



Utilization Management Policy

Determination of Safety to Deliver Thrust Joint Manipulation to a Specific Region

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Policy Statement

Proposed manipulative services may not be approved when the clinical presentation (history, physical findings and/or diagnostic studies) is indicative of contraindications to this procedure. When proposed services are contraindicated, support clinicians will contact the health care provider to ensure patient safety.

Purpose

To ensure that utilization review determinations consider the safety of proposed thrust joint manipulation to a region.

Scope

All in and out of network programs involving all provider types, where utilization review determinations are rendered for spinal and/or extraspinal manipulation procedures.

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Definitions

The following definitions apply to this policy:

- Adverse events (AE) – medium to long term in duration, with moderate to severe symptoms, and of a nature that is serious, distressing, and unacceptable to the patient and required further treatment.¹
- Mobilization/Manipulation – skilled passive movements to the joints and/or related soft tissues that are applied at varying speeds and amplitudes, including a small-velocity and high-amplitude therapeutic movement.²
- Thrust joint manipulation (TJM) – high-velocity/low-amplitude therapeutic movements within or at the end of range of motion.³
- Absolute Contraindication – any circumstance that renders a form of treatment or clinical intervention inappropriate because it places the patient at undue risk.⁴
- Relative Contraindication – any circumstance that may place the patient at undue risk unless the treatment approach is modified.⁴

Background

Overview:

Manipulative therapy is utilized by chiropractors, physical therapists and other healthcare practitioners to treat a multitude of disorders including: spine-related disorders, headaches, and various conditions affecting the upper or lower extremities.⁵ Thrust joint manipulation (TJM) incorporates high-velocity/low-amplitude (HVLA) methods, which are common among the different manipulative technique systems.^{4,6} The appropriateness of manipulative therapy has been described for conditions involving spinal regions (cervical,⁷ thoracic,⁸ and lumbo-sacral⁹) and extraspinal regions.⁵

The safety of TJM to a specific region can be determined by identifying pre-existing conditions that might be indicative of a patient's risk for an adverse event (AE).⁷ The consideration of contraindications (absolute and relative) and 'red flag' factors or symptoms can be used in conjunction with sound clinical reasoning to guide judgments about the safety of TJM.¹⁰ TJM should not be performed to the area of pathology when absolute contraindications are present (Table 1).¹¹ The presence of other conditions may require modification of TJM (eg, non-thrust techniques) and can be viewed as relative contraindications (Table 2).^{4,11} TJM should be deferred depending on the need for further examination and diagnostic testing when red flags suggestive of underlying contraindications to TJM are identified (Table 3).^{4,12}

Table 1. Absolute Contraindications to TJM[^]

1.	Anomalies such as dens hypoplasia, unstable os odontoideum, etc.
2.	Acute fracture
3.	Spinal cord tumor
4.	Acute infection such as osteomyelitis, septic discitis, and tuberculosis of the spine
5.	Meningeal tumor
6.	Hematomas, whether spinal cord or intra-canalicular
7.	Malignancy involving the treatment site
8.	Frank disc herniation with accompanying signs of progressive neurological deficit
9.	Basilar invagination of the upper cervical spine
10.	Arnold-Chiari malformation of the upper cervical spine
11.	Dislocation at the treatment site
12.	Aggressive types of benign tumors (eg, aneurismal bone cyst, giant cell tumor, osteoblastoma or osteoid osteoma)
13.	Internal fixation/stabilization devices
14.	Neoplastic disease of muscle or other soft tissue
15.	Positive Kernig's or Lhermitte's signs
16.	Congenital, generalized hypermobility
17.	Signs or patterns of instability at the treatment site
18.	Syringomyelia
19.	Hydrocephalus of unknown etiology
20.	Diastematomyelia
21.	Cauda equina syndrome
22.	Vertebral artery abnormalities, vertebrobasilar insufficiency

[^] List may not include all possible absolute contraindications

Adapted from: World Health Organization. Part 2: Guidelines on safety of chiropractic; in WHO guidelines on basic training and safety in chiropractic. Geneva, CH: WHO 2005; <http://www.who.int/medicines/areas/traditional/Chiro-Guidelines.pdf>

Table 2. Relative Contraindications to TJM[^]

1.	Progressive spondylolisthesis
2.	Articular hypermobility, and circumstances where the stability of the joint is uncertain
3.	Post-surgical joints or segments with no evidence of instability
4.	Bone demineralization
5.	Severe painful disc pathology eg, discitis or disc herniation
6.	Bleeding disorders and anticoagulant therapy
7.	Psychological factors (eg, aberrant behavior patterns) where TJM represents inappropriate treatment

[^] List may not include all possible relative contraindications

Adapted from: World Health Organization. Part 2: Guidelines on safety of chiropractic; in WHO guidelines on basic training and safety in chiropractic. Geneva, CH: WHO 2005; <http://www.who.int/medicines/areas/traditional/Chiro-Guidelines.pdf>

Table 3. Red Flags[^]

1.	History of cancer
2.	History of injection drug use
3.	Recent genitourinary or gastrointestinal procedure
4.	Fever, chills, night sweats
5.	Unexplained recent weight loss
6.	Immunocompromised status
7.	Pain worse at night
8.	Unremitting pain (even when supine)
9.	Incontinence
10.	Saddle anesthesia
11.	Severe or rapidly progressive neurologic deficit
12.	Previous diagnosis of vertebrobasilar insufficiency or stroke
13.	Facial/intraoral anesthesia or paresthesia
14.	Visual disturbances, blurred vision, diplopia
15.	Dizziness/vertigo
16.	Nausea
17.	Tinnitus
18.	Drop attacks
19.	Dysarthria
20.	Dysphagia
21.	Any symptom listed in #s 13 to 20 aggravated by position or movement of the neck
22.	No change or worsening of symptoms after multiple manipulations

[^] List may not include all possible red flags

Adapted from:

- Bratton RL. Assessment and management of acute low back pain. *American Family Physician*. 1999;60(8):2299-308.
- Puentedura EJ, March J, Anders J, et al. Safety of cervical spine manipulation: are adverse events preventable and are manipulations being performed appropriately? A review of 134 case reports. *Journal of Manual & Manipulative Therapy*. 2012;20(2):66-74.

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6. Cooperstein R, Gleberzon BJ. *Technique systems in chiropractic*. Elsevier Health Sciences; 2004.
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11. World Health Organization. Part 2: Guidelines on safety of chiropractic; in WHO guidelines on basic training and safety in chiropractic. Geneva, CH: WHO 2005; <http://www.who.int/medicines/areas/traditional/Chiro-Guidelines.pdf>
12. Refshauge KM, Parry S, Shirley D, et al. Professional responsibility in relation to cervical spine manipulation. *Australian journal of Physiotherapy*. 2002;48(3):171-9.



Utilization Management Policy

Policy History/Revision Information

Date	Action/Description
1/1997	Original effective date
3/24/1998	Annual review completed
1/28/1999	Annual review completed
2/23/2000	Annual review completed
3/07/2001	Annual review completed
9/20/2002	Annual review completed
11/11/2003	Annual review completed
11/18/2004	Annual review completed
2/14/2006	Annual review completed
12/04/2006	Annual review completed
4/10/2008	Annual review completed
11/11/2008	Policy header rebranded, "OptumHealth Care Solutions – Physical Health"
1/15/2009	Policy placed into new format
4/30/2009	Annual review completed
4/08/2010	Annual review completed
10/26/2010	Policy rebranded to "OptumHealth Care Solutions, Inc. (OptumHealth)"
4/07/2011	Annual review completed
4/19/2012	Annual review completed
4/18/2013	Annual review completed
4/17/2014	Annual review completed; Policy rebranded "Optum* by OptumHealth Care Solutions, Inc."
4/16/2015	Annual review completed
4/21/2016	Annual review completed
4/20/2017	Annual review completed. The Title, Definitions and Background were revised to reflect changes in terminology associated with manipulative therapy. The References were updated to support the revisions. Legal entity name changed from "OptumHealth Care Solutions, Inc." to "OptumHealth Care Solutions, LLC."
4/26/2018	Annual review completed; no significant changes to the document
4/25/2019	Annual review completed; no significant changes to the document
4/23/2020	Annual review completed; no significant changes to the document

Contact Information

Please forward any commentary or feedback on Optum utilization management policies to: policy.inquiry@optumhealth.com with the word "Policy" in the subject line.

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