Policy Number	**THE803.008**
Policy Effective Date	**08/15/2024**
Policy End Date	**12/31/2025**

Non-Covered Physical Therapy Services

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Related Policies (if applicable)
SUR702.005: Acupuncture for Pain Management, Nausea and Vomiting and Opioid Dependence
THE801.039: Stationary Ultrasonic Diathermy Devices

Disclaimer

Carefully check state regulations and/or the member contract.
Each benefit plan, summary plan description or contract defines which services are covered, which services are excluded, and which services are subject to dollar caps or other limitations, conditions or exclusions. Members and their providers have the responsibility for consulting the member's benefit plan, summary plan description or contract to determine if there are any exclusions or other benefit limitations applicable to this service or supply. **If there is a discrepancy between a Medical Policy and a member's benefit plan, summary plan description or contract, the benefit plan, summary plan description or contract will govern.**

Legislative Mandates

EXCEPTION: For Illinois only: Illinois Public Act 103-0458 [Insurance Code 215 ILCS 5/356z.61] (HB3809 Impaired Children) states all group or individual fully insured PPO, HMO, POS plans amended, delivered, issued, or renewed on or after January 1, 2025 shall provide coverage for therapy, diagnostic testing, and equipment necessary to increase quality of life for children who have been clinically or genetically diagnosed with any disease, syndrome, or disorder that includes low tone neuromuscular impairment, neurological impairment, or cognitive impairment.

Coverage

This medical policy has become inactive as of the end date above. See medical policy THE803.010 Physical Therapy (PT) and Occupational Therapy (OT) Services for dates of service 01/01/2026 and after.

Certain physical therapy modalities **are considered not medically necessary** as they have not been proven to be effective and/or safe for the treatment of disease or injury or are provided

primarily for the convenience of the member, the caregiver or the provider. These include but are not limited to:

- Physical therapy services that do not require the skills of a qualified provider of physical therapy services, as well as services that are considered to be a maintenance program;
- Kinesiology;
- Percussion hammer;
- Spray and Stretch technique for myofascial pain, including but not limited to Fluori-Methane and vapor coolant;
- Fluidotherapy (examples include but are not limited to Fluido DHT®, FLU110D®);
- Methods of mechanical massage and spinal mobilization of soft tissue (examples include but are not limited to Anatomotor™);
- Craniosacral therapy;
- Special exercise equipment including rental and/or purchase of such equipment (examples include but are not limited to gyrotonic machines and ROMTech PortableConnect devices) (check member's contract carefully for possible exclusion).

Rental and/or purchase of hydrocollators **is considered not medically necessary** as they are considered a convenience item when used at home.

Hydrotherapy bed treatment **is considered not medically necessary**.

Duplicate therapy **is considered not medically necessary**. When patients receive both physical and occupational therapy, the therapies should provide different treatments and not duplicate the same treatment. They must also have separate treatment plans and goals.

All of the following physical therapy modalities **are considered experimental, investigational and/or unproven**:

- Cupping;
- Diathermy heat treatments for pulmonary conditions;
- Electromagnetic therapy (e.g., Diapulse®);
- Home use of diathermy devices (e.g., Magnatherm®), including, but not limited to:
  - Radiofrequency diathermy;
  - High-frequency diathermy;
  - Short wave diathermy;
  - Microwave diathermy;
- Kinesio taping;
- Neurostructural integration technique;
- The Pettibon System, including but not limited to the Wobble Chair and the Pettibon Repetitive Cervical Traction.

NOTE: See medical policy SUR702.018 for information regarding dry needling, including dry needling of myofascial trigger points.

Policy Guidelines

None.

Description

Physical therapy services include therapeutic interventions tailored to the specific needs of the patient. Such interventions include therapeutic exercise programs to increase strength and endurance, as well as application of various other modalities including, but not limited to, heat, cold, electrical stimulation, ultrasound, hydrotherapy, and massage or mobilization techniques. These services must be rendered under a written plan of care established by a physician or other qualified non-physician practitioner (e.g., physician assistant), and must be performed by a licensed physical therapist, or by assistive personnel under the supervision of a licensed physical therapist; if performed by assistive personnel, such services shall not exceed his or her education, training and/or licensure. To be considered medically necessary, these modalities must also be proven and accepted as effective and/or safe for the treatment of disease or injury.

Various types of treatment that do not generally require the skills of a licensed physical therapist include, but are not limited to:

- Passive range of motion (ROM) treatment, which is not related to restoration of a specific loss of function;
- Any of the following treatments when given alone or to a patient who presents no complications of disease, illness, or injury: hot packs, hydrocollator, infrared heat, whirlpool baths, paraffin baths, Hubbard tank, contrast baths.

A maintenance program consists of activities that preserve the patient's present level of function and prevent regression of that function. Maintenance begins when:

- Therapeutic goals of the treatment plan have been achieved, and/or when no additional functional progress is apparent or expected to occur; and/or
- Maximum medical improvement has been achieved; and/or
- Therapy fails to provide durable, condition-specific corrective benefit; and/or
- Therapy is not reasonably expected to improve health status in a reasonable and predictable period of time; and/or
- Therapy is not primarily to support continuance of the improvement achieved; and/or
- Therapy is not primarily provided to prevent relapse.

Maintenance services typically do not require the services of a licensed physical therapist and include, but are not limited to:

- Repetitive exercise to improve gait, maintain strength and endurance, and assistive walking such as that provided in support for feeble or unstable patients;
- Range of motion and passive exercises that are not related to the restoration of a specific loss of function, but are useful in maintaining range of motion in paralyzed extremities;

- General exercise programs, even when recommended by a physical therapist.

Kinesiology does not diagnose or treat disease, but rather uses manual muscle testing (analysis which detects minor functional imbalances) to detect the root causes of illness and to assess ways to improve your health and well-being. Kinesiology uses massage, nutrition, and contact points to help with emotions and anxieties, specific personal dietary intake and supplements for nutritional deficiencies, structural imbalances, and energy blocks. Kinesiology is primarily preventive in that it is intended to balance the whole person, to enhance health and well-being, and to ward off disease. (5)

Percussion hammer is a device that gives deep muscle massage with vibration and percussion of as much as 3000 pulses per minute.

Spray and stretch technique involve passively stretching the target muscle while simultaneously applying Fluori-Methane or “vapor coolant” spray topically. Spray and Stretch is thought to produce temporary anesthesia by lowering skin temperature, thereby allowing the muscle to be passively stretched toward normal length; this is done to help activate trigger points, relieve muscle spasm, and reduce referred pain. (1)

Fluidotherapy is a form of dry, convective heating that uses pulverized organic materials that are suspended and circulated in a heated air stream.

Methods of mechanical massage and spinal mobilization of soft tissue are done using a specialized bench table that has roller-type cams beneath the surface. The rollers slowly travel the length of the spine, stretching spinal joints.

Cupping is a practice used in traditional medicine in several parts of the world, including China and the Middle East. It involves creating suction on the skin using a glass, ceramic, bamboo, or plastic cup. Negative pressure is created in the cup either by applying a flame to the cup to remove oxygen before placing it on the skin or by attaching a suction device to the cup after it is placed on the skin. In “wet cupping,” the skin is pierced, and blood flows into the cup. “Dry cupping” doesn’t involve piercing the skin. (2)

Diathermy is the controlled production of "deep heating" beneath the skin in the subcutaneous tissues, deep muscles, and joints for therapeutic purposes. There are basically two types of diathermy devices on the market today: radio or high frequency and microwave. Radio frequency (r.f.) diathermy is assigned an operating frequency of 27.12MHz (short wave) by the Federal Communications Commission. Older radio frequency units were assigned an operating frequency of 13.56MHz. Microwave diathermy is assigned 915MHz and 2450MHz as operating frequencies. (3)

Craniosacral therapy (CST) is a type of gentle manipulation and light-touch therapy involving the bones and soft tissues of the head, spine, and pelvis. Practitioners assert that CST reestablishes the normal flow of fluids, particularly cerebrospinal fluid, and thus restores

health; no significant clinical trials have tested these assertions. CST has been used to treat a variety of disorders, including pain, injuries, and fatigue, as well as to reduce tension and increase general well-being and health. (4)

Neurostructural integration therapy is a non-invasive type of soft tissue bodywork therapy that is used for a wide range of conditions from acute pain to chronic conditions. In theory, neurostructural integration therapy causes deep relaxation, allowing the musculature of the body to 'reorganize' itself via natural activation of various neural reflexes, which is thought to provide lasting relief from pain and dysfunction while increasing energy levels. (6)

A hydrocollator is a heating unit that provides a supply of temperature-consistent hot packs.

A hydrotherapy bed is a type of waterbed that has strategically located spa jets. The jets create water pulsation that heats and massages the patient's back when he is lying on the bed. This has been used as a substitute for hot packs and massage.

Gyrotonic machines are thought to increase range of motion and develop coordination by working major muscle groups interdependently and in an integrated manner. The Gyrotonic Pulley Tower Combination Unit was the first piece of Gyrotonic Equipment to be sold to the public. Since then, other equipment has been developed, including: the Jumping Stretching Board, the Archway, the Leg Extension Unit, and the GYROTONER®. Each piece of equipment has its own unique features, and functions, providing an extensive range of exercise options. These pieces of equipment are not part of a physical therapy program. (7)

The ROMTech PortableConnect devices are rehabilitative exercise therapy devices to increase range of motion. (8) The PortableConnect enables gentle, therapeutic movement within a comfortable range of motion through cycling, including a screen that allows remote clinical oversight (telemedicine) and fully customizable therapy protocols. (9)

Kinesio Tape (KT) is a specialized, thin, elastic tape that can be stretched up to 120%~140% of its original length, making it quite elastic compared with conventional taping. (10) Kinesio taping differs from conventional taping and/or strapping in that instead of providing support, the purpose of kinesio taping is to assist with partial to full range of motion by applying pulling forces to the skin over the targeted muscles. KT is air permeable and water resistant and can remain in place over several days.

The Pettibon System is described as follows. "In The Pettibon System exercises are performed to decrease hysteresis in these tissues using the Wobble Chair™ and the Pettibon Repetitive Cervical Traction™. From a clinical standpoint, the exercises are performed at the beginning of a patient visit prior to manipulative intervention. This reduces the overall resistance of the soft tissues to the manipulative force, thus allowing that force to assume a more corrective role. Once the manipulative techniques are administered, the patient then wears the Pettibon Weighting System while the soft tissue is less resistant. Therefore, in The Pettibon System, all of the components of the spine are corrected and rehabilitated as a unit, using rehabilitative

procedures designed to target each type of tissue specifically. Finally, another type of isometric exercise is used to rehabilitate normal spine alignment. Pettibon has slightly modified the performance of these exercises by creating the Linked Exercise Trainer™ on which they are performed...Areas of muscle imbalance can therefore be isolated and strengthened using the Linked Exercise Trainer, thus reinforcing corrective spinal changes." (11) One of the uses of the Pettibon System is to correct scoliosis.

Rationale

An updated PubMed search was conducted through June 2023 on kinesiology, percussion hammer, spray and stretch technique, fluidotherapy, mechanical massage and spinal mobilization, and craniosacral therapy. Based on this PubMed search, these modalities are not known to be safe and/or effective in improving health outcomes as determined by credible scientific evidence published in the peer-reviewed medical literature, and as such are not considered medically necessary. In addition, no clinical trials were found that would support the use of gyrotonic machines in the physical therapy setting, or to support the use of the Pettibon System, including the Wobble Chair and/or the Pettibon Repetitive Cervical Traction.

Diathermy

The application of deep heat using diathermy devices has inherent risks that make these devices inappropriate for unsupervised use at home. Diathermy devices are institutional equipment that must always be used by or under the supervision of a qualified provider of physical therapy services. The literature search conducted on diathermy, ultrasound and heat treatments for pulmonary conditions, electromagnetic therapy and/or pulsed short-wave therapy, and neurostructural integration therapy failed to provide significant scientific evidence or peer-reviewed medical literature that:

- Permits conclusions on the effect of these therapies;
- Demonstrates an improvement in net health outcome through use of these therapies;
- Demonstrates that any of these therapies are as beneficial as established alternatives.

Kinesio Taping

In 2008, Thelen et al. conducted a prospective, randomized, double-blinded, clinical trial using a repeated-measures design to determine the short-term clinical efficacy of kinesio tape (KT) when applied to college students with shoulder pain, as compared to a sham tape application. Forty-two subjects clinically diagnosed with rotator cuff tendonitis/impingement were randomly assigned to 1 of 2 groups: therapeutic KT group or sham KT group. Subjects wore the tape for 2 consecutive 3-day intervals. Self-reported pain and disability and pain-free active ranges of motion (ROM) were measured at multiple intervals to assess for differences between groups. The therapeutic KT group showed immediate improvement in pain-free shoulder abduction (mean +/- SD increase, 16.9 degrees +/- 23.2 degrees; P = .005) after tape application. No other differences between groups regarding ROM, pain, or disability scores at any time interval were found. The authors concluded that KT may be of some assistance to clinicians in improving pain-free active ROM immediately after tape application for patients

with shoulder pain. Utilization of KT for decreasing pain intensity or disability for young patients with suspected shoulder tendonitis/impingement is not supported. (12)

In 2009, González-Iglesias et al. reported a randomized clinical trial to determine the short-term effects of kinesio taping, applied to the cervical spine, on neck pain and cervical range of motion in individuals with acute whiplash-associated disorders (WADs). Forty-one patients (21 females) were randomly assigned to 1 of 2 groups: the experimental group received kinesio taping to the cervical spine (applied with tension) and the placebo group received a sham KT application (applied without tension). Both neck pain (11-point numerical pain rating scale) and cervical ROM data were collected at baseline, immediately after the KT application, and at a 24-hour follow-up by an assessor blinded to the treatment allocation of the patients. Mixed-model analyses of variance (ANOVAs) were used to examine the effects of the treatment on each outcome variable, with group as the between-subjects variable and time as the within-subjects variable. The primary analysis was the group-by-time interaction. The group-by-time interaction for the 2-by-3 mixed-model ANOVA was statistically significant for pain as the dependent variable ($F = 64.8$; $P<.001$), indicating that patients receiving kinesio taping experienced a greater decrease in pain immediately post-application and at the 24-hour follow-up (both, $P<.001$). The group-by-time interaction was also significant for all directions of cervical range of motion: flexion ($F = 50.8$; $P<.001$), extension ($F = 50.7$; $P<.001$), right ($F = 39.5$; $P<.001$) and left ($F = 3.8$, $P<.05$) lateral flexion and right ($F = 33.9$, $P<.001$) and left ($F = 39.5$, $P<.001$) rotation. Patients in the experimental group obtained a greater improvement in ROM than those in the control group (all, $P<.001$). The authors concluded that patients with acute WAD receiving an application of kinesio taping, applied with proper tension, exhibited statistically significant improvements immediately following application of the KT and at a 24-hour follow-up. However, the improvements in pain and cervical range of motion were small and may not be clinically meaningful. Future studies should investigate if KT provides enhanced outcomes when added to physical therapy interventions with proven efficacy or when applied over a longer period. (13)

In 2015 Leibbrandt and Louw published a review of available evidence for the effect of McConnell taping on knee biomechanics in individuals with anterior knee pain. (14) A search of PubMed, Medline, Cinahl, SPORTDiscus, PEDro and ScienceDirect electronic databases was completed to include literature published up to June 2014. Experimental research on knee biomechanical or electromyography outcomes of McConnell taping compared with no tape or placebo tape were included. Two reviewers completed the searches, selected the full text articles, and assessed the risk of bias of eligible studies. A total of 8 heterogeneous studies with a total sample of 220 were included in this review. Pooling of data was possible for 3 outcomes: average knee extensor moment, average vastus medialis oblique (VMO)/vastus lateralis (VL) ratio and average VMO-VL onset timing. None of these outcomes revealed significant differences. The authors concluded that the evidence is currently insufficient to justify routine use of the McConnell taping technique in the treatment of anterior knee pain. It was stated that there is a need for more evidence on the etiological pathways of anterior knee pain, level I evidence, and studies investigating other potential mechanisms of McConnell taping.

Giray et al. (2017) conducted a prospective, single blind RCT to investigate the effects of kinesiology taping and different types of application techniques of kinesiology taping in addition to therapeutic exercises in the treatment of congenital muscular torticollis. (15) Infants (aged 3-12 months) were randomized to one of three groups: Group 1 (exercise group), Group 2 (exercise + kinesiology taping applied on the affected side) and Group 3 (exercise+ kinesiology taping applied on both affected and unaffected sides). To ensure group concealment, randomization was done by using opaque, sealed envelopes (EKS) which the assessors (EG, BMK) were blinded to. Before attending the first therapy session, parents chose an envelope containing a message revealing which group the infant would be allocated. It was given to the physiotherapist and the interventions were started. The authors concluded that there was no additive effect of kinesiology taping to exercises for the treatment of congenital muscular torticollis.

In 2019 Rahlf et al. published a randomized sham-controlled trial to determine the effects of kinesio taping on pain, function, gait, and neuromuscular control concerning patients with knee osteoarthritis (OA). (16) A total of 141 patients (65.1 [7.0] y) with a clinical and radiographic diagnosis of knee OA were intervened with KT, sham tape, or no tape for 3 consecutive days. The main outcome measures included self-reported pain, stiffness, and function measured by the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC). Further tests included the Balance Error Scoring System, 10-m walk test, the maximum voluntary isometric contraction force of the quadriceps femoris, and knee active range of motion. The results at baseline demonstrated that there were no differences in all outcomes between groups except for knee flexion. Significant effects were found for WOMAC pain (tape vs sham, $P = .05$; tape vs control, $P = .047$), stiffness (tape vs sham, $P = .01$; tape vs control, $P \leq .001$), and physical function (tape vs sham, $P = .03$; tape vs control $P = .004$). No interactions were found for balance, muscle strength, walking speed, or active range of motion. The investigators concluded that wearing KT for 3 consecutive days had beneficial effects regarding self-reported clinical outcomes of pain, joint stiffness, and function. This emphasizes that kinesio taping might be an adequate conservative treatment for the symptoms of knee OA. Several limitations were discussed and include the lack of blinding of the investigators. The visible tape at the knee joint made a concealed data collection impossible. Furthermore, due to the painful progress of OA, the use of the maximum voluntary isometric contraction (MVIC) test was questionable. Patients are often unable to develop their full strength. Beside the application technique, this could indicate the lack of significant results in this study. The use of submaximal force test might be useful in future studies. In addition, difficult is the positioning of the sham–tape application. By the proximity to the knee joint, the influence of the tape is not excluded. However, a remote tape application from the knee joint makes the intervention not authentic. Future studies should focus on KT in comparison with other conservative treatment measures.

Heddon et al. (2021) analyzed the efficacy of elastic taping (ET) (e.g., K-tape) on pain in patients with knee OA by using the WOMAC score. (17) Following the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) standard for reporting systematic reviews of qualitative and quantitative evidence, the authors used 3 electronic databases, PubMed, Cochrane, and EBSCO, and grey literature was included. Amongst all the papers found, 6 RCT

for a total of 392 participants met the criteria and were included in the review. Three papers out of the 6 RCT had low risks of bias. When the ET was compared to sham taping, the results show no to moderate decreases of WOMAC scores in patients with primary knee OA. Limitations were that authors focused on a single index test (WOMAC) and could not perform a meta-analysis. Authors included that ET does not provide strong adverse outcomes; data do not support the use of ET as a treatment alone because of too slight reductions of the WOMAC score for reaching clinical efficiency. Thus, this systematic review shows no strong evidence regarding the use of elastic taping for pain improvement in patients with primary knee osteoarthritis.

Araya-Quintanilla et al. (2022) determined the effectiveness of KT with or without co-interventions for clinical outcomes in patients with subacromial impingement syndrome (SIS). (18) Ten trials for the quantitative analysis were included. Pain intensity, shoulder function, and shoulder flexion were evaluated. Authors concluded that kinesiotaping with or without co-interventions was not superior to other interventions for improving shoulder pain intensity, function, and ROM flexion in patients with SIS.

Craniosacral Therapy (CST)

Ernst (2012) reviewed randomized trials to evaluate the evidence of effectiveness of CST for any condition. (19) Six RCTs with 471 participants were included in the review. The largest with the best quality trial involved children with cerebral palsy, this trial found no benefit for motor function or a range of secondary outcomes. The author concluded that even though there were methodological and reporting weaknesses, this was a reflection of the limitations of the evidence. The review of randomized trials found insufficient evidence to support therapeutic effect of CST.

In 2020, Haller et al. investigated the effectiveness and safety of craniosacral therapy for chronic pain conditions. (20) Ten RCTs of 681 patients with neck and back pain, migraine, headache, fibromyalgia, epicondylitis, and pelvic girdle pain were included. CST showed small/moderate greater post intervention effects on pain intensity and disability compared to treatment as usual care, sham and active manual treatments. Effects were maintained through 6-months follow-up. The implications of the findings were viewed by the authors as preliminary due to the small number of studies included in the meta-analysis. Most individual analyses included only two studies with a median pooled sample of 138 (range 119-230) participants, which produced imprecise results across primary and secondary outcomes. It is likely that additional studies will change the estimates of effect. Confidence in the reported estimates of effect was also reduced due to the frequent unclear risk of bias profile of the included RCTs. Many RCTs did not report allocation concealment, blinding of outcome assessment, and alternative methods of decreasing the risk of performance bias. Additionally, the study does not allow for making conclusions about the effectiveness of CST for specific pain conditions. More RCTs strictly following consolidated standards of reporting trials (CONSORT) are needed to further corroborate the efficacy, comparative effectiveness, and safety of CST in patients with chronic pain conditions.

Haller et al. (2021) in a prospective cohort study, examined the use, benefits, and safety of CST in primary health care. (21) Consecutive out-patients utilizing CST from 2015 to 2019 were asked to provide anonymized data on symptom intensity, functional disability, and quality of life before and after treatment using an adapted 11-point numerical rating scale (NRS) version of the Measure Yourself Medical Outcome Profile (MYMOP). CST therapists submitted 220 patient records (71.4% female) including 15.5% infants and toddlers, 7.7% children, and 76.8% adolescents and adults. Patients received on average 7.0 ±7.3 CST sessions to treat 114 different, acute and chronic conditions. Symptom intensity decreased by -4.38 NRS (95 %CI = -4.69/-4.07), disability by -4.41 NRS (95 %CI = -4.78/-4.05), and quality of life improved by 2.94 NRS (95 %CI = 2.62/3.27). Furthermore, CST enhanced personal resources by 3.10 NRS (95 %CI = 1.99/4.21). Independent positive predictors of change in the adapted total MYMOP score included patients' expectations ($p = .001$) and therapists' CST experience ($p = .013$), negative predictors were symptom duration ($p < .002$) and patient age ($p = .021$); a final categorical predictor was CST type ($p = .023$). Minor but no serious adverse events occurred. The authors concluded that the utilization of CST may provide a promising additional treatment option for primary care patients who are interested in complementary therapies to treat a wide range of physical and mental symptoms in all age groups from infants to older adults. Further trials using randomized controlled designs are needed to confirm the exploratory study results in different patient populations.

Castejón-Castejón et al. (2022) conducted a randomized controlled trial (RCT) to evaluate the number of craniosacral therapy sessions that can be helpful to obtain a resolution of the symptoms of infantile colic. (22) Researchers also sought to observe if there are any differences in the evolution obtained by the groups that received a different number of Craniosacral Therapy sessions at 24 days of treatment, compared with the control group which did not receive any treatment. A total of 58 infants with colic were randomized into two groups of which 29 babies in the control group received no treatment, and those in the experimental group received 1-3 sessions of craniosacral therapy (CST) until symptoms were resolved. Evaluations were performed until day 24 of the study. In this RCT, crying hours served as primary outcome. The secondary outcome were the hours of sleep and the severity, measured by an Infantile Colic Severity Questionnaire (ICSQ). Differences were observed in favor of experimental group compared to the control group on day 24 in crying hours (mean difference = 2.94, at 95 %CI = 2.30-3.58; $p < 0.001$) primary outcome, and also in hours of sleep (mean difference = 2.80; at 95 %CI = - 3.85 to - 1.73; $p < 0.001$) and colic severity (mean difference = 17.24; at 95 %CI = 14.42-20.05; $p < 0.001$) secondary outcomes. Also, the differences between the groups ≤ 2 CST sessions (n = 19), 3 CST sessions (n = 10) and control (n = 25) were statistically noteworthy on day 24 of the treatment for crying, sleep, and colic severity outcomes ($p < 0.001$). The authors concluded that babies with infantile colic may obtain a complete resolution of symptoms on day 24 by receiving 2 or 3 CST sessions compared to the control group, which did not receive any treatment. This RCT is a small, unblinded study. Further investigation is needed before clinical usefulness of this procedure is proven.

<u>Cupping</u>

Yuan et al. (2015) published a systematic review and meta-analysis to review and analyze the existing data about pain and disability in traditional Chinese medicine (TCM) treatments for neck pain (NP) and low back pain (LBP). (23) Studies were identified by a comprehensive search of databases, such as MEDLINE, EMBASE, and Cochrane Library, up to September 1, 2013. Seventy-five RCTs (n = 11077) were included. Almost all the studies investigated individuals experiencing chronic NP (CNP) or chronic LBP (CLBP). The investigators found moderate evidence that acupuncture was more effective than sham-acupuncture in reducing pain immediately post-treatment for CNP (visual analogue scale (VAS) 10 cm, mean difference (MD) = -0.58 (-0.94, -0.22), 95% confidence interval, p = 0.01), CLBP (standardized mean difference = -0.47 (-0.77, -0.17), p = 0.003), and acute LBP (VAS 10 cm, MD = -0.99 (-1.24, -0.73), p< 0.001). Cupping could be more effective than waitlist in VAS (100 mm) (MD = -19.10 (-27.61, -10.58), p < 0. 001) for CNP or medications (e.g., NSAID) for CLBP (MD = -5.4 (-8.9, -0.19), p = 0.003). No serious or life-threatening adverse effects were found. The investigators concluded that acupuncture, acupressure, and cupping could be efficacious in treating the pain and disability associated with CNP or CLBP in the immediate term. The investigators noted several limitations, first they found that the number of studies was small. Thus, further studies in these areas are warranted. Second, the strength of the evidence was low or moderate rather than high, which means that the results may change through further research. Third, the analysis was limited to studies published in English and Chinese when numerous studies had been carried out in various countries. Although there were usually larger sample sizes in Chinese studies compared with English studies, there were definite flaws in the designs of Chinese studies and higher risks of bias, such as a lack of allocation concealment. The clinical heterogeneities of some of the meta-analyses might limit the translations of results. However, these heterogeneities were inevitable because the selections of acupoints should be individualized and disease-specific according to TCM theory, but the meridians of these points were homogeneous in some extent. Second, the heterogeneities might be due to different population, such as the wide range of ages (17–90 years) and different peoples from different countries. Third, the underlying differential TCM-diagnoses in patients suffering from NP or LBP might be responsible for the heterogeneity to some extent. Lastly, the variances of treatments methods in different trials might also contribute to the heterogeneity, such as the numbers of treatment sessions or durations, and the frequencies or intervals of treatments. For these reasons, a standardized treatment for each group of a sub-diagnosis is needed to gain a higher homogeneity for future studies.

Wang et al. (2017) published a meta-analysis based on existing RCTs to assess the effects and safety of cupping for the patients with LBP. (24) Pubmed, Cochrane Library databases, and Embase database were electronically researched. RCTs reporting the cupping for the patients with LBP were included. The meta-analysis was conducted using Review Manager software (version 5.3, Nordic Cochrane Centre). The primary outcome was VAS scores. The secondary outcomes included ODI (Oswesty pain disability index) scores, McGill present pain index (MPPI) scores and complications. Six RCTs were included in this synthesized analysis. The results showed that cupping therapy was superior to the control management with respect to VAS scores (SMD: -0.73, [95% CI: -1.42 to -0.04]; P= 0.04), and ODI scores (SMD: -3.64, [95% CI: -5.85 to -1.42]; P= 0.001). There was no statistically significant difference as regard to MPPI scores.

No serious adverse event was reported in the included studies. The investigators concluded that cupping therapy can significantly decrease the VAS scores and ODI scores for patients with LBP compared to the control management. High heterogeneity and risk of bias existing in studies limit the authenticity of the findings. The findings need to be further confirmed by sub-group analysis based on different types of cupping and control management, and meta-regression to find the source of high heterogeneity based on more well-designed and high-quality RCTs. There also exist some limitations in this meta-analysis. Firstly, many types of cupping therapy and different control managements were included in cupping groups and control groups respectively, and it is difficult to conduct subgroup analysis or Meta regression due to the lack of enough trials. Secondly, the frequency of cupping, duration of each session, location of acupoints, experience of manipulators in each trial were different. These factors might strongly influence the clinical effects of cupping. Thirdly, the included Chinese RCTs showed low-scoring of Jadad scores, and the included English RCTs showed fair-scoring of Jadad scores. The qualities of original trials may potentially impact results of each trial and meta-analysis. Additionally, they did not test the publication bias due to the limitation of number of RCTs.

Ma et al. (2018) conducted a systematic review and meta-analysis to assess the effectiveness of cupping for the management of ankylosing spondylitis (AS). (25) A total of 5 RCTs met the inclusion criteria, and most were of low methodological quality. Studies were included if cupping therapy was used as the sole intervention or as an adjunct therapy in conjunction with Western medicine therapy and patients were diagnosed with AS using definitive modified New York criteria. The primary outcome was the functional condition measured by recognized scales including the Bath Ankylosing Spondylitis Functional Index (BASFI). Other outcomes were disease activity as measured on the Bath Ankylosing Disease Activity Index (BADAI), and serum levels of erythrocyte sedimentation rate (ESR) and C reactive protein (CRP). Four studies (n=294) showed cupping plus Western medicine had a significantly better response rate than Western medicine alone ($p<0.001$). Three RCTs (n=242) showed significantly better BASFI ($p<0.001$), BASDAI ($p<0.01$), ESR ($p<0.01$), and CRP ($p<0.01$) outcomes with Western medicine plus cupping. Limitations of the analysis include the limited number of studies with small patient populations, high risk of bias, and lack of blinding to the intervention. The authors noted that caution must be taken when attempting to generalize the results of this systematic review due to the low quality of the studies and that the power of the analysis based on small sample size effects may be exaggerated. Most of included RCTs were conducted on Chinese populations making it difficult to apply the result to the general population.

Summary of Evidence
The search of peer reviewed literature identified no new clinical trial publications or any additional information that would change the coverage position of any of the non-covered physical therapy indications addressed on this medical policy.

Practice Guidelines and Position Statements
European Association of Urology (EAU)

The EAU's guidelines updated April 2014 on chronic pelvic pain stated that "There are insufficient data on the effectiveness of myofascial physical therapy for the treatment of PPS" (prostate pain syndrome)". (26)

American College of Occupational and Environmental Medicine (ACOEM)
In 2020, the ACOEM published guidelines for non-invasive and minimally invasive management of low back disorders. These guidelines do not recommend kinesio taping (KT) and taping (including KT tape and Rocktape) for the treatment of spine conditions. (27)

National Center for Complementary and Integrative Health (NCCIH) - U.S. Department of Health and Human Services - National Institutes of Health
The NCCIH states the following regarding cupping: "There's been some research on cupping, but most of it is of low quality. Cupping may help reduce pain, but the evidence for this isn't very strong. There's not enough high-quality research to allow conclusions to be reached about whether cupping is helpful for other conditions." (2)

Coding

Procedure codes on Medical Policy documents are included **only** as a general reference tool for each policy. **They may not be all-inclusive.**

The presence or absence of procedure, service, supply, or device codes in a Medical Policy document has no relevance for determination of benefit coverage for members or reimbursement for providers. **Only the written coverage position in a Medical Policy should be used for such determinations.**

Benefit coverage determinations based on written Medical Policy coverage positions must include review of the member's benefit contract or Summary Plan Description (SPD) for defined coverage vs. non-coverage, benefit exclusions, and benefit limitations such as dollar or duration caps.

CPT Codes	97016, 97024, 97026, 97034, 97035, 97039, 97139, 97140, 97799
HCPCS Codes	A9900, E0225, E0239, E1399, G0295, G0329

*Current Procedural Terminology (CPT®) ©2023 American Medical Association: Chicago, IL.

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Centers for Medicare and Medicaid Services (CMS)

The information contained in this section is for informational purposes only. HCSC makes no representation as to the accuracy of this information. It is not to be used for claims adjudication for HCSC Plans.

The Centers for Medicare and Medicaid Services (CMS) does have a national Medicare coverage position. Coverage may be subject to local carrier discretion.

A national coverage position for Medicare may have been changed since this medical policy document was written. See Medicare's National Coverage at <http://www.cms.hhs.gov>.

Policy History/Revision

Date	Description of Change
12/31/2025	Document became inactive.
08/15/2024	Reviewed. No changes.
09/15/2023	Document updated with literature review. The following change was made to Coverage: Ultrasound diathermy considered experimental, investigational and/or unproven was moved to medical policy THE801.039. References 3, 17-18, 21-22, and 25 were added and others updated.
03/15/2023	Reviewed. No changes.

01/15/2022	Document updated with literature review. The following change was made to Coverage: The ROMTech PortableConnect device was added to the not medically necessary coverage statement as it has not been proven to be effective and/or safe for the treatment of disease or injury or are provided primarily for the convenience of the member, the caregiver, or the provider. References 8 and 9 were added and others updated.
03/15/2021	Document updated with literature review. The following change was made to Coverage: Cupping was added as experimental, investigational and unproven. References 2, 14, 16-18, and 20-21 were added, some references removed, and others updated.
05/01/2019	Document updated with literature review. Coverage unchanged. References 3 and 13-17 were added and some references were removed.
07/15/2017	Reviewed. No changes.
08/01/2016	Document updated with literature review. The following statement was removed from the experimental, investigational and/or unproven indications: "Low level laser therapy (LLLT) for any use, including but not limited to treatment for carpal tunnel syndrome and/or treatment for cessation of smoking. LLLT is also known by many other names including, but not limited to therapeutic laser, low-power laser, low-energy laser, biostimulating laser, photobiostimulating laser, laser phototherapy, cold laser (examples include, but are not limited to: Helium Neon Laser®, HairMax Laser Comb®, THOR DD2 Laser System®, MicroLight 830®." Low level laser will now be addressed in a new medical policy MED201.045. In addition the following NOTE was added to the coverage section: "NOTE: See medical policy SUR702.005 – "Acupuncture" for information regarding dry needling, including dry needling of myofascial trigger points."
04/01/2015	Reviewed. No changes.
04/01/2014	Document updated with literature review. Coverage changed as follows: 1) The following was added as not medically necessary: Special exercise equipment, including but not limited to gyrotonic machines, and including rental and/or purchase of such equipment (check member's contract carefully for possible exclusion). 2) The not medically necessary statement regarding hydrocollators was revised to clarify "rental and/or purchase" and the following was added: (NOTE: Application of heat packs in the Physical Therapy setting may be considered medically necessary when criteria for Physical Therapy are met (as outlined in medical policy THE803.010). 3) The following was added to the list of experimental, investigational and/or unproven: a) Kinesio Taping; b) The Pettibon System, including but not limited to the Wobble Chair and the Pettibon Repetitive Cervical Traction.
09/15/2008	Coverage revised, the following was added as experimental, investigational and unproven: 1) Electromagnetic therapy (e.g., Diapulse®); 2) Home use of diathermy devices (e.g., Magnatherm®), including, but not limited to: a)

	Radiofrequency diathermy, b) High frequency diathermy, c) Short wave diathermy, d) Ultrasound diathermy, e) Microwave diathermy.
12/15/2007	Revised/Updated Entire Document.
09/01/2005	Revised/Updated Entire Document
05/01/1996	New Medical Document