MEDICAL POLICY



An independent licensee of the Blue Cross Blue Shield Association MEDICAL POLICY DETAILS Lumbar Traction: Vertebral Axial Decompression and Home Lumbar Traction **Medical Policy Title Devices Policy Number** 1.01.50 Category **Technology Assessment Original Effective Date** 01/18/07 10/18/07, 09/18/08, 09/17/09 **Committee Approval Date Current Effective Date** 05/16/24 09/16/10 **Archived Date** 09/15/11, 09/20/12, 09/19/13, 09/18/14, 09/17/15, 07/21/16, 07/20/17, 07/19/18, **Archive Review Date** 07/18/19, 06/18/20, 06/17/21, 06/16/22, 06/22/23, 05/16/24 **Product Disclaimer** • Services are contract dependent; if a product excludes coverage for a service, it is not covered, and medical policy criteria do not apply. • If a commercial product (including an Essential Plan or Child Health Plus product), medical policy criteria apply to the benefit. • If a Medicaid product covers a specific service, and there are no New York State Medicaid guidelines (eMedNY) criteria, medical policy criteria apply to the benefit. • If a Medicare product (including Medicare HMO-Dual Special Needs Program (DSNP) product) covers a specific service, and there is no national or local Medicare coverage decision for the service, medical policy criteria apply to the benefit. • If a Medicare HMO-Dual Special Needs Program (DSNP) product DOES NOT cover a specific service, please refer to the Medicaid Product coverage line.

POLICY STATEMENT

Based upon our criteria and assessment of the peer-reviewed literature, lumbar traction by any method has not been medically proven to be effective and, therefore, is considered **investigational** for all indications, including low back pain.

Refer to Corporate Medical Policy #1.01.00 Durable Medical Equipment – Standard and Non-Standard Refer to Corporate Medical Policy #11.01.03 Experimental or Investigational Services

DESCRIPTION

Lumbar traction, a widely used treatment for low back pain, often in combination with other modalities, can be provided manually by a therapist or by mechanical means and may be self-administered using portable devices.

Vertebral axial decompression has been investigated as a technique to reduce intradiscal pressure and relieve low back pain associated with herniated lumbar discs or degenerative lumbar disc disease. Manufacturers of the VAX-D state the device provides traction without the accompanying abdominal muscular contractions that other types of traction elicit, leading to a condition where there is negative intradiscal pressure. Negative intradiscal pressure is speculated to help heal the annulus in a variety of ways. The patient lies on a powered traction table wearing a pelvic harness and grasping hand grips. The table is slowly extended, and a distraction force is applied via the pelvic harness until the desired tension is reached, followed by a gradual decrease of the tension. The cyclic nature of the treatment allows the patient to withstand stronger distraction forces, compared to static lumbar traction techniques. An individual session typically includes 15 cycles of tension, and 10 to 15 daily treatments may be administered. A number of vertebral axial decompression devices have been marketed.

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Pneumatic lumbar traction devices have been developed for home use. The patient, wearing pelvic and lower rib cage harnesses, lies on a two-piece surface. Pneumatic power provided by a hand pump moves the sections apart, applying traction through the harnesses. Examples are the Saunders Lumbar HomeTrac, Saunders STx, Orthotrac, and Comfort Trac.

RATIONALE

A number of manufacturers have received Section 510(k) approval from the FDA to market devices characterized by the FDA as powered traction devices. Examples include, but not limited to the VAX-D Therapeutic Table in 1996, Decompression Reduction Stabilization (DRS) in 1998, Accu-SPINA System in 2000, DRX9000 in 2003, Lordex Power Traction in 2003, SpineRx-LDM in 2003, Healthstar Elite in 2004, Antalgic-Trak in 2005, and SpineMED S200b/S200c Decompression Table in 2005.

There is only limited-quality evidence from studies with small sample sizes and moderate to high risk of bias. The effects shown by these studies are small and are not clinically relevant. Published studies of traction as a treatment for LBP lack methodological rigor and reach conflicting conclusions. A 2013 update of the Cochrane review of traction for LBP, with or without sciatica, included a review of 37 randomized, controlled trials. The authors concluded that traction, either alone or in combination with other treatments, has little or no impact on pain intensity, functional status, global improvement, or return to work among people with LBP. For people with mixed-symptom patterns (acute, subacute, or chronic LBP with or 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. For chronic LBP without sciatica, there was moderate-quality evidence that traction makes little or no difference in pain intensity when compared with sham treatment. No studies reported on the effect of traction on functional status, global improvement or return to work. Adverse effects were reported in seven of the 32 studies.

Wang et al. (2022) published a meta-analysis evaluating the efficacy of mechanical traction for pain associated with lumbar disc herniation. Six RCTs (n=239) were included in analysis. Overall, results demonstrated that mechanical traction was significantly better than conventional physical therapy in improving pain scores and disability scores. Heterogeneity was low among studies. The results were limited by small sample sizes, short-term follow-up, and no standardized control groups among studies.

The American College of Physicians (2017) published a clinical practice guideline indicating that evidence was low-quality and insufficient to determine the effectiveness of traction for LBP. In addition, the North American Spine Society published guidelines in 2020 on the treatment of low back pain and their recommendation related to lumbar traction is as follows: "In patients with subacute or chronic low back pain, traction is not recommended to provide clinically significant improvements in pain or function."

The Agency for Healthcare Research and Quality (AHRQ) technology assessment concluded that currently available evidence is too limited in quality and quantity to allow for formulation of evidence-based conclusions regarding the efficacy of decompression therapy as a therapy for chronic back pain when compared with other nonsurgical treatment options (Jurecki-Tiller, 2007).

CODES

- Eligibility for reimbursement is based upon the benefits set forth in the member's subscriber contract.
- CODES MAY NOT BE COVERED UNDER ALL CIRCUMSTANCES. PLEASE READ THE POLICY AND GUIDELINES STATEMENTS CAREFULLY.
- Codes may not be all inclusive as the AMA and CMS code updates may occur more frequently than policy updates.
- Code Key: Experimental/Investigational = (E/I), Not medically necessary/appropriate = (NMN).

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CPT Codes

Code	Description
No specific code	

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HCPCS Codes

Code	Description
E0830 (E/I)	Ambulatory traction device, all types, each
S9090 (E/I)	Vertebral axial decompression, per session

ICD10 Codes

Code	Description
Investigational for all codes	

REFERENCES

Cheng Y, et al. The effect of mechanical traction on low back pain in patients with herniated intervertebral disks: a systemic review and meta-analysis. Clinical Rehab 2020;31(I):13-22.

*Deen HG Jr et al. Sudden progression of lumbar disk protrusion during vertebral axial decompression traction therapy. Mayo Clin Proc 2003 Dec;78(12):1554-6.

*Gose EE, et al. Vertebral axial decompression therapy for pain associated with herniated or degenerated disc or facet syndrome: an outcome study. J Neuro Res 1998 Apr;20(3):186-90.

*Harte AA, et al. The effectiveness of motorised lumbar traction in the management of LBP with lumbo sacral nerve root involvement: a feasibility study. BMC Musculoskelet Disord 2007 Nov 29;8:118.

*Harte AA, et al. The efficacy of traction for back pain: a systematic review of randomized controlled trials. <u>Arch Phys</u> Med Rehab 2003 Oct;84(10:1542-53.

*Jurecki-Tiller M, Bruening W, Tregear S, et al. Decompression therapy for the treatment of lumbosacral pain. Prepared by the ECRI Institute Evidence-Based Practice Center for the Agency for Healthcare Research and Quality (AHRQ) (Contract No. 290-02-0019). Rockville, MD: AHRQ; 2007 Apr 26: PMID:25506956.

*Ramos G, et al. Effects of vertebral axial decompression on intradiscal pressure. J Neurosurg 1994 Sep;81(3):350-3.

*Sherry E, et al. A prospective randomized controlled study of VAX-D and TENS for the treatment of chronic low back pain. Neuro Res 2001 Oct;23(7):780-4.

Tanabe H, et al. Immediate effect of mechanical lumbar traction in patients with chronic low back pain: A crossover, repeated measures, randomized controlled trial. <u>J Orthop Sci</u> 2021 Mar 27;S0949-2658(20)30287-6. Online ahead of print.

Vanti C, et al. Effectiveness of mechanical traction for lumbar radiculopathy: A systematic review and meta-analysis. Phys Ther 2021 Mar 3;101(3):pzaa231.

Vanti C, et al. Vertical traction for lumbar radiculopathy: a systematic review. Arch Physiother 2021 Mar 15;11(1):7.

*WCB Evidence Based Practice Group WorkSafe Program Design Division Workers Compensation Board of BC. Vertebral axial decompression for low back pain. 2005 Feb.

Wang W, et al. Clinical efficacy of mechanical traction as physical therapy for lumbar disc herniation: a meta-analysis. <u>Comput Math Methods Med</u> 2022 June 21. doi:10.1155/2022/5670303.

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*Key Article

KEY WORDS

Home lumbar traction device, Lumbar traction, VAX-D, DRS System, DRX, HomeTrac, Orthotrac, ComforTrac, Saunders, Motorized Spinal Traction, Intervertebral Differential Dynamics.

CMS COVERAGE FOR MEDICARE PRODUCT MEMBERS

There is currently a National Coverage Determination (NCD) 160.16 Vertebral Axial Decompression (VAX-D) for Lumbar Traction. Please refer to the following NCD websites for Medicare Members: [http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=124&ncdver=1&bc=AgAAgAAAAAA&] accessed 04/22/24.