Motorized Spinal Traction

Policy Number: CS080.Q
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➲ Instructions for Use

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Application

This Medical Policy does not apply to the states listed below; refer to the state-specific policy/guideline, if noted:

State	Policy/Guideline
Idaho	Motorized Spinal Traction (for Idaho Only)
Indiana	None
Kansas	Motorized Spinal Traction (for Kansas Only)
Kentucky	Motorized Spinal Traction (for Kentucky Only)
Nebraska	Motorized Spinal Traction (for Nebraska Only)
New Jersey	Motorized Spinal Traction (for New Jersey Only)
New Mexico	Motorized Spinal Traction (for New Mexico Only)
North Carolina	Motorized Spinal Traction (for North Carolina Only)
Ohio	Motorized Spinal Traction (for Ohio Only)
Pennsylvania	Motorized Spinal Traction (for Pennsylvania Only)
Tennessee	Motorized Spinal Traction (for Tennessee Only)

Coverage Rationale

Motorized spinal traction devices are unproven and not medically necessary for treating neck and low back disorders 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 policy 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 federal, state, or contractual requirements 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
S9090	Vertebral axial decompression, per session

Description of Services

Vertebral axial decompression is a type of spinal traction used in the treatment of back or neck pain.

This involves the use of a computer-driven table to control disc decompression. For the treatment, a pelvic harness is applied to the individual, and the individual lies on the special table and is subjected to a series of cycles as the table is slowly extended and a distraction force is applied via the harness. When the desired tension is reached, it is gradually decreased. The number of sessions varies.

Clinical Evidence

Back

There is insufficient evidence from peer-reviewed, published studies to conclude that spinal unloading devices are effective in the management of low back pain (LBP) or that they improve health outcomes. Available studies have limitations such as a small sample size, incomplete data, a lack of follow-up after therapy was ceased, and short-term follow-up. Additional well-designed, controlled trials are needed to determine the efficacy of this service.

Hayes (2025) conducted an Evidence Analysis Research Brief to summarize the volume of publications and to provide newly published, peer-reviewed literature, representative payer policies, and position statements and guidelines published since the 2003 publication of *Mechanized Spinal Distraction Therapy for Low Back Pain*. Since 2003, six studies have been newly published, all of which are included and summarized in this policy's clinical evidence. In addition, no position statements or guidelines have been identified, suggesting no/unclear support for the use of mechanized spinal distraction therapy in individuals with LBP.

Adar et al. (2024) conducted a retrospective study to compare the effectiveness of traditional motorized traction and nonsurgical spinal decompression (NSD) added to conventional physiotherapy for the treatment of chronic LBP (CLBP) caused by lumbar discopathy. The retrospective data from 160 patients diagnosed with lumbar discopathy who underwent physical therapy in the authors' clinic were reviewed. Their mean age was 44.6 ±12.4 years (range, 21-65 years), 57.5% (n = 92) were female, and 42.5% (n = 68) were male. Demographic data, duration of symptoms, physical examination findings, lumbosacral magnetic resonance imaging (MRI) reports, method and duration of treatment, and visual analog scale (VAS) and Oswestry Disability Index (ODI) results were recorded. There were no differences between conventional physiotherapy, motorized traction, and spinal decompression groups in terms of age, duration of symptoms, and the number of sessions ($p > 0.05$). In all three groups, the mean scores on the VAS and ODI were decreased in the pre- and posttreatment comparisons ($p < 0.005$). The authors concluded that in patients with subacute and chronic lumbar discopathies, motorized traction and spinal decompression treatments that were added to conventional treatment were found to be more effective than conventional treatment alone. The results of spinal decompression and conventional motorized traction (CMT) treatments were similar. This study is limited by its retrospective observational design, heterogeneity of sample groups, and small sample size. In addition, factors such as body mass index, accompanying fibromyalgia, drug use, different decompression levels, exercise adherence, lifestyle factors, and psychological factors (e.g., fear-avoidance beliefs, anxiety about pain), which have the potential to affect the effectiveness of treatments and results, were not evaluated; this may also have affected the results. The exclusion criteria might limit the generalizability of the study to only patients with specific characteristics, reducing the diversity of the sample. Due to these limitations, the study has insufficient results in terms of clinical acceptance. Randomized controlled trials (RCTs), with balanced group sizes, would provide more reliable comparisons between the treatments.

Vanti et al. (2023) conducted a systematic review and meta-analysis of RCTs comparing the effects of different types or parameters of lumbar traction in LBP. The CENTRAL (Cochrane Central Register of Controlled Trials), CINAHL (Cumulative Index to Nursing and Allied Health Literature), ISI Web of Science, PEDro, PubMed, and Scopus databases were searched from their inception to March 31, 2021. All RCTs comparing different types or parameters of lumbar traction in adults who reported LBP, with or without lumbar radiculopathy (LR), were considered. Any restriction regarding publication time or language was applied. Two reviewers independently selected the studies, performed the quality assessment, and extracted the results. A meta-analysis used a random-effects model. Sixteen studies met the inclusion criteria for qualitative analysis, and five were pooled. Meta-analyses of results from five studies on LBP with LR showed no difference between diverse traction modalities at the short-term follow-up. Very low- to low-quality evidence supports these results. High-force and low-force traction demonstrated improvements in pain. The authors concluded that the literature suggests the short-term effectiveness of traction on pain in LBP with LR regardless of the type or the dosage used. Different effects of traction, other than mechanical ones, can be hypothesized. This systematic review may be relevant for clinical practice due to the similar effects of different traction types or dosages. The small number of studies included in the quantitative synthesis is the most important limitation of this review. Very often, no information was

reported about dropouts, and even if it was reported, the data related to the individuals who had not completed the study were not specified. Several studies were excluded due to incomplete data on the outcomes, mostly when only percentages of improvement or worsening were reported, instead of pre- and posttreatment means and SDs. A small sample size makes it difficult to decide whether these conclusions can be generalized to a larger population. Further investigation is needed before the clinical usefulness of this procedure is proven.

Amjad et al. (2022) conducted an RCT to determine the effects of NSD therapy in addition to routine physical therapy on pain, lumbar range of motion (ROM), functional disability, back muscle endurance (BME), and quality of life (QOL) in participants with radiculopathy. A total of 60 participants with LR were randomly allocated into two groups, an experimental (n = 30) and a control (n = 30) group, through a computer-generated random number table. Baseline values were recorded before providing any treatment by using the VAS, Urdu version of the ODI (ODI-U), Modified-Modified Schober Test, prone isometric chest raise test, and 36-Item Short Form Survey (SF-36) for measuring pain at rest, functional disability, lumbar ROM, BME, and QOL, respectively. All participants received 12 treatment sessions over 4 weeks, and then all outcome measures were again recorded. By using the analysis of covariance test, a statistical ($p < 0.05$) between-group improvement was observed in the VAS, ODI-U, BME, lumbar ROM, role physical, and bodily pain domains of the SF-36, which was in favor of the NSD therapy group. The between-group difference was 1.07 ±0.32 cm ($p < 0.001$) for the VAS, 5.65 ±1.48 points ($p < 0.001$) for the ODI-U, 13.93 ±5.85 s ($p = 0.002$) for BME, 2.62 ±0.27 cm ($p < 0.001$) for lumbar flexion, 0.96 ±0.28 ($p < 0.001$) for lumbar extension, 5.77 ±2.39 ($p = 0.019$) for role physical, and 6.33 ±2.52 ($p = 0.016$) for the bodily pain domain of the SF-36. For these outcomes, a medium to large effect size (d = 0.61-2.47; 95% CI, 0.09-3.14) was observed. The authors concluded that a combination of NSD therapy with routine physical therapy is more effective, statistically and clinically, than routine physical therapy alone in terms of improving pain, lumbar ROM, BME, functional disability, and the physical role domain of QOL in individuals with LR, following 4 weeks of treatment. Limitations of this RCT include the additional therapy time given to the interventional group compared with the control group. The high-technology intervention and additional therapy time vs control may have significantly impacted patient-reported outcome measures and led to the potential Hawthorne effect. Due to the nature of the treatment, it was not possible to maintain participants' blinding, which may also have caused the Hawthorne effect. In addition, the lack of follow-up after therapy was ceased is another limitation. The short-term follow-up did not allow for the assessment of intermediate- and long-term outcomes.

A randomized crossover study performed by Lee et al. (2021) evaluated real-time standard spinal traction (ST) compared with lordotic curve-controlled traction (LCCT). The study included 40 participants with mild nonradicular LBP who were randomly assigned to either standard ST or LCCT. Each participant had initial x-rays taken in a standing position. After 10 minutes of traction, another radiograph was taken in the supine position, and real-time shooting was performed during both standard ST and LCCT procedures. The following angles were measured: intervertebral disc angle of all segments and disc distance anterior and posterior. All measurements were taken by a radiologist who was blinded to the study. The disc distance was defined as the distance between the inferior end plate of the upper vertebrae and the superior end plate of opposing lower vertebrae while applying standard ST to straighten the spine or applying LCCT posteriorly to maintain the lordotic curve. Standard ST was applied and gradually increased to the maximum level tolerated or until the force was one-third of the participant's weight. LCCT participants had a magnetic marker attached to the L4/L5 disc space by physical palpation. The authors found that during standard ST, the force of traction decreased the lordotic curve and had more effect on the posterior and overstretching, which causes pain, muscle spasms, and damage to facet joints and soft tissue, without an effect on the discs. The LCCT group, with the same amount of force, had a greater distance increase in discs and fewer muscle spasms. The authors concluded that the LCCT preserved the lordotic curve, whereas standard ST only straightened it. The authors feel that the newly developed LCCT device was useful in increasing the disc space evenly while maintaining the lordotic curve. Limitations include the small sample size and lack of long-term efficacy for LBP; further studies are warranted.

Tanabe et al. (2021) performed an RCT to evaluate the efficacy and safety of traction in participants with CLBP using recently developed equipment that is capable of precise traction force control. The study included 95 participants with nonspecific CLBP from 28 clinics and hospitals, distributed throughout Japan, between December 2016 and March 2017. Participants were randomly assigned to group A (n = 49), which received the intermittent traction with vibration mode, and group B (n = 46), which received intermittent traction only (ITO) mode. All participants were followed up weekly for two periods after study initiation. The primary outcome measures were disability level, including pain, and QOL. A statistical analysis was performed using a linear mixed model. Two types of traction devices sold in the market under the same category of classification (MINATO Medical Science, ST-2L/2CL and OG Wellness Technologies, OL-6500/6000) were used. The devices consist of two main parts: a holding part for the upper body with arm holders and a computerized moving part for the lower body. The upper body unit automatically measures the height of the armpit to maintain the counterforce against traction. The lower body unit produces a position of 90/90° traction, adjusting the thigh length. Compared with pretraction data, both traction modes showed improvement, except the first intervention of ITO treatment. The differences in Japan Low Back Pain Evaluation Questionnaire scores over time showed improvements in the

treatment in which vibrational force was added in contrast to the conventional traction treatment; the mean difference was significant to compare the intermittent traction with vibration treatment and ITO treatment (-1.75; p = 0.001; 95% CI, -2.69 to -0.80). However, a difference between the two sequences (p = 0.884) or a carryover effect (p = 0.527) was not observed. The authors concluded that lumbar traction could provide an immediate effect in terms of the pain intensity and functional status in individuals with CLBP, and a traction method with added vibrational force on preload seemed to be promising. In addition, the study contributes to some evidence of the efficacy of lumbar traction. Limitations of the study include a short follow-up period of 2 weeks, which did not allow for assessment of intermediate- and long-term outcomes. Further investigation is needed before the clinical usefulness of this procedure is proven.

Cheng et al. (2020) completed a systematic review of seven articles and a meta-analysis of literature that included 403 individuals. The criteria assessed in the RCT included individuals with LBP (with or without sciatica) and those with herniated disc(s) confirmed by MRI or computed tomography. The analysis compared individuals who received any type of traction to the lumbar spine with sham or no traction, and pain measurements were obtained before and after intervention. The authors concluded that lumbar traction was effective in the short term for reducing LBP in those with a lumbar herniated disc, but further studies are needed to determine long-term effectiveness. Several limitations of the study were identified, including methodology; a small sample size; and differing interventions and outcome assessments, contributing to the heterogeneity. In addition, only two trials used sham controls.

Tadano et al. (2019) conducted a qualitative study as part of an RCT (UMIN-CTR 000024329; date opened: October 13, 2016) to examine the biomechanical change at the lumbar area under lumbar traction and confirm its reproducibility and accuracy as a mechanical intervention. A total of 133 participants with nonspecific CLBP were included, from 28 orthopedic clinics, to assess and determine traction conditions while participants underwent a biomechanical experiment. Two types of commercially available motorized traction devices (MINATO Medical Science, ST-2 L/2CL and OG Wellness Technologies, OL-6500/6000) were used and incorporated into other measuring tools, including an infrared range finder and large extension strain gauge. The finite element method (FEM) was used to analyze the real data of pelvic girdle movement at the lumbar spine level. Self-report assessments, with representative two conditions, were analyzed according to the qualitative coding method. Overall, 38 participants provided available biomechanical data. Distraction force lineally correlated with the movement of the traction unit at the pelvic girdle. After applying vibration force to preloading, the strain gauge showed proportional vibration of the shifting distance, without a phase lag qualitatively. FEM simulation provided at least a 3.0-mm shifting distance at the lumbar spine under 100 mm of body traction. In total, 95 participants provided a treatment diary and were classified as no pain, improved, unchanged, and worsened. Approximately 83.2% of participants reported a positive response. The authors concluded that the current study, which combined a biomechanical experiment with FEM simulation and analysis of participants' perspectives, found that lumbar traction operates as an actual mechanical intervention therapy in individuals with CLBP. Additionally, it provided the possibility of an immediate effect after traction. The identification of an appropriate loading mode, which is a limitation to this study, may still be an essential step for ascertaining the clinical utility of lumbar traction. In addition, only the distance on the lumbar skin was assessed rather than a direct assessment of the shift of discs or vertebral bodies. The findings of this study need to be validated by well-designed studies. Further investigation is needed before the clinical usefulness of this procedure is proven.

Koçak et al. (2017) studied and compared the efficiency of CMT with NSD using the DRX9000TM device, a different form of motorized ST, in participants with LBP associated with lumbar disc herniation. Overall, 48 participants were randomized into two different groups; the first group underwent CMT, and the second group underwent NSD. Both groups underwent the therapy for 6 weeks. Participants were assessed before and after the sessions; pain was assessed by the VAS, functional status was assessed using the ODI, QOL was assessed using the SF-36, the state of depression mood was assessed using the Beck Depression Inventory, and the global assessment of the illness was conducted using the Patient's Global Assessment of Response to Therapy and Investigator's Global Assessment of Response to Therapy scales. The authors concluded that the study findings show that both CMT and NSD treatments were effective methods in controlling pain, enhancing functional status, and reducing depressive mood in participants with CLBP associated with lumbar disc herniation. Limitations include the lack of a control group without motorized ST, absence of sham groups, and inability to perform long-term follow-up in the participants; future studies are warranted.

In an RCT, Thackeray et al. (2016) examined the effectiveness of mechanical traction in participants (n = 120) with LBP and nerve root compression. Participants were randomized to receive an extension-oriented treatment approach, with or without the addition of mechanical traction, and during a 6-week period, participants received up to 12 treatment visits. The primary outcomes of pain and disability were collected at 6 weeks, 6 months, and 1 year by assessors blinded to group allocation. At the end of the 1-year time frame, the authors concluded that in this participant population, there was no evidence that mechanical lumbar traction in combination with an extension-oriented treatment was superior to extension-oriented exercises alone in the management of these participants at any point in the evaluation period.

Wegner et al. (2013) conducted a systematic review to determine if traction was more effective than reference treatments, placebo, sham traction, or no treatment for LBP with or without sciatica, with a focus on pain intensity, functional status, global improvement, and return to work. The authors included RCTs that used traction, including mechanical traction, manual traction (unspecific or segmental traction), computerized traction, autotraction, underwater traction, bed rest traction, inverted traction, continuous traction, and intermittent traction. This is an update of a Cochrane review that was first published in 1995 and previously updated in 2006. This systematic review included a total of 32 RCTs, involving 2,762 individuals. For people with mixed symptom patterns (acute LBP, subacute LBP, and CLBP 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 compared with placebo, sham traction, or no treatment. When comparing the combination of physiotherapy plus traction with physiotherapy alone or when comparing traction with other treatments, there was very low- to moderate-quality evidence that traction may make little or no difference in pain intensity, functional status, or global improvement. 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. No studies reported the effect of traction on return to work. For CLBP without sciatica, there was moderate-quality evidence that traction makes any difference in pain intensity 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, which included increased pain, aggravation of neurological signs, and subsequent surgery. Four studies reported that there were no adverse effects. The remaining studies did not mention adverse effects. 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, and return to work among people with LBP. The authors stated that the use of traction as treatment for nonspecific LBP is not supported by the best-available evidence. Traction is no better than standard interventions for (acute, subacute, and chronic) LBP. They also noted that few individuals were identified for any of the principal outcome measurements and, as a result, none of the findings should be considered robust. These conclusions are applicable to both manual and mechanical traction. Further research, with RCTs, is needed to validate these findings.

Schimmel et al. (2009) conducted an RCT in 60 participants to evaluate the efficacy of Intervertebral Differential Dynamics Therapy® (IDD) in LBP vs sham therapy. Both groups received 20 sessions in the Accu-SPINA device. The IDD group received traction weight that was systematically increased until 50% of a person's body weight plus 4.45 kg (10 lb) was reached. The SHAM group received a nontherapeutic traction weight of 4.45 kg in all sessions. The outcomes were measured using the VAS, ODI, and SF-36 two, 6, and 14 weeks after the initiation of treatment. The VAS improved from 61 (±25) to 32 (±27) in the IDD group and from 53 (±26) to 36 (±27) in the SHAM group. Leg pain, ODI scores, and SF-36 scores improved in both groups. The authors found no difference between the IDD Therapy and the SHAM therapy; however, participants in both groups reported a decrease in low back and leg pain and an increase in functional status and QOL.

An RCT by Unlu et al. (2008) compared the use of motorized traction, ultrasound, and low-power laser therapies in 60 participants (equally distributed) with acute leg pain and LBP caused by lumbar disc herniation. Treatment consisted of 15 sessions over a 3-week period. All participants had pre- and posttreatment MRI. Additional outcomes measurements included a physical examination of the lumbar spine, the VAS, the Roland-Morris Disability Questionnaire, and the Modified Oswestry Disability Questionnaire to evaluate functional disability at baseline, after each session, and at 1 and 3 months after treatment. The authors reported similar improvement across treatment conditions for the outcomes measured (pain intensity and functional disability) at the end of the 3-week treatment period and at the 1- and 3-month follow-up assessments. Additionally, there were similar reductions in disc herniation on posttreatment MRI evaluations. The authors concluded that all the modalities were effective in the treatment of these participants with acute lumbar disc herniation. The study is limited by the lack of a comparison group that did not receive treatment for similar concerns and a small sample size.

Beattie et al. (2008) conducted a prospective case series study in 296 participants to examine outcomes after administration of a prone lumbar traction protocol using the VAX-D system. All participants had LBP with evidence of a degenerative and/or herniated intervertebral disc at one or more levels of the lumbar spine. Participants involved in litigation and/or those receiving workers' compensation were excluded. Participants underwent an 8-week course of prone lumbar traction, which consisted of five 30-minute sessions a week for 4 weeks, followed by one 30-minute session a week for 4 additional weeks. The numeric pain rating scale and the Roland-Morris Disability Questionnaire were completed prior to the intervention, discharge (within 2 weeks of the last visit), and at 30 days and 180 days after discharge. Intention-to-treat strategies were used to account for those participants who were lost to follow-up. A total of 250 participants (84.4%) completed the treatment protocol, with 247 participants (83.4%) available at the 30-day follow-up and 241 participants (81.4%) available at the 180-day follow-up. The researchers noted significant improvements for all postintervention outcome scores compared with preintervention scores ($p < 0.01$). The authors concluded that causal

relationships between the outcomes and the intervention cannot be made until further study is performed using randomized comparison groups.

Macario et al. (2006) completed a systematic review of the literature to assess the efficacy of NSD achieved with motorized traction for chronic discogenic lumbosacral back pain. The authors found that the efficacy of spinal decompression achieved with motorized traction for chronic discogenic LBP remains unproven. This may be, in part, due to heterogeneous groups of individuals and the difficulties involved in properly blinding individuals to the mechanical pulling mechanism. Randomized, double-blinded trials are needed to measure the efficacy of such systems.

Hayes (2003; updated 2008) completed a Health Technology Assessment on mechanized spinal distraction therapy for the treatment of LBP. The evidence evaluated for this report was obtained from a search of available peer-reviewed literature spanning the years of 1993 to 2003. Due to a paucity of evidence, studies that evaluated the effect of VAX-D therapy or the Decompression Reduction Stabilization (DRS®) System therapy on clinical outcomes in individuals with LBP were reviewed. The reviewed studies included individuals with LBP due to disc protrusion, disc herniation, degenerative disc disease, facet syndrome, sciatica, or radiculopathy. Pain reduction was the primary outcome measure in the reviewed studies. One study also assessed the effects of VAX-D therapy on spinal mobility and the individuals' ability to perform activities of daily living. These studies included a randomized controlled study that compared VAX-D therapy with transcutaneous electrical nerve stimulation (TENS), a retrospective chart review, and an uncontrolled study. No randomized studies were found that compared VAX-D therapy with sham intervention or any standard treatment for LBP. Hayes concluded that although data from two small RCTs suggest that mechanized controlled axial spinal distraction can reduce LBP in some individuals, serious methodological flaws limit the credibility of the study results. There is insufficient evidence of good quality to draw definitive conclusions regarding the safety and efficacy of this therapy, performed either with the VAX-D or DRS device. Therefore, a Hayes rating of D has been assigned for mechanized spinal distraction therapy in individuals with LBP due to disc protrusion, disc herniation, degenerative disc disease, facet syndrome, sciatica, or radiculopathy. Additionally, a Hayes rating of D has been assigned for mechanized spinal distraction therapy in pregnant women and individuals with osseous stenosis, unstable spine, spinal surgical implants, inflammatory disease, vertebral fractures, severe osteoporosis, cauda equina syndrome, or unstable spondylolisthesis. This rating is based on concerns regarding the safety of spinal distraction therapy in these individuals. Annual reviews were performed yearly, with the last conducted in 2008. At that time, Hayes concluded that there were no changes in efficacy, selection criteria for individuals, safety, or long-term follow-up. Additionally, there was no anticipated impact or change in the Hayes rating(s) from the 2003 Directory Report.

Neck

Published clinical evidence for treating neck pain with vertebral axial decompression or other types of motorized traction is limited by poor study design and short follow up. Well-designed RCTs are needed to determine the efficacy of vertebral axial decompression for this indication.

A systematic review with meta-analysis was completed by Colombo et al. (2020) to investigate the effectiveness of traction therapy in reducing pain in individuals with cervical radicular syndrome. Two reviewers independently selected RCTs that compared the effectiveness of traction in addition to other treatments with that of other treatments alone for pain outcome. The authors calculated the mean differences and 95% CIs. They used the Cochrane tool to assess risk of bias and the GRADE (Grading of Recommendations Assessment, Development and Evaluation) system to evaluate the quality of evidence and summarize the study. A total of seven studies (589 individuals), one with a low risk of bias, were evaluated. An overall estimate of treatment modalities showed low evidence that adding traction to other treatments is statistically significant (mean difference, -5.93; 95% CI, -11.81 to -0.04; p = 0.05; I2 = 57%) compared with other treatments alone. The subgroup analyses were noteworthy only for mechanical and continuous modalities. The authors concluded that the overall analysis showed that compared with controls, reduction in pain intensity after traction therapy was achieved in individuals with cervical radiculopathy. However, the quality of evidence was generally low, and none of these effects were clinically meaningful. This systematic review with meta-analysis has several imitations. The authors did not investigate other functional outcomes (e.g., abilities of daily living) or adverse events. To obtain a broader view of different traction techniques, the authors included a wide variety of control groups, which may have reduced the accuracy of comparisons. The available evidence is limited, with overall poor-quality methodology and design. Therefore, no conclusions can be made regarding the relative efficacy, effectiveness, or safety of treatment. Future RCTs should investigate other interventions for cervical radicular syndrome; apply homogeneous and universally accepted inclusion criteria and clinical examinations; focus on individuals with acute symptoms; and adopt explicit methods to minimize selection, performance, and detection bias.

Clinical Practice Guidelines

American College of Physicians (ACP)

In an updated clinical practice guideline on noninvasive treatments for LBP, the ACP (Qaseem et al., 2017) states that evidence is insufficient to determine the effectiveness of several therapies, including traction, for acute LBP, subacute LBP, or CLBP. Low-quality evidence shows no clear differences between traction and other active treatments, between traction with physiotherapy vs physiotherapy alone, or between different types of traction in patients with LBP with or without radiculopathy.

North American Spine Society (NASS)

The NASS evidence-based guideline (Kriener et al., 2020; updated 2021) on the diagnosis and treatment of LBP considers the evidence to be insufficient to recommend the use of traction in patients with subacute LBP or CLBP.

The NASS evidence-based guideline (Kriener et al., 2011) on the diagnosis and treatment of degenerative lumbar spinal stenosis considers the evidence to be insufficient to recommend the use of any type of traction in the treatment of lumbar disc herniation with radiculopathy and lumbar spinal stenosis.

The NASS evidence-based guideline (Bono et al., 2011) on the diagnosis and treatment of cervical radiculopathy from degenerative disorders recommends that future outcome studies in patients in this population who are treated only with ancillary treatments (such as traction) should include subgroup analysis.

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.

Powered traction equipment is regulated by the FDA, but products are too numerous to list. Refer to the following website for more information (product code ITH): http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfPMN/pmn.cfm. (Accessed January 29, 2026)

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Policy History/Revision Information

Date	Summary of Changes
05/01/2026	**Supporting Information** • Updated *Clinical Evidence* and *References* sections to reflect the most current information • Archived previous policy version CS080.P

Instructions for Use

This Medical Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the federal, state, or contractual requirements for benefit plan coverage must be referenced as the terms of the federal, state, or contractual requirements for benefit plan coverage may differ from the standard benefit plan. In the event of a conflict, the federal, state, or contractual requirements for benefit plan coverage govern. Before using this policy, check the federal, state, or contractual requirements for benefit plan coverage. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Policy is provided for informational purposes. It does not constitute medical advice.

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