



# Spinal Manipulation Under Anesthesia

Optum Health Solutions Musculoskeletal (MSK)  
Utilization Management Policy  
Policy Number: 393

Effective Date: 04/25/2024

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# Policy Statement

Optum considers CPT code 22505, Spinal Manipulation Under Anesthesia, to be unproven and not medically necessary due to insufficient research evidence of safety and efficacy in the clinical setting when performed for conditions other than vertebral fracture or complete dislocation.

## Purpose

This policy serves as the criterion for peer-review decisions concerning spinal manipulation under anesthesia. The policy document summarizes the position of Optum concerning the evidence-basis of services described by CPT code 22505, Manipulation of spine requiring anesthesia, any region.

## Scope

The scope of this policy document is limited to those services described by CPT code 22505.

## Description

Spinal manipulation under anesthesia refers to manipulation of the spine while the patient is under general anesthesia or conscious sedation.

## Background

Manipulation under anesthesia (MUA) originated with orthopedic surgeons and osteopathic physicians in the 1930s and was initially used mainly to treat spinal pain in a single session (Frances, 2007). MUA was fairly common in orthopedic practices until the 1960s, when improved surgical techniques caused most allopathic physicians to abandon the use of this intervention. Interest in spinal MUA further declined in the 1970s and 1980s, as osteopathic physicians gravitated away from the profession's manipulative roots.

## Clinical Evidence

There is a plausible theoretical basis for the application of MUA to the axial spine and associated soft tissues (DiGiorgi, 2013). It has been proposed that spinal articular mechanics can be restored by disrupting or stretching adhesions through manipulation, which can be more effectively accomplished with anesthesia to allow for pain inhibition and muscular relaxation (Herzog, 1999). The most recent reviews of spinal MUA point out the absence of experimental research, leaving a void of evidence to either substantiate or deny the validity of the principal clinical basis for utilizing spinal MUA (Dagenais et al., 2008; DiGiorgi, 2013, 2018). While patient selection for spinal MUA could be enhanced by knowing more about the fibrotic adhesion concept, there is no research that reliably differentiates those with intra-articular adhesions from other manifestations of segmental dysfunction (DiGiorgi, 2018).

In the absence of evidence supporting spinal adhesion as the primary rationale for intervention, a consensus-based guideline has described the factors qualifying a patient for MUA. These factors are summarized as follows: The patient has been nonresponsive or minimally responsive (continues to experience intractable pain, interference to activities of daily living, and/or biomechanical dysfunction) following a minimum of 4-8 weeks of care using physical medicine procedures, usually including spinal manipulative treatment (SMT); and a continuation of SMT is viewed as necessary to obtain progress, provide interim treatment prior to surgery, or when there are no better treatment options available (Gordon et al., 2014).

Palmieri and Smoyak (2002) studied the effects of MUA compared to participants receiving chiropractic treatment alone. 87 subjects participated in the study. 38 patients in the intervention group and 49 patient in the nonintervention group. The overall rating of "very low" (any estimate of effect is very uncertain) quality of evidence. The authors concluded the MUA procedure warrants further analysis. Large scale studies of MUA are warranted.

The incomplete development of the relative/absolute contraindications to care represents a significant limitation with current spinal MUA guidelines. Even when individual patients meet all the consensus-based qualifications, the very low-quality evidence for spinal MUA can lead to uncertainty in selection, dosing, and patient safety. Although rare, significant adverse events (eg, spinal fracture and hemothorax with spinal MUA for ankylosing spondylitis) have been reported (DiGiorgi, 2013).

# Coding Information

Note: The Current Procedural Terminology (CPT) code listed in this policy may not be all inclusive and are for reference purposes only. The listing of a service code in this policy does not imply that the service described by the code is a covered or non-covered health service. Coverage is determined by the member's benefit document.

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| Code  | Description  |
|-------|--|
| 22505 | Manipulation of the spine requiring anesthesia, any region |

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## References

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# Plain Language Summary

## Spinal Manipulation Under Anesthesia

### Utilization Management Policy # 393

Plain Language Summaries are a service provided by Optum to help patients better understand the complicated and often mystifying language of modern healthcare.

Plain Language Summaries are presented to supplement the associated clinical policy or guideline. These summaries are not a substitute for advice from your own healthcare provider.

### What is spinal manipulation under anesthesia and what is known about it so far?

Spinal pain is a common problem. Traditional treatments that are helpful for some patients with neck, mid, and low back pain include drugs (pain killers, anti-inflammatory drugs, and muscle relaxants), physical therapy, manipulation, and exercise. Spinal manipulation under anesthesia (MUA) is a possible alternative treatment for spinal pain.

MUA requires the coordinated services of both an anesthesiologist and a health care professional (chiropractor, physician, or physical therapist), who is specially trained in using his or her hands to move the bones in the spine while a person is not conscious.

There is disagreement about the role of MUA in treating spinal pain. It is uncertain if MUA helps more than traditional treatments. Most healthcare organizations exclude MUA from benefit coverage.

### How was Spinal MUA evaluated?

A work group of clinicians was assigned to review the available research. The internet was searched for policies, guidelines, and articles about spinal MUA. The work group independently examined the research using a broadly accepted method. Possible ratings were high, moderate, low, or very low quality.

Before it was approved, the policy was then presented to a series of committees, who included independent health care practitioners.

### What did the work group find?

The research quality was rated as very low. It was not possible to make a determination that spinal MUA provided more benefit or less risk, when compared to generally accepted and safe treatments including traditional spinal manipulation. The vast majority of other healthcare companies appear to have reached a similar conclusion.

### What are the conclusions?

Spinal MUA is viewed as *unproven and not medically necessary*. Further research is needed before MUA can be considered an established treatment option for a variety of spinal conditions.

# Review and Approval History

| Date       | Description   |
|------------|---|
| 7/12/2007  | Original effective date   |
| 4/10/2008  | Annual review and approval completed  |
| 9/09/2008  | Plain Language Summary rebranded - OptumHealth  |
| 1/15/2009  | Policy reformatted  |
| 4/30/2009  | Annual review and approval completed  |
| 4/08/2010  | Annual review and approval completed  |
| 10/26/2010 | Policy rebranded to "OptumHealth Care Solutions, Inc. (OptumHealth)"  |
| 4/7/2011   | Annual review and approval completed  |
| 4/19/2012  | Annual review and approval completed  |
| 4/18/2013  | Annual review and approval completed  |
| 4/17/2014  | Annual review and approval completed; Revised Table 5; Policy rebranded "Optum* by OptumHealth Care Solutions, Inc."  |
| 4/16/2015  | Annual review and approval completed  |
| 4/21/2016  | Updated Table 5; Annual review and approval completed   |
| 4/20/2017  | Updated Table 5; Annual review and approval completed; Legal entity name changed from "OptumHealth Care Solutions, Inc." to "OptumHealth Care Solutions, LLC."  |
| 4/26/2018  | Annual review and approval completed; Background, Literature Review, Tables and References were revised. No change to Policy Statement.   |
| 4/25/2019  | Annual review and approval completed; Table 4 and References updated  |
| 4/23/2020  | Annual review and approval completed; No new evidence was identified that supports a change in policy statement   |
| 4/22/2021  | Annual review and approval completed; No new evidence was identified that supports a change in policy statement   |
| 5/03/2022  | Annual review and approval completed; Updated references; No new evidence was identified that supports a change in policy statement   |
| 6/29/2022  | Updated legal entity name "OptumHealth Care Solutions, LLC." to *Optum™ Physical Health ("Optum") includes OptumHealth Care Solutions, LLC; ACN Group IPA of New York, Inc.; ACN Group IPA of California, Inc. d/b/a OptumHealth Physical Health of California; Managed Physical Network, Inc.; and OrthoNet Holdings, Inc. which includes OrthoNet New York IPA, Inc., OrthoNet West, Inc., OrthoNet, LLC, OrthoNet of the South, Inc. |
| 4/27/23    | Annual review and approval completed; no significant changes made to the document. Updated contact email from <a href="mailto:policy.inquiry@optumhealth.com">policy.inquiry@optumhealth.com</a> to <a href="mailto:phpolicy_inquiry@optum.com">phpolicy_inquiry@optum.com</a> .  |
| 3/6/2024   | Annual review; no substantive changes. Approved by Optum Clinical Guideline Advisory Committee.   |



**4/25/2024**

Annual review and approval completed. Document content transitioned to new policy template. No significant changes made to the document.