



## Medical Policy

### Manipulation under Anesthesia

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#### Policy Number: 483

BCBSA Reference Number: 8.01.40

NCD/LCD: NA

#### Related Policies

None

#### Policy

#### Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

##### Spinal Manipulation

Spinal manipulation (and manipulation of other joints, e.g., hip joint, performed during the procedure) with the patient under anesthesia and spinal manipulation after epidural anesthesia and corticosteroid injection are **INVESTIGATIONAL** for treatment of chronic spinal (cranial, cervical, thoracic, lumbar), chronic sacroiliac, and pelvic pain.

Spinal manipulation and manipulation of other joints under anesthesia involving serial treatment sessions is **INVESTIGATIONAL**.

Manipulation under anesthesia involving multiple body joints is **INVESTIGATIONAL** for treatment of chronic pain.

##### Manipulation under Anesthesia for Treatment of Adhesive Capsulitis of the Shoulder<sup>1</sup>

Shoulder manipulation under anesthesia is considered **MEDICALLY NECESSARY** for the treatment of adhesive capsulitis when **ALL** of the following criteria are met:

1. Pain and stiffness with limited range of motion which significantly interfere with activities of daily living.
2. Other etiologies of shoulder pain have been excluded by clinical history, physical exam, and appropriate imaging studies (e.g., plain films to exclude significant glenohumeral osteoarthritis).
3. Failure of a conservative treatment regimen, including acetaminophen, nonsteroidal anti-inflammatory drugs (NSAIDs), and/or oral corticosteroids for at least 3 weeks; physical therapy/home exercise program for at least 6 weeks; and an intra-articular corticosteroid injection.

Shoulder manipulation under anesthesia in other circumstances except as noted above is considered **INVESTIGATIONAL**.

Shoulder manipulation under anesthesia involving serial treatment sessions is considered **INVESTIGATIONAL**.

#### **Manipulation under Anesthesia for Treatment of Stiffness After Total Knee Arthroplasty<sup>1</sup>**

Knee manipulation under anesthesia is considered **MEDICALLY NECESSARY** for the treatment of arthrofibrosis following total knee arthroplasty (or anterior cruciate ligament reconstruction) when **ALL** of the following criteria are met:

1. Pain and stiffness with limited range of motion which significantly interfere with activities of daily living.
2. Other etiologies of knee pain/stiffness have been excluded by clinical history, physical exam, and appropriate imaging studies (e.g., malpositioned/incorrectly sized arthroplasty components).
3. Failure of a conservative treatment regimen, including acetaminophen and/or nonsteroidal anti-inflammatory drugs (NSAIDs) for at least 3 weeks and physical therapy/home exercise program for at least 6 weeks.

The manipulation under anesthesia, if necessary, should be performed ideally within 3 months of the initial total knee arthroplasty.

Manipulation under anesthesia is considered **MEDICALLY NECESSARY** for the treatment of displaced fractures and joint dislocations.

Knee manipulation under anesthesia in other circumstances except as noted above is considered **INVESTIGATIONAL**.

Knee manipulation under anesthesia involving serial treatment sessions is considered **INVESTIGATIONAL**.

#### **For Treatment of Other Joints**

Manipulation under anesthesia involving multiple body joints is considered **INVESTIGATIONAL** for treatment of chronic pain.

Manipulation under anesthesia involving other joints is considered **INVESTIGATIONAL** for treatment of chronic pain.

### **Prior Authorization Information**

#### **Inpatient**

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

#### **Outpatient**

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	<b>Outpatient</b>
<b>Commercial Managed Care (HMO and POS)</b>	Prior authorization is <b><u>not required</u></b> .
<b>Commercial PPO and Indemnity</b>	Prior authorization is <b><u>not required</u></b> .
<b>Medicare HMO Blue<sup>SM</sup></b>	Prior authorization is <b><u>not required</u></b> .
<b>Medicare PPO Blue<sup>SM</sup></b>	Prior authorization is <b><u>not required</u></b> .

### **CPT Codes / HCPCS Codes / ICD Codes**

*Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.*

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The following CPT code is considered investigational for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

CPT codes:	Code Description
22505	Manipulation of spine requiring anesthesia, any region

The above **medical necessity criteria MUST** be met for the following codes to be covered for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

CPT codes:	Code Description
23700	Manipulation under anesthesia, shoulder joint, including application of fixation apparatus (dislocation excluded)

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if **medical necessity criteria** are met:

### ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
M75.00	Adhesive capsulitis of unspecified shoulder
M75.01	Adhesive capsulitis of right shoulder
M75.02	Adhesive capsulitis of left shoulder

The above **medical necessity criteria MUST** be met for the following codes to be covered for **Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:**

### CPT Codes

CPT codes:	Code Description
27570	Manipulation of knee joint under general anesthesia (includes application of traction or other fixation devices)

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if **medical necessity criteria** are met:

### ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
M24.661	Ankylosis, right knee
M24.662	Ankylosis, left knee
M24.669	Ankylosis, unspecified knee

## Description

### **Manipulation Under Anesthesia**

Manipulation is intended to break up fibrous and scar tissue to relieve pain and improve range of motion. Anesthesia or sedation is used to reduce pain, spasm, and reflex muscle guarding that may interfere with the delivery of therapies and to allow the therapist to break up joint and soft tissue adhesions with less force than would be required to overcome patient resistance or apprehension. Manipulation under anesthesia is generally performed with an anesthesiologist in attendance. Manipulation under anesthesia is an accepted treatment for isolated joint conditions, such as arthrofibrosis of the knee and adhesive capsulitis. It is also used to reduce fractures (eg, vertebral, long bones) and dislocations.

Manipulation under anesthesia has been proposed as a treatment modality for acute and chronic pain conditions, particularly of the spine, when standard care, including manipulation, and other conservative measures have failed. Manipulation under anesthesia of the spine has been used in various forms since the 1930s. Complications from general anesthesia and forceful long-lever, high-amplitude nonspecific manipulation procedures led to decreased use of the procedure in favor of other therapies. Manipulation under anesthesia was modified and revived in the 1990s. This revival has been attributed to increased interest in spinal manipulative therapy and the advent of safer, shorter-acting anesthesia agents used for conscious sedation.

### **Manipulation Under Anesthesia Administration**

Manipulation under anesthesia of the spine is described as follows: after sedation, a series of mobilization, stretching, and traction procedures to the spine and lower extremities are performed and may include passive stretching of the gluteal and hamstring muscles with straight-leg raise, hip capsule stretching and mobilization, lumbosacral traction, and stretching of the lateral abdominal and paraspinal muscles. After the stretching and traction procedures, spinal manipulative therapy is delivered with high-velocity, short-amplitude thrust applied to a spinous process by hand, while the upper torso and lower extremities are stabilized. Spinal manipulative therapy may also be applied to the thoracolumbar or cervical area when necessary to address low back pain.

Manipulation under anesthesia takes 15 to 20 minutes, and after recovery from anesthesia, the patient is discharged with instructions to remain active and use heat or ice for short-term analgesic control. Some practitioners recommend performing the procedure on three or more consecutive days for best results. Care after manipulation under anesthesia may include four to eight weeks of active rehabilitation with manual therapy, including spinal manipulative therapy and other modalities. Manipulation has also been performed after injection of local anesthetic into lumbar zygapophyseal (facet) and/or sacroiliac joints under fluoroscopic guidance (manipulation under joint anesthesia/analgesia) and after epidural injection of corticosteroid and local anesthetic (manipulation postepidural injection). Spinal manipulation under anesthesia has also been combined with other joint manipulation during multiple sessions. Together, these therapies may be referred to as medicine-assisted manipulation.

### **Manipulation under anesthesia for Treatment of Adhesive Capsulitis of the Shoulder**

A frozen shoulder is a condition affecting the shoulder that causes pain and stiffness with reduced range of motion or loss of mobility. Manipulation under anesthesia is a treatment used by medical doctors/surgeons to break up adhesions and scar tissue that are causing pain and lack of movement. Manipulation under anesthesia of the shoulder is particularly effective for most individuals because the pain caused by frozen shoulder is eliminated when adhesions in the shoulder joint are broken down.

### **MUA for Treatment of Stiffness After Total Knee Arthroplasty**

During a total knee replacement, some tissues are exposed to the air causing essential lubricating fluids to evaporate. Affected muscles that would normally glide over each other may form adhesions that can cause pain and limit the ability to move the affected joint if the fluids are not quickly replenished after surgery. Manipulation under anesthesia is a technique used by medical doctors/surgeons of bending the knee to break up scar tissue for the treatment of stiffness and poor range of motion after total knee arthroplasty.

## Summary

Manipulation under anesthesia consists of a series of mobilization, stretching, and traction procedures performed while the patient is sedated (usually with general anesthesia or moderate sedation).

For individuals who have chronic spinal, sacroiliac, or pelvic pain who receive manipulation under anesthesia, the evidence includes case series and nonrandomized comparative studies. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Scientific evidence on spinal manipulation under anesthesia, spinal manipulation with joint anesthesia, and spinal manipulation after epidural anesthesia and corticosteroid injection is very limited. No randomized controlled trials have been identified. Evidence on the efficacy of manipulation under anesthesia over several sessions or for multiple joints is also lacking. The evidence is insufficient to determine the effects of the technology on health outcomes.

### **MUA for Treatment of Adhesive Capsulitis of the Shoulder**

Mun S (2016) reported in a prospective randomized controlled study of 121 individuals with frozen shoulder. Results from the study noted in patients (n=60) treated hydrodistention with joint manipulation under an interscalene block demonstrated better patient satisfaction and earlier restoration of range of motion than individuals (n=61) who were treated with intra-articular corticosteroid injection at 6 weeks. The pain score was lower at 12 weeks and the constant score was better in individuals with joint manipulation in the individuals treated with corticosteroid injection. Twelve months after treatment, the pain score, patient satisfaction, range of motion, and constant score were similar in the 2 groups. The authors concluded that joint manipulation provided earlier pain relief and restored shoulder range of motion and function compared with single intra-articular corticosteroid injection individuals with frozen shoulder. The evidence is sufficient to determine the effects of the technology on health outcomes.

### **MUA for Treatment of Stiffness After Total Knee Arthroplasty**

Gu A (2018) reported range of motion (ROM) after MUA results of twenty-two studies (N=1488). The trials except in two studies reported pre-MUA motion of less than 90°, while mean ROM at last follow-up exceeded 90°. Mean pre-manipulation ROM was 80° and the mean post-manipulation ROM was 100.6° in studies that reported improvement in ROM after MUA treatment. The authors concluded that MUA remains an effective treatment option for post-operative stiffness following TKA. Individuals treated within 12 weeks post-operatively had the best outcomes and MUA provided clinically significant improvement in ROM for most patients. The evidence is sufficient to determine the effects of the technology on health outcomes.

## Policy History

Date	Action
11/2020	New medically necessary indications described for Treatment of Adhesive Capsulitis of the Shoulder and for Treatment of Stiffness after Total Knee Arthroplasty based on expert opinion. Clarified coding information. Effective 11/1/2020.
6/2020	BCBSA National medical policy review. Description, summary and references updated. Policy statements unchanged.
5/2019	BCBSA National medical policy review. Description, summary and references updated. Policy statements unchanged.
12/2015	Added coding language.
2/2015	New references added from BCBSA National medical policy.
3/2014	New references added from BCBSA National medical policy.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
6/2011	Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements.
1/2011	BCBSA National medical policy review. Changes to policy statements.

7/2010	Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements.
7/2010	BCBSA National medical policy review. No changes to policy statements.
7/2009	Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements.
6/2009	BCBSA National medical policy review. No changes to policy statements.
7/2008	Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements.
2/2008	BCBSA National medical policy review. No changes to policy statements.
7/2007	Reviewed - Medical Policy Group - Orthopedics, Rehabilitation Medicine and Rheumatology. No changes to policy statements.

## Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:

[Medical Policy Terms of Use](#)

[Managed Care Guidelines](#)

[Indemnity/PPO Guidelines](#)

[Clinical Exception Process](#)

[Medical Technology Assessment Guidelines](#)

## References

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## Treatment of Adhesive Capsulitis of the Shoulder

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#### **Treatment of Stiffness After Total Knee Arthroplasty**

3. Gu A, Michalak AJ, Cohen JS. Efficacy of Manipulation Under Anesthesia for Stiffness Following Total Knee Arthroplasty: A Systematic Review. *J Arthroplasty.* 2018 May;33(5):1598-1605.
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#### **Endnotes**

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<sup>1</sup> Based on BCBS Association MPRM 8.01.40 and expert opinion