the following:

- Manipulation of the finger on the day following the injection of collagenase clostridium histolyticum (Xiaflex®) to treat Dupuytren's contracture
- Closed reduction of a fracture or joint dislocation unless specified
- Elbow joint for Arthrofibrosis following elbow surgery or fracture

Definitions

Arthrofibrosis: A complication of injury or trauma where an excessive scar tissue response leads to painful restriction of joint motion, with scar tissue forming within the joint and surrounding soft tissue spaces and persisting despite rehabilitation exercises and stretches. (International Pain Foundation)

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 policy 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
21073	Manipulation of temporomandibular joint(s) (TMJ), therapeutic, requiring an anesthesia service (i.e., general or monitored anesthesia care)
22505	Manipulation of spine requiring anesthesia, any region
23700	Manipulation under anesthesia, shoulder joint, including application of fixation apparatus (dislocation excluded)
25259	Manipulation, wrist, under anesthesia
26340	Manipulation, finger joint, under anesthesia, each joint
27198	Closed treatment of posterior pelvic ring fracture(s), dislocation(s), diastasis or subluxation of the ilium, sacroiliac joint, and/or sacrum, with or without anterior pelvic ring fracture(s) and/or dislocation(s) of the pubic symphysis and/or superior/inferior rami, unilateral or bilateral; with manipulation, requiring more than local anesthesia (i.e., general anesthesia, moderate sedation, spinal/epidural)
27275	Manipulation, hip joint, requiring general anesthesia
27570	Manipulation of knee joint under general anesthesia (includes application of traction or other fixation devices)
27860	Manipulation of ankle under general anesthesia (includes application of traction or another fixation apparatus)

HCPCS Code	Description
D7830	Manipulation under anesthesia

Diagnosis Code	Description
Knee	
M24.661	Ankylosis, right knee
M24.662	Ankylosis, left knee
M24.669	Ankylosis, unspecified knee
Shoulder	
M24.611	Ankylosis, right shoulder
M24.612	Ankylosis, left shoulder
M24.619	Ankylosis, unspecified shoulder
M75.00	Adhesive capsulitis of unspecified shoulder
M75.01	Adhesive capsulitis of right shoulder
M75.02	Adhesive capsulitis of left shoulder

Description of Services

Manipulation under anesthesia (MUA) is a non-invasive procedure which combines manual manipulation of a joint or the spine with an anesthetic. Individuals who are unable to tolerate manual procedures due to pain, spasm, muscle contractures, or guarding may benefit from the use of an anesthetic agent prior to manipulation. Anesthetics may include intravenous general anesthesia or mild sedation, injection of an anesthetic to the affected area, oral medication such as muscle relaxants, inhaled anesthetics, or any other type of anesthetic medication therapy. Because the person's protective reflex mechanism is absent under anesthesia, manipulation using a combination of specific short lever manipulations, passive stretches, and specific articular and postural kinesthetic maneuvers to break up fibrous adhesions

and scar tissue around the joint, and surrounding tissue is made less difficult. Manipulation procedures can be performed under either general anesthesia, mild sedation, or local injection of an anesthetic agent to the affected area. (Reid & Desimone, 2002)

Spinal manipulation under anesthesia (SMUA) consists of spinal manipulation and stretching procedures performed on the individual after an anesthetic is administered (e.g., mild sedation, general anesthesia). This is typically performed by chiropractors, osteopathic physicians, and orthopedic physicians along with an anesthesiologist. Theoretically, SMUA is thought to stretch the joint capsules to break up adhesions within the spinal column to allow for greater mobility and reduced back pain; however, this has not been proven to be safe or effective in the peer-reviewed literature.

Clinical Evidence

Knee

In a 2024 randomized controlled trial, Abdel et al. sought to investigate the effect of adjuvant anti-inflammatory medications with manipulation under anesthesia (MUA) and physical therapy on range of motion (ROM) and outcomes. In the trial, there were 124 participants from 15 different institutions, all of whom received TKA for osteoarthritis and developed stiffness after the surgery. All participants received MUA when ROM was < 90° at 4 and 12 weeks postoperatively. The randomization occurred via permuted block design while controls received MUA and physical therapy, while the treatment group also received one dose of pre-MUA intravenous dexamethasone and 14 days of celecoxib. The ROM and clinical outcomes were assessed at 6 weeks and 1 year. The trial results found that the ROM significantly improved a mean of 46° from a pre-MUA ROM of 72-118° immediately following MUA (P < .001). The ROM was similar between the treatment and control groups at 6 weeks following MUA (101 versus 99°, respectively; P = .35) and at one year following MUA (108 versus 108°, respectively; P = .98). The limitations of the study include the lack of masking to either the participants or their surgeons due to study design and feasibility. The authors concluded that the clinical outcomes were similar at both endpoints.

A systematic review by Hopper et al. (2024) sought to determine what factors are associated with an increased risk of arthrofibrosis requiring MUA or lysis of adhesions (LOA) after anterior cruciate ligament reconstruction (ACLR). The review found that eleven studies, including 333,876 ACLRs with 4,842 subsequent MUA or LOA (1.45%), were analyzed. Increasing age was associated with an increased risk in 3 studies (P < .001, P < .05, P < .01) but was found to have no association with another two. Other factors that were identified by multiple studies as risk factors for MUA/LOA were female sex (4 studies), earlier surgery (5 studies), use of anticoagulants other than aspirin (2 studies), and concomitant meniscal repair (4 studies). The limitations of the review are the different ways outcomes were recorded, making it challenging to compare results. The authors concluded that 1.45% of the participants who underwent ACLR and were included in this systematic review had to undergo a subsequent MUA/LOA to treat arthrofibrosis. Female sex, older age, earlier surgery, use of anticoagulants other than aspirin, and concomitant meniscal repair were associated with increased risk of MUA/LOA. The modifiable risks, including the use of anticoagulants and the time between injury and surgery, can be considered when making treatment decisions.

In 2024, Akhtar et al. undertook a systematic review and meta-analysis to evaluate the functional and clinical outcomes of early versus delayed MUA for stiffness following a TKA. The results of the review demonstrated that pre-MUA and post-MUA knee flexion for the early/delayed groups was 71.3°/77.9° and 103.0°/96.1°, respectively. Upon meta-analysis, pre-MUA knee flexion was significantly higher in the delayed group (P = .003), whereas post-MUA flexion was similar in both groups (P = .36). The mean gain in knee flexion for the early and delayed groups was 32.0°/19.2°. The surgical complication and revision TKA rates for the early and delayed groups were 4.9%/10.3% and 5%/9%, respectively. A meta-analysis found the risk of surgical or medical complications and revision TKA significantly higher in the delayed MUA group (P < .00001 and = .002, respectively). The limitations of the review are the considerable variability in reporting of post-MUA functional outcomes, which limited our meta-analysis to only analyzing post-MUA knee flexion from only 6 of the total 14 studies. Similarly, the pooled mean post-MUA gain in flexion was nearly 2 times higher in the early versus delayed group, but given the variable reporting of the data, a meta-analysis was not possible. The authors concluded that although post-MUA knee flexion was similar in those undergoing early and delayed MUA following TKA, the mean gain in flexion for early patients was nearly double that of delayed individuals. Delayed participants also had significantly higher risks of surgical or medical complications and revision TKA following MUA.

In the 2024 randomized prospective trial, authors Tille et al. sought to evaluate differences between cruciate retaining (CR) and posterior stabilized (PS) implant systems regarding knee function, patient-reported outcome measures, and complication rates. The trial results demonstrated minor differences between treatment groups regarding demographic factors. Within the PS group, the duration of surgery was longer (mean PS 81.4 min vs CR 76.0 min, P = .006). Better flexion (median PS 120.0° vs. CR 115°, P = .017) and an overall better ROM (median PS 120.0° vs. CR 115.0°, P = .008)

for the PS group were observed. PROMs did not differ between groups. At the 2-year follow-up, there were no revisions in either cohort. Five participants needed reoperations. Three people needed manipulation under anesthesia: 2 in the CR and one in the PS group. The limitations of the trial were the differences in patient demographics (age and BMI) between treatment groups despite randomization. The authors concluded that while PS TKA achieved a better flexion capability, PROMs were similar in CR and PS TKA. The CR implant design continues to be a reliable option for patients with an intact posterior cruciate ligament.

In 2023, Grace and colleagues studied the impact of early MUA on cementless fixation by comparing functional outcomes and survivorship of cementless and cemented TKA through a multicenter study. A consecutive series of individuals who underwent MUA for postoperative stiffness within 90 days of primary unilateral TKA were found, and cases involving extensive hardware removal were excluded. TKAs undergoing MUA and cemented TKAs undergoing MUA were propensity-matched 1:1 using age, gender, body mass index, and year of surgery. At baseline, both groups had comparable baseline Knee Injury and Osteoarthritis Outcome Scores (KOOS), Short Form (SF)-12 physical, and SF-12 Mental scores. The study resulted in both groups showing MUA-related complications as equivalently low (P = .324), with one patella component dissociation in the cementless group. In the peri-operative period, no tibial or femoral components acutely loosened. The postoperative KOOS and SF-12 mental scores were similar between groups, demonstrating P = .101 and P = .380, respectively. There was a 98.0% six-year survivorship free from any revision after MUA in both groups (P = 1.000). The limitations of the study include the overall rate of aseptic loosening after TKA is low, which could demonstrate an underpowering of the difference in such aseptic loosening rates. Also, the study did not include the outcome variables that could further characterize how cementless TKA individuals do after early MUA. The authors concluded that in the early postoperative MUA after cementless TKA, there is no association with increased MUA-related complications or worse outcomes for individuals compared to cemented TKA. The SF survivorship remained comparable between groups, suggesting the bone-implant interface's high durability. Future studies with the inclusion of additional variables in addition to a higher number of participants would better characterize this population and could be particularly suited for implantation using robotic technology would be beneficial.

Frackler and associates (2022) systematically reviewed the literature assessing the efficacy and complications of arthroscopic LOA and MUA for postoperative arthrofibrosis of the knee and evaluated whether any relevant subgroups are associated with different clinical presentations and outcomes. The included studies consisted of a pre-and postoperative ROM measurements for the treated individuals, with the studies that reported outcomes for those with isolated cyclops lesions after anterior cruciate ligament reconstruction excluded. The results of the review included 240 individuals with a mean time from index surgery to arthroscopic LOA and MUA of 8.4 months and a mean postoperative follow-up of 31.2 months. The studies showed a significant improvement (41.6) in the arc of motion after arthroscopic LOA. Significant improvements in outcome measures, including the International Knee Documentation Committee, Western Ontario and McMaster Universities Osteoarthritis Index, and Knee Injury and Osteoarthritis Outcome Score, were reported after arthroscopic LOA across all applicable studies. Of 240 people, a single complication (synovial fistula) occurred after LOA and MUA, which resolved without intervention. The limitations of the study included the nonrandomized nature of the included studies, which increases the risk of selection bias and confounding, and the lack of assessment of the publications for bias of outcomes of interest because less than ten studies were synthesized for each outcome, and lastly, significant heterogeneity for the study due to the wide range of definitions for arthrofibrosis. The authors concluded that a significant challenge for surgeons continues to be knee arthrofibrosis post-operatively; however, when extensive nonoperative treatment fails, arthroscopic LOA and MUA may be a safe and efficacious treatment for arthrofibrosis in the postoperative knee.

Haffar et al. (2022) conducted a systematic review comparing outcomes of MUA, arthroscopic lysis of adhesions (aLOA), and revision total knee arthroplasty (rTKA) for treatment of arthrofibrosis and stiffness after TKA. The primary endpoint was patient-reported outcome measures (PROMs), and secondary outcomes were ROM and percentage of those who pursued further treatment for stiffness. There were 40 studies included in the review 17 of which applied to MUA. For MUA, the authors noted an average ROM increase of 20.97° post-operatively. The authors also noted that all studies that reported pre-operative and post-operative Knee Society score (KSS) clinical and functional scores showed improvement at final follow-up following MUA. Additionally, only 17% of individuals who received MUA required further care. Limitations included poor quality of evidence for many of studies included in this review.

Lim et al (2021) conducted a study that evaluated the effect of MUA outcomes using clinical outcomes regarding ROM and personal satisfaction following TKA. This is a retrospective study of 97 people post bilateral primary TKA. The study shows postoperative flexion was significantly greater in the MUA group at the 6 months follow up, and at the 2 year follow up. Additionally, at the 12 months follow up patient satisfaction scores were substantially higher in the MUA group. The authors concluded MUA improves clinical outcomes such as ROM and satisfaction after primary TKA.

Randsborg et al. (2020) evaluated a case series of participants that experienced MUA for knee stiffness following a TKA. Twenty-four individuals met the inclusion criteria; MUA was performed following a TKA, along with 2-3 days of continuous passive motion therapy and enhanced physiotherapy with home exercises upon discharge. The authors concluded the study supported previous findings that MUA for knee joint stiffness following a TKA improves ROM both in the short and long term. Limitations included small sample size, the lack of a comparison group undergoing a different treatment or no treatment and retrospective design. (Included in Haffar, et al. 2022 systematic review)

Gu et al. (2018) conducted a systematic review of the efficacy of MUA for stiffness following TKA. Twenty-two studies (1488 people) reported on ROM after MUA, and four studies (81 people) reported ROM after repeat MUA. However, none of the studies appeared to include a comparison group without MUA, limiting the conclusions that can be drawn. All studies reported pre-MUA motion of less than 90°, while mean ROM at last follow-up exceeded 90° in all studies except two. For studies reporting ROM improvement following repeat MUA, the mean pre-manipulation ROM was 80° and the mean post-manipulation ROM was 100.6°. The authors concluded that MUA remains an efficacious, minimally invasive treatment option for post-operative stiffness following TKA and provides clinically significant improvement in ROM for most individuals, with the best outcomes occurring in those treated within 12 weeks post-operatively. The quality of studies, variability of inclusion criteria and methods for reporting the data, the lack of comparison groups and variability in the physical therapy (PT) regimens were just a few limitations identified in this systematic review. Additional research is expected to provide clarity regarding timing of MUA interventions and post-procedure PT protocol.

Fabricant et al. (2018) evaluated a case series of ninety individuals aged 18 years and younger who underwent LOA and MUA at an urban tertiary care hospital following prior knee surgery. The primary purpose of this study was to report improvements in ROM following LOA/MUA in children and adolescents with knee arthrofibrosis, and, secondarily, to evaluate for any effect of preoperative dynamic splinting on ROM outcomes. Demographic, clinical, ROM, and revision data were all compiled. Mean time from index surgery to LOA/MUA was 6.0 ±4.4 months, and follow-up was 42 ±56 months. The authors found 62% of the participants had full ROM at follow up, and 25% had functional ROM. It was concluded that LOA/MUA for children with arthrofibrosis in the knees results in significant improvements in ROM with 90% revision-free success. Limitations of the study included lack of comparison group and small sample size. (Included in the Fracker 2022 systematic review)

A matched case control study was conducted by Pierce et al. (2017) to assess the incidence of revision TKA among those who underwent or did not undergo MUA after initial TKA. A prospectively collected database of two high-volume institutions was assessed for individuals who required a single MUA following TKA between 2005 and 2011. The study included138 knees with a mean 8.5-year follow-up post-MUA. This was compared with a matched cohort (1:1) who underwent TKA during the same time but did not require an MUA. Incidence of revision surgery and clinical outcomes were compared between the two cohorts. Nine knees underwent revision in the MUA cohort and seven revisions were performed in the matched cohort. The mean KSS and clinical scores were similar between the two cohorts. The authors concluded that undergoing an MUA was not associated with an increased risk of revision TKA. However, individuals requiring MUA after an initial TKA may have been different from those not requiring MUA, limiting the conclusions that can be derived from this study. [Included in the Haffar et al. (2022) systematic review]

Spine

The effectiveness of MUA for various joints including the spine demonstrates negligible improvements, and the procedures have not been consistently supported by high quality studies. They are limited by small sample sizes, limited control groups, and inadequate masking. The potential risks and lack of reliable benefits make MUA unfavorable option compared to alternative therapies.

Taber et al. (2014) performed a retrospective chart review of 18 cases treated MUA for lumbopelvic pain at an outpatient ambulatory surgical center. Individuals with pre- and postintervention Oswestry Low Back Pain Disability Index (ODI) scores were included along with those having lumbopelvic and hip complaints. ODI scores were assessed within one week prior to MUA and again two weeks after the procedure. The participants underwent two to four chiropractic MUA procedures over the course of a week per the National Academy of Manipulation Under Anesthesia physicians' protocols. Preprocedural ODI scores ranged from 38 to 76; postprocedural scores range from 0 to 66. For each person, the ODI scores were lower with average decrease of 20.6. The authors identified sixteen of the eighteen individuals experienced meaningful improvement of their pain. Limitations of the study included small study size, no control group, potential bias, and insufficient data on long-term safety. The authors suggested future large scale, carefully controlled prospective studies be performed.

Methodological limitations of studies reported in a narrative review (DiGiorgi, 2013) of the literature investigating spinal manipulation under anesthesia (SMUA) concluded that, "the evidence of treatment efficacy [SMUA] remains limited, with published studies that are generally weak in their methodological quality and consistently varied across multiple domains

which do not permit comparative analysis toward generalization." Similarly, a review (Dagenais, et al, 2008) of medication-assisted manipulation (MAM) for individuals having chronic low back pain reported, "there is insufficient research to guide clinicians, policy makers, and especially individuals' decision whether to consider this treatment [spinal MAM] approach." MUA for low back pain has been used for many years however there is insufficient evidence in the published literature to support the long-term safety and efficacy of its use.

In a prospective study of 68 participants with chronic low-back pain, Kohlbeck et al. (2005) compared changes in pain and disability for chronic low-back pain receiving treatment with MAM to those receiving spinal manipulation only. All participants received an initial 4- to 6-week trial of spinal manipulation therapy (SMT), after which 42 people received supplemental intervention with MAM and the remaining 26 patients continued with SMT. Low back pain and disability measures favored the MAM group over the SMT-only group at 3 months. The authors concluded that MAM appears to offer some people increased improvement in low back pain and disability; however, the study is limited by lack of randomization, small sample size, insufficient data on long-term safety, and significant baseline differences between groups for the primary outcome variable (pain/disability scale).

In a prospective controlled study by Palmieri and Smoyak (2002), 87 individuals who received either SMUA or traditional chiropractic treatment for low back pain were evaluated. The participants were assigned to one of two groups: 38 to an intervention group who received SMUA and 49 subjects to a nonintervention group who received traditional chiropractic treatment. Participants were followed for 4 weeks. Self-reported outcomes, including back pain severity and functional status, were used to evaluate changes. The SMUA group had an average decrease of 50% in the Numeric Pain Scale scores while the nonintervention group had a 26% decrease. The SMUA group had an average decrease of 51% in the Roland-Morris Questionnaire scores while the nonintervention group had a 38% decrease. The authors concluded that while there was greater improvement in the intervention group, additional studies are needed to evaluate the safety and effectiveness of MUA. This study has a high risk of bias due to the methods used to select subjects, lack of assessor blinding, failure to isolate the effects of the active intervention, and interpretation of outcomes. Subjects were selected largely based upon 2 criteria: meeting NAMUAP eligibility requirements and having insurance coverage for SMUA. This led to significant baseline heterogeneities between intervention and control groups. Sample size (n = 87; SMUA group = 38; SMT group = 49) did not reach anticipated number of participants. The attempt to measure the difference in treatment effect between SMUA and SMT was confounded by the addition of a specific exercise protocol for the SMUA group vs. an undefined "home exercise" program for the SMT group. Follow-up period was limited and therefore insufficient data on long-term safety are available. Problems with obtaining timely follow-up data were reported. The use of a percentile difference in outcome scores between groups does not consider if each outcome of interest exhibited a clinically meaningful difference between each group. In fact, there were no statistical or clinically meaningful differences between groups. There was a difference of 1.52 points on the NRS at initial follow-up and 1.32 points difference at final follow-up (the minimal clinically important change has been widely reported as 2 points). The difference at initial follow up for the RMDQ was 2.2 points and at final follow up was 1 point (as noted in the study, a 4-point difference is necessary for it to be clinically meaningful).

Temporomandibular Joint (TMJ)

The effectiveness of MUA for various joints including TMJ demonstrates negligible improvements, and the procedures have not been consistently supported by high quality studies. They are limited by small sample sizes, limited control groups, and inadequate masking. The potential risks and lack of reliable benefits make MUA unfavorable option compared to alternative therapies.

Foster et al. (2000) studied 55 individuals receiving manipulation under general anesthesia of the temporomandibular joint to determine the success rate of MUA effectiveness to reduce the number of subjects being referred for invasive surgery. Of the 55 individuals participating in this study, 15 improved, 15 did not, 6 showed partial improvement and 19 were not treated. The median pre-treatment opening was 20mm (range 13-27). Among those who improved after manipulation, the median opening after treatment was 38mm (range 35-56). The authors concluded that MUA may help some people; however, some of those who improved experienced a return of TMJ clicking but not of joint or muscle tenderness. Furthermore, this study is limited by lack of comparison group.

Toe

The effectiveness of MUA for various joints including the toe demonstrates negligible improvements and the procedures have not been consistently supported by high quality studies. They are limited by small sample sizes, limited control groups, and inadequate masking. The potential risks and lack of reliable benefits make MUA unfavorable option compared to alternative therapies.

Ajwani et al. (2018) assessed 35 subjects that had undergone first metatarsophalangeal joint (MTPJ) surgery to determine the effectiveness of MUA and steroid injection to treat joint stiffness. Documentation of ROM measurements and radiographs were reviewed. A mixture of depomedrone and bupivacaine were used for the steroid injection. Following MUA, the participants were given the Manchester–Oxford foot questionnaire (MOXFQ) to complete for assessment of their level of joint pain. The mean pre-manipulation total range of movement at the first MTPJ was 25° (range 5–100), immediate post-manipulation ROM was 70° (10–180), and final follow-up ROM was 50° (10–90). The average post-operative MOXFQ score was 25.2 (out of 52). The authors concluded joint ROM significantly improved after manipulation by a mean of 44.7 degrees. Limitations included small sample size, retrospective in nature and lack of randomization with no control or comparative groups.

Feuerstein et al. (2016) performed a medical records review study (n-38) to investigate the intermediate and long-term outcomes of first MTP joint manipulation for arthrofibrosis that developed, specifically, as a complication of hallux valgus surgery. Medical records were reviewed at the Weil Foot and Ankle Institute, IL to identify those who had undergone first MTP joint manipulation under anesthesia. Before the person's visit, the medical records were reviewed to assess the course and timing of the procedures, visual analog scale (VAS) score before manipulation and ROM of the first MTP joint after hallux valgus correction and before manipulation and first MTP joint ROM immediately after manipulation. Manipulation procedures occurred at a mean 1.2 years from the date of the initial hallux valgus correction. The research visits occurred at a mean 6.5 years after the first MTP joint manipulation. Before manipulation, the individuals had a mean VAS score of 6.5. At the research visit, the mean VAS score was 2.3. The authors concluded that joint motion was significantly improved in the direction of dorsiflexion and plantar flexion from before manipulation to both immediately after manipulation and at the final follow-up visit. They stated that the study demonstrated that joint MUA could be a useful treatment modality to increase mobility and decrease pain in the person. The limitations of the study include the lack of randomization, lack of a control or comparison group, and potential selection bias.

Other

Clinical evidence was not identified regarding MUA for treating any condition (for single or serial manipulations) related to the following:

- Ankle
- Finger
- Hip
- Pelvis
- Wrist

Clinical Practice Guidelines

The American Association of Oral and Maxillofacial Surgeons (AAOMS)

In 2023 the AAOMS created Clinical Practice Guidelines for Oral and Maxillofacial Surgery on temporomandibular joint surgery. For inflammatory arthropathy surgical management the AAOMS recommends manipulation as a surgical management for active (progressive) Temporomandibular joint (TMJ) disease, and stable (nonprogressive) TMJ disease. The AAOMS's recommendations for mandibular dislocation: recurrent or persistent surgical management includes manipulation and relocation of the condyle. Lastly, for ankylosis and restricted jaw motion, the AAOMS recommends brisement (forceful manipulation of jaw under general anesthesia).

American College of Occupational and Environmental Medicine (ACOEM)

In a recommendation regarding MUA, the ACOEM concludes MUA, and medication-assisted spinal manipulation (MASM) are not recommended due to lack of quality studies that solely evaluate MUA or MASM for treatment of acute, subacute, or chronic lower back pain. (Hegmann et al., 2020)

In a recommendation regarding MUA, the ACOEM (2016) has concluded that MUA and medication-assisted spinal manipulations are not recommended due to insufficient evidence of safety and effectiveness for acute, subacute, and chronic cervicothoracic pain.

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.

Manipulation is a procedure and therefore not subject to FDA regulation.

References

The foregoing Oxford policy has been adapted from an existing UnitedHealthcare national policy that was researched, developed and approved by UnitedHealthcare Medical Technology Assessment Committee. [2025T0515Y]

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Policy History/Revision Information

Date	Summary of Changes
02/01/2025	**Supporting Information** • Updated *Clinical Evidence* and *References* sections to reflect the most current information • Archived previous policy version ANESTHESIA 004.25

Instructions for Use

This Clinical Policy provides assistance in interpreting UnitedHealthcare Oxford 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 policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare Oxford reserves the right to modify its Policies as necessary. This Clinical Policy is provided for informational purposes. It does not constitute medical advice.

The term Oxford includes Oxford Health Plans, LLC and all of its subsidiaries as appropriate for these policies. Unless otherwise stated, Oxford policies do not apply to Medicare Advantage members.

UnitedHealthcare may also use tools developed by third parties, such as the InterQual® criteria, to assist us in administering health benefits. UnitedHealthcare Oxford Clinical Policies 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.