

# Home Traction Therapy

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[➔ Instructions for Use](#)

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## Coverage Rationale

Home traction therapy is unproven and not medically necessary for treating low back and neck disorders with or without radiculopathy due to insufficient evidence of efficacy.

## 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 guideline 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.

HCPCS Code	Description
E0830	Ambulatory traction device, all types, each
E0840	Traction frame, attached to headboard, cervical traction
E0849	Traction equipment, cervical, free-standing stand/frame, pneumatic, applying traction force to other than mandible
E0850	Traction stand, freestanding, cervical traction
E0855	Cervical traction equipment not requiring additional stand or frame
E0856	Cervical traction device, with inflatable air bladder(s)
E0860	Traction equipment, overdoor, cervical
E0941	Gravity assisted traction device, any type

## Description of Services

Traction is the act of drawing or pulling and relates to forces applied to the body to stretch a given part or to separate 2 or more parts. Traction is intended for individuals with musculoskeletal or neurological impairments of the spine; the objective is to

relieve pain, relax muscle spasms, and decompress spinal structures. The type of traction used depends on the individual's age, weight and medical condition.

## Clinical Evidence

For low back and neck disorders with or without radiculopathy, there is insufficient, conflicting or poor clinical evidence in the published, peer-reviewed scientific literature to demonstrate the net benefit vs harm and effectiveness of home traction. Additional research is recommended.

### Lumbar Traction

In September 2017, the U.S. Department of Veterans Affairs (VA) and U.S. Department of Defense (DoD) approved the joint Clinical Practice Guideline (CPG) for Diagnosis and Management of Low Back Pain. This CPG was intended to provide healthcare providers a framework by which to evaluate, treat, and manage patients with low back pain (LBP) and is based on a systematic review of the literature. The workgroup developing the guideline found insufficient evidence to support the use of lumbar traction in treating LBP.

In November 2016, the National Institute for Health and Care Excellence (NICE) published guideline NG59 on Low back pain and sciatica in over 16s: assessment and management which addressed non-invasive treatments and specifically cited not to offer traction for managing low back pain with or without sciatica. The guideline did recommend consideration of manual therapy (spinal manipulation, mobilisation or soft tissue techniques such as massage) for managing low back pain with or without sciatica, but only as part of a treatment package including exercise, with or without psychological therapy, for low back pain and sciatica.

Wegner et al. (2013) published an update to a 2007 Cochrane review (Clarke, et al., 2007) that assessed the effects of traction compared to placebo, sham traction, reference treatments and no treatment in people with low back pain (LBP). The review included 32 randomized controlled trials with 2,762 participants involving traction to treat acute (less than four weeks' duration), subacute (four to 12 weeks' duration) or chronic (more than 12 weeks' duration) non-specific LBP with or without sciatica. The review found for individuals with mixed symptom patterns (acute, subacute and chronic LBP with and without sciatica) there was low-to moderate-quality evidence that traction may make little or no difference in pain intensity, functional status, global improvement or return to work when compared to placebo, sham traction or no treatment. The review noted that for people with LBP with sciatica and acute, subacute or chronic pain, there was low- to moderate-quality evidence that traction probably has no impact on pain intensity, functional status or global improvement. Regarding chronic LBP without sciatica, the review found that there was moderate-quality evidence that traction probably makes little or no difference in pain intensity when compared with sham treatment. The authors concluded that the findings indicate that traction, either alone or in combination with other treatments, has little or no impact on pain intensity, functional status, global improvement and return to work among people with LBP. The review found that there is only limited-quality evidence from studies with small sample sizes and moderate to high risk of bias and that the effects shown by these studies are small and not clinically relevant.

The Cochrane systematic review referenced by Wegner was conducted for the purpose of determining the effectiveness of traction in the management of LBP with or without sciatica (Clarke et al., 2007). The study included randomized controlled trials involving traction to treat acute, subacute or chronic nonspecific LBP with or without sciatica. The review included 25 studies. The studies included 2206 patients with 1045 receiving traction. Five of these trials were considered high quality. The authors concluded that traction is probably not effective, and traction as single treatment for LBP is not supported by the studies. In addition, the authors noted that future research on traction for patients with LBP should distinguish between symptom pattern and duration and should be carried out according to the highest methodological standards.

### Cervical Traction

Fritz et al. (2014) reported on a randomized controlled trial of 86 patients that compared exercise with mechanical traction during treatment sessions or exercise with over-door traction provided during treatment session and at home. Patients with neck pain and signs of radiculopathy were randomized to 4 weeks of treatment with exercise, exercise with mechanical traction, or exercise with over-door traction. All patients were scheduled to receive 10 individual physical therapy sessions over a 4-week treatment. The primary outcome measure was Neck Disability Index and secondary outcome measure was neck and arm pain intensity-assessment was performed at four weeks, six months, and 12 months. Intention-to-treat analysis found lower Neck Disability Index scores at six months in the mechanical traction group compared to the exercise group and over-door traction

group, and at 12 months in the mechanical traction group compared to the exercise group. Secondary outcomes favored mechanical traction. Limitations of the study included: the rate of loss to follow; several patients crossed over to a different treatment during the first 4 weeks; there were several baseline differences among the treatment groups (e.g., duration of symptoms).

In a prospective case series, Cai et al. (2011) evaluated potential prognostic variables and the validity of a clinical prediction rule for improvement in spondylosis neck pain after home cervical traction in 103 consecutive patients with cervical pain. The patients used a traction device with an adjustable cervical halter with a traction force equaling 10% to 15% of their body weight. They were instructed to pull the rope of the pulley system until the determined traction force was reached. The patients were instructed to perform 2 traction treatments for 20 minutes daily for 2 weeks, reinforced by a treatment diary. Standard physical examination of the cervical spine was conducted before intervention. Data on the Numerical Pain Scale (NPS) score, Neck Disability Index (NDI), Fear-Avoidance Beliefs Questionnaire (FABQ) scores, and a global rating of perceived improvement were collected before and after treatment. A positive treatment response was defined as 50% improvement between pre- and post-treatment of NPS or NDI, or rated as much improved or completely recovered in the global rating scheme. Forty-seven patients had a positive response to home cervical traction, while 56 did not. This study is limited by its short-term follow-up and lack of controls.

Young et al. (2009) conducted a randomized controlled trial of 81 patients with cervical radiculopathy. The patients received manual therapy, exercise, and intermittent cervical traction or they received manual therapy, exercise, and sham intermittent cervical traction. The results suggested that the addition of mechanical cervical traction to a multimodal treatment program of manual therapy and exercise yields no significant additional benefit to pain, function, or disability in patients with cervical radiculopathy.

A Cochrane review of 7 randomized controlled trials (n=958) by Graham et al. (2008) assessed the effects of mechanical traction for neck disorders. Outcomes included pain, function, disability, global perceived effect, patient satisfaction, and quality of life measures. The review found no statistically significant difference between continuous traction and placebo traction in reducing pain or improving function for chronic neck disorders with radicular symptoms. The authors concluded that there was no evidence to clearly support or refute the use of either continuous or intermittent traction for neck disorders. Further studies are needed to assess the safety and efficacy of traction for neck disorders.

Olivero and Dulebohn (2002) conducted a retrospective review of 81 patients receiving halter cervical traction for the treatment of cervical radiculopathy. All patients experienced at least 6 weeks of symptoms before undergoing a trial of traction that consisted of wearing a cervical collar and home-based halter cervical traction: 8 to 12 pounds, applied for 15 minutes, 3 times a day for 3 to 6 weeks. Sixty-three (78%) of 81 patients responded to therapeutic traction, experiencing significant or total pain relief, 3 could not tolerate the traction, and traction failed in 15 patients. Three of the 63 patients who responded to traction therapy, suffered recurrence of their symptoms and required surgery. The authors concluded that 75% of patients with at least a 6 week history of cervical radiculopathy will benefit from home-based halter traction therapy. The study is limited by small sample size and lack of a comparison group.

Swezey et al. (1999) reported that a brief (3-5 min), over-the-door home cervical traction modality provided symptomatic relief in 81% of patients (n=58) with mild to moderately severe (Grade 3) cervical spondylosis syndromes. Five patients discontinued treatment after reporting transient symptom aggravation with traction. No serious or sustained adverse events were recorded. The author noted that prospective, randomized assessment of cervical traction for this and other methods is needed.

There is insufficient evidence in the published, peer-reviewed scientific literature to demonstrate that home traction is effective treatment. In general, studies have been of poor methodological quality, with small sample sizes and lack of randomization. Further randomized controlled clinical trials are needed.

## Professional Societies

### *North American Spine Society (NASS)*

The NASS evidence-based clinical guideline (Kreiner et al., 2020) for diagnosis and treatment of low back pain indicated that traction is not recommended as it provides no clinically significant improvement in pain or function in patients with subacute or chronic low back pain.

The NASS evidence-based clinical guideline (Kreiner et al., 2011) for diagnosis and treatment of lumbar disc herniation with radiculopathy noted that there is insufficient evidence to make a recommendation for or against the use of traction in the treatment of lumbar disc herniation with radiculopathy.

The NASS evidence-based clinical guideline for the diagnosis and treatment of cervical radiculopathy from degenerative disorders notes that regarding the role of traction in the treatment of cervical radiculopathy from degenerative disorders that cervical halter traction and combinations of medications, physical therapy, injections and traction have been associated with improvements in patient reported pain in uncontrolled case series. They note that such modalities may be considered recognizing that no improvement relative to the natural history of cervical radiculopathy has been demonstrated (Bono et al., 2010).

### ***American College of Physicians/American Pain Society***

A joint clinical practice guideline from the American College of Physicians and the American Pain Society for the diagnosis and treatment of low back pain notes that intermittent or continuous traction in patients with or without sciatica have not been proven effective for chronic low back pain (Chou, et al., 2007b).

### ***American College of Physicians (ACP)***

The ACP developed a clinical practice guideline to present the evidence and provide clinical recommendations on noninvasive treatment of low back pain. The committee based these recommendations on a systematic review of randomized, controlled trials and systematic reviews published through April 2015 on noninvasive pharmacologic and nonpharmacologic treatments for low back pain. Updated searches were performed through November 2016. Clinical outcomes evaluated included reduction or elimination of low back pain, improvement in back-specific and overall function, improvement in health-related quality of life, reduction in work disability and return to work, global improvement, number of back pain episodes or time between episodes, patient satisfaction, and adverse effects.

The 2017 clinical practice guideline on acute, subacute, and chronic low back pain in adults continued to find insufficient evidence to evaluate the effectiveness of spine traction alone or in combination with other therapies. Low-quality evidence failed to reveal a difference between traction and other treatments for radicular low back pain. (Qaseem et al., 2017)

## **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.

Non-powered orthopedic traction devices are classified by the FDA as Class I devices. There are numerous FDA-registered traction devices including foam or rigid collars, and over-the-door pulley, pneumatic, or mechanical systems. The devices are exempt from the premarket notification procedures. Additional information is available at: <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm> (Accessed May 5, 2020)

## **References**

- Bono C, Ghiselli G, Gilbert TJ, et al. North American Spine Society (NASS). Evidence-based clinical guidelines for multidisciplinary spine care. Diagnosis and treatment of cervical radiculopathy from degenerative disorders. 2010. Available at: <https://www.spine.org/Portals/0/Assets/Downloads/ResearchClinicalCare/Guidelines/CervicalRadiculopathy.pdf>. Accessed May 5, 2020
- Cai C, Ming G, Ng LY; Development of a clinical prediction rule to identify patients with neck pain who are likely to benefit from home-based mechanical cervical traction; *Eur Spine J*; 2011; 20 (6): 912-922.
- Chou R, Qaseem A, Snow V, et al. Clinical Efficacy Assessment Subcommittee of the American College of Physicians; American College of Physicians; American Pain Society Low Back Pain Guidelines Panel; Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society; *Ann Intern Med*; 2007 Oct 2; 147 (7): 478-91.(b).
- Clarke JA, van Tulder MW, Blomberg SE, et al. Traction for low -back pain with or without sciatica; *Cochrane Database Syst Rev*; 2007 Apr 18; (2): CD003010.

Fritz JM, Thackeray A, Brennan GP, et al. Exercise only, exercise with mechanical traction, or exercise with over-door traction for patients with cervical radiculopathy, with or without consideration of status on a previously described subgrouping rule: a randomized clinical trial; J Orthop Sports Phys Ther; 2014 Feb; 44 (2): 45-57.

Graham N, Gross A, Goldsmith CH, et al; Mechanical traction for neck pain with or without radiculopathy; Cochrane Database Syst Rev; 2008 Jul 16; (3): CD006408.

Kreiner DS, Matz P, et al. North American Spine Society (NASS). Evidence-based clinical guidelines for multidisciplinary spine care. Diagnosis and treatment of Low Back Pain. 2020. Available at: <https://www.spine.org/Portals/0/assets/downloads/ResearchClinicalCare/Guidelines/LowBackPain.pdf> Accessed May 5, 2020.

Keriner DS, Shaffer WO, Summers J., et al. North American Spine Society (NASS). Evidence-based clinical guidelines for multidisciplinary spine care. Diagnosis and treatment of degenerative lumbar spinal stenosis. 2011.

NICE. Low back pain and sciatica in over 16s: assessment and management. NICE guideline [NG59] Published date: 30 November 2016.

Olivero WC, Dulebohn SC; Results of halter cervical traction for the treatment of cervical radiculopathy: retrospective review of 81 patients; Neurosurgical Focus 2002; 12 (2).

Pangarkar, S.S., Kang, D.G., Sandbrink, F. et al. VA/DoD Clinical Practice Guideline: Diagnosis and Treatment of Low Back Pain. J GEN INTERN MED 34, 2620–2629 (2019). <https://doi.org/10.1007/s11606-019-05086-4>

Qaseem A, Wilt TJ, McLean RM, Forciea MA, Clinical Guidelines Committee of the American College of Physicians. Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians. Annals of Internal Medicine 2017;166(7):514-530.

Swezey RL, Swezey AM, Warner K; Efficacy of home cervical traction therapy; American Journal of Physical Medicine & Rehabilitation 1999; 78: 30-32.

Wegner I, Widyahening IS, van Tulder MW, et al. Traction for low-back pain with or without sciatica; Cochrane Database Syst Rev; 2013 Aug 19; 8.

Young IA, Michener LA, Cleland JA, et al. Manual therapy, exercise, and traction for patients with cervical radiculopathy: a randomized clinical trial; Phys Ther. 2009 Jul; 89 (7): 632-42; Erratum in: Phys Ther; 2009 Nov; 89 (11): 1254-5. Phys Ther; 2010 May; 90 (5): 825.

## Guideline History/Revision Information

Date	Summary of Changes
01/01/2021	<b>Template Update</b> <ul style="list-style-type: none"><li>Reformatted policy; transferred content to new template</li></ul>
06/01/2020	<b>Supporting Information</b> <ul style="list-style-type: none"><li>Updated <i>Clinical Evidence</i>, <i>FDA</i>, and <i>References</i> sections to reflect the most current information</li><li>Archived previous policy version MMG060.J</li></ul>

## Instructions for Use

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

UnitedHealthcare may also use tools developed by third parties, such as the MCG™ Care Guidelines, to assist us in administering health benefits. UnitedHealthcare West Medical Management Guidelines 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.

Member benefit coverage and limitations may vary based on the member's benefit plan Health Plan coverage provided by or through UnitedHealthcare of California, UnitedHealthcare Benefits Plan of California, UnitedHealthcare of Oklahoma, Inc., UnitedHealthcare of Oregon, Inc., UnitedHealthcare Benefits of Texas, Inc., or UnitedHealthcare of Washington, Inc.