



Keystone First
Family of Health Plans

Acupuncture

Clinical Policy ID: CCP.1155

Recent review date: 5/2025

Next review date: 9/2026

Policy contains: Chronic migraine; knee osteoarthritis; low back pain; nausea and vomiting; temporomandibular disorders.

Keystone First VIP Choice has developed clinical policies to assist with making coverage determinations. Keystone First VIP Choice's clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by Keystone First VIP Choice, on a case by case basis, when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. Keystone First VIP Choice's clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. Keystone First VIP Choice's clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, Keystone First VIP Choice will update its clinical policies as necessary. Keystone First VIP Choice's clinical policies are not guarantees of payment.

Coverage policy

Acupuncture is clinically proven and, therefore, may be medically necessary when performed by a qualified practitioner who is appropriately trained and licensed in acupuncture and when all of the following criteria are met:

- As adjunctive treatment when standard treatment inadequately controls symptoms, is not tolerated, or is refused.
- For members age 18 years or older, one of the following medical conditions:
 - Chemotherapy-induced or postoperative nausea and vomiting (Gan, 2020; National Comprehensive Cancer Network, 2024b).
 - Acute, subacute, or chronic (lasting more than three months) non-specific lower back pain (Qaseem, 2017).
 - Chronic migraine (Linde, 2016b).
 - Chronic pain caused by osteoarthritis of the knee (American College of Rheumatology [Kolasinski, 2020]; American Academy of Orthopaedic Surgeons, 2021).
 - Temporomandibular disorders (Busse, 2023; Fernandes, 2017; Gil-Martínez, 2018).

- Chronic pain from cancer or cancer-related treatment (Mao, 2022; National Comprehensive Cancer Network, 2024a).
- For members age seven to 17 (Brittner, 2016; National Institute for Health and Care Excellence, 2021):
 - Headache.
 - Migraine.
- For members age one and older (Lee, 2015):
 - Postoperative pain.
 - Postoperative nausea and vomiting.

Limitations

All other uses of acupuncture are investigational/not clinically proven and, therefore, not medically necessary.

Treatment beyond five visits without meaningful improvement in symptoms requires review by a medical director.

Maintenance treatment, when the member's symptoms are neither regressing nor improving, is not medically necessary.

Children should not be treated with acupuncture for nausea and vomiting while under anesthesia.

Alternative covered services

Standard medical management of chronic pain syndromes or nausea and vomiting due to chemotherapy or anesthesia.

Background

Acupuncture is one of the practices of traditional Chinese medicine, which considers energy known as “qi” to flow throughout the body along patterns known as meridians (National Center for Complementary and Integrative Health, 2022). Disturbances in the flow of qi are believed to result in disease. Acupuncture is based on the theory that stimulating specific points on the body corrects imbalances in the flow of qi, thereby improving health. The approach has four components:

- Acupuncture needle(s).
- Target location mapped by traditional Chinese medicine.
- Depth of needle insertion.
- Stimulation of the inserted needle.

Traditional acupuncture uses thin needles, but it may also apply manual pressure, electrical stimulation, magnets, low-power lasers, heat, and ultrasound. The U.S. Food and Drug Administration regulates acupuncture needles as Class II medical devices with special controls. Acupuncture needles must be labeled for single use only, biocompatible and sterile, and administered by qualified practitioners only (21 CFR 880.5580).

The professional credentials of an acupuncture practitioner can range from none to licensed medical doctor. Licensure laws and scope-of-practice guidelines regulating acupuncture practitioners vary by state. Currently, 22 states require the passage of National Certification Commission for Acupuncture and Oriental Medicine examinations, and 26 states and the District of Columbia specify National Certification Commission for Acupuncture and Oriental Medicine certification as a prerequisite for licensure (National Certification Commission for Acupuncture and Oriental Medicine, undated). Board certification in medical acupuncture is granted by the American Board of Medical Acupuncture (2022).

Findings

Given the substantial volume of literature on acupuncture, AmeriHealth Caritas considered only the most comprehensive evidence published in the last ten years.

Guidelines

Guidelines view acupuncture as a safe, noninvasive, adjunctive treatment that may improve symptoms, most notably pain, yet the recommendations often conflict, reflecting the inherent uncertainty in the supportive evidence. In a review of guideline recommendations, acupuncture was most frequently recommended for musculoskeletal and connective tissue diseases, neurological disorders, and obstetrics/gynecology/women's health (Zhang, 2022). Some notable guidelines include the following.

- In patients with low back pain, there is general agreement that acupuncture may be effective and possibly cost effective as adjunctive treatment for chronic low back pain; there is conflicting and insufficient evidence to determine either the relative effectiveness of acupuncture to improve pain and function compared to sham or the superiority of different acupuncture modalities (Department of Veterans Affairs/Department of Defense, 2022; Qaseem, 2017). For acute (< four weeks) or subacute (four to 12 weeks) low back pain, two guidelines provide conflicting recommendations, recognizing the low quality of the evidence (Department of Veterans Affairs/Department of Defense, 2022; Qaseem, 2017).
- The National Institute for Health and Care Excellence (2020, 2022a, 2022b) does not recommend acupuncture for:
 - Eating disorders.
 - Osteoarthritis.
 - Depression in adults.
- For chronic tension-type headaches in youth over 12 years old, the National Institute for Health and Care Excellence (2021) suggests considering up to 10 sessions of acupuncture over five to eight weeks.
- The American College of Rheumatology issued conditional recommendations for acupuncture for osteoarthritis of the hand, hip, or knee based on an assessment of greater potential benefit outweighing the minimal harms of treatment, acknowledging that the greatest number of positive trials with the largest effect sizes have been carried out in knee osteoarthritis (Kolasinski, 2020). The American Academy of Orthopaedic Surgeons (2021) issued a downgraded, limited strength of recommendation for acupuncture to improve pain and function in patients with knee osteoarthritis based on inconsistent evidence and a lack of internal consistency with recommendations of equal supporting evidence.

In an international consensus guideline developed under the auspices of the American Society of Enhanced Recovery and Society for Ambulatory Anesthesia (Gan, 2020), while pericardium 6 stimulation has been shown to reduce the risk of early post-operative nausea and vomiting and the need for rescue antiemetics in adults, there is insufficient evidence of a benefit in children or in patients with late vomiting. Its added value as part of multimodal treatment is unclear. The findings were based on a Cochrane review (Lee, 2015) suggesting that pericardium 6 acupoint stimulation is worthwhile when the baseline risk of post-operative nausea and vomiting is high, as an alternative to antiemetics in people in whom exposure is undesirable (e.g., pregnant or breast-feeding women) or contraindicated.

The National Comprehensive Cancer Network (2024a, 2024b) recommends acupuncture for managing anticipatory nausea and/or vomiting related to cancer treatment. The Network lists acupuncture as one of the physical modalities to consider in conjunction with pharmacologic interventions for managing cancer pain, especially in vulnerable populations in whom standard pharmacologic interventions may be less tolerated or less

preferred. In addition, the American Society of Clinical Oncology issued weak recommendations for offering acupuncture to patients experiencing chemotherapy-induced peripheral neuropathy from cancer treatment and to patients experiencing surgical or procedural pain (Mao, 2022).

For nausea and vomiting of pregnancy, the American College of Obstetricians and Gynecologists (2018) suggest considering pericardium 6 acupressure with wrist bands as a first-line nonpharmacologic option. The College did not recommend for or against pericardium 6 acupuncture, citing evidence of limited benefit.

A multidisciplinary international guideline development panel issued a conditional recommendation in favor of acupuncture for temporomandibular disorders, based on the results of a systematic review by Yao (2023) and a consensus that the potential benefit outweighed the likelihood of minor harms (Busse, 2023).

Evidence review

In recent decades, the quantity of acupuncture research has increased, and secondary analyses such as systematic and meta-analyses are needed to objectively appraise safety and effectiveness for a range of medical conditions. Yet, even among comparative reviews of randomized controlled trials for specific conditions, there is often disagreement about the direction and magnitude of the effect and its clinical relevance.

A comprehensive overview by Hempen (2025) provides a reasonable guide for tracking the best available evidence that would support this policy's recommendations. Hempen (2025) identified several medical conditions for which the evidence from systematic reviews of randomized controlled trials is of sufficient quality to support a positive, clinically significant effect when used as part of a multimodal treatment approach. The conditions include: low-back pain; knee osteoarthritis; chronic nonspecific back, neck, or shoulder pain, chronic headache, or pain from osteoarthritis; postoperative nausea and vomiting; migraine prophylaxis; tension-type headache; cancer-related fatigue; menopausal symptoms; and chronic prostatitis/chronic pelvic pain syndrome in men. However, not all of these conditions are addressed in current guidelines.

Adverse effects associated with acupuncture are poorly reported in the literature. One German observational study enrolled 229,230 patients with more than two million acupuncture sessions in an outpatient setting. Acupuncture treatment addressed chronic osteoarthritis pain of the knee or hip, low back pain, neck pain or headache, allergic rhinitis, asthma, or dysmenorrhea. In all, 8.6% of patients experienced an adverse effect. Most were minor such as bleeding, hematoma, or pain at the acupuncture site. Serious complications were rare, occurring in at most 1 to 10 out of 10,000 treated people (Witt, 2009).

Systematic reviews

- Systematic reviews found evidence supporting the use of acupuncture for postoperative or chemotherapy-induced nausea and vomiting (Lau, 2016; Lee, 2015), as a prophylaxis for episodic migraine (Linde, 2016b) and tension-type headache (Linde, 2016a), and for chronic non-specific low back pain and knee osteoarthritis (Manyanga, 2014; Qaseem, 2017).
- Reviews also support the use of acupuncture for managing chronic pain associated with temporomandibular disorders, especially in those with myofascial pain. Although much of the data examined feature small sample sizes and short-term follow-up periods, these studies demonstrate that conventional acupuncture results in statistically significant pain reduction (Fernandes, 2017; Gil-Martínez, 2018) and probably improved physical functioning compared with placebo (Yao, 2023).
- In children, the strongest evidence for acupuncture's efficacy and safety is for headache, migraine, postoperative nausea and vomiting, and postoperative pain. Children should not be treated with acupuncture for nausea and vomiting while under anesthesia (Brittner, 2016; Lee, 2015).
- Acupuncture may be effective for management of cancer-related fatigue, particularly for breast cancer patients and those currently undergoing anti-cancer treatment (Jang, 2020; Zhang, 2018). In Zhang

(2018), acupuncture for 20-30 minute/session three times/week for two or three weeks, followed by twice weekly for two weeks, and then weekly for six weeks had substantial effects on cancer-related fatigue.

- For women with menopausal insomnia, acupuncture may improve sleep quality measured by the Pittsburgh Sleep Quality Index and perimenopausal-related symptoms using the Kupperman index better than sham acupuncture, standard care, or no treatment. The authors concluded women with menopausal insomnia who experience no or a limited effect from standard care may benefit from acupuncture alone or as an adjunct, and it may prevent medication addiction or overuse. However, the overall high risk of bias, high heterogeneity, and short follow up in the studies prevented conclusions regarding efficacy (Zhang, 2025; 28 randomized controlled trials).
- For treating chronic prostatitis/chronic pelvic pain syndrome, compared to sham or standard medical treatment, acupuncture may produce clinically meaningful reductions in prostatitis symptoms, particularly pain, without an associated increase in the incidence of adverse events. The overall quality of the evidence was very low to low. The evidence of an effect on sexual dysfunction was inconclusive (Franco, 2019; Qin, 2022).
- For nausea and vomiting of pregnancy, acupuncture is safe and may be as effective as conventional Western medicine at reducing symptoms. However, the quality of the evidence was rated very low to moderate with presence of publication bias. It may be most beneficial for patients who experience limited relief from, or contraindications to, conventional medications, but large-scale, rigorously designed studies are needed to confirm the findings (Jin, 2024; 24 randomized controlled trials, n = 2,390).

Meta-analyses

- Two meta-analyses support the use of acupuncture in managing symptoms of Parkinson's disease, such as motor function, depression, and sleep disorders (Lee, 2017; Liu, 2017).
- Recent large meta-analyses found that acupuncture significantly reduced lower back pain compared to no treatment or sham acupuncture (Mu, 2020; Su, 2021; Wang, 2021; Wu, 2021), reduced the frequency of migraine attacks and headache intensity compared to prophylactic drugs (Fan, 2021; Giovanardi, 2020; Naguit, 2022), reduced pain and improved function in knee osteoarthritis, especially when combined with other therapies such as massage or Chinese herbal medicine (Lee, 2023; Shi, 2021; Wang, 2022; Yang, 2021), and improved pain intensity and mouth opening in temporomandibular disorders (Liu, 2021; Peixoto, 2021; Sung, 2021).

In 2021, we removed nine references from the policy. No other policy changes are warranted.

In 2024, we reorganized the findings section and removed 12 references older than 2014. We also added a new systematic review (Nielsen, 2022).

The study reviewed 22 systematic reviews, of which 17 meta-analyses (n = 13,065) found substantial evidence supporting the effectiveness of acupuncture therapy for acute pain management in perioperative, emergency department, and urgent care settings. Acupuncture, either as a standalone treatment or as an adjunct to standard care, significantly reduces acute pain intensity, decreases the need for opioid and non-steroidal anti-inflammatory drug analgesics, and improves patient satisfaction compared to sham acupuncture, standard care, or pharmaceutical pain management alone. Acupuncture was a safe treatment with a low risk of adverse events (Nielsen, 2022).

In 2025, we updated the references and coverage to include indications for pain associated with cancer or cancer treatment based on guideline recommendations, and to emphasize acupuncture as an adjunctive treatment in the setting of standard treatment failure, intolerance, or refusal by the member for all indications.

References

On March 3, 2025, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were “acupuncture” (MeSH), “acupuncture therapy” (MeSH), and “acupuncture.” We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

21 CFR 880.5580. Acupuncture needle.

American Academy of Orthopaedic Surgeons. Management of osteoarthritis of the knee (non-arthroplasty) evidence-based clinical practice guideline. <https://www.aaos.org/globalassets/quality-and-practice-resources/osteoarthritis-of-the-knee/oak3cpq.pdf>. Published August 31, 2021.

American Board of Medical Acupuncture. Home. General information. <http://www.dabma.org/indexd.asp>. Published 2022.

ACOG Practice Bulletin no. 189: Nausea and vomiting of pregnancy. *Obstet Gynecol*. 2018;131(1):e15-e30. Doi: 10.1097/aog.0000000000002456.

Brittner M, Le Pertel N, Gold MA. Acupuncture in pediatrics. *Curr Probl Pediatr Adolesc Health Care*. 2016;46(6):179–183. Doi: 10.1016/j.cppeds.2015.12.005.

Busse JW, Casassus R, Carrasco-Labra A, et al. Management of chronic pain associated with temporomandibular disorders: A clinical practice guideline. *Bmj*. 2023;383:e076227. Doi: 10.1136/bmj-2023-076227.

Department of Veterans Affairs/Department of Defense. Diagnosis and treatment of low back pain (LBP) (2022). <https://www.healthquality.va.gov/guidelines/Pain/lbp/VADODLBPCPGFinal508.pdf>. Published 2022.

Fan S-Q, Jin S, Tang T-C, Chen M, Zheng H. Efficacy of acupuncture for migraine prophylaxis: A trial sequential meta-analysis. *J Neurol*. 2021;268(11):4128-4137. Doi: 10.1007/s00415-020-10178-x.

Fernandes AC, Duarte Moura DM, Da Silva LGD, De Almeida EO, Barbosa GAS. Acupuncture in temporomandibular disorder myofascial pain treatment: A systematic review. *J Oral Facial Pain Headache*. 2017;31(3):225-232. Doi: 10.11607/ofph.1719.

Franco JVA, Turk T, Jung JH, et al. Non-pharmacological interventions for treating chronic prostatitis/chronic pelvic pain syndrome: A Cochrane systematic review. *BJU Int*. 2019;124(2):197-208. Doi: 10.1111/bju.14492.

Gan TJ, Belani KG, Bergese S, et al. Fourth consensus guidelines for the management of postoperative nausea and vomiting. *Anesth Analg*. 2020;131(2):411-448. Doi: 10.1213/ANE.0000000000004833.

Gil-Martínez A, Paris-Alemany A, López-de-Uralde-Villanueva I, La Touche R. Management of pain in patients with temporomandibular disorder (TMD): Challenges and solutions. *J Pain Res*. 2018;11:571-587. Doi: 10.2147/JPR.S127950.

Giovanardi CM, Cinquini M, Aguggia M, et al. Acupuncture vs. pharmacological prophylaxis of migraine: A systematic review of randomized controlled trials. *Front Neurol*. 2020;11:576272. Doi: 10.3389/fneur.2020.576272.

Hempen M, Hummelsberger J. The state of evidence in acupuncture: A review of meta-analyses and systematic reviews of acupuncture evidence update 2017 to 2022. *Complement Ther Med*. 2025;103149. Doi: 10.1016/j.ctim.2025.103149.

- Jang A, Brown C, Lamoury G, et al. The effects of acupuncture on cancer-related fatigue: Updated systematic review and meta-analysis. *Integr Cancer Ther.* 2020;19:1534735420949679. Doi: 10.1177/1534735420949679.
- Jin B, Han Y, Jiang Y, Zhang J, Shen W, Zhang Y. Acupuncture for nausea and vomiting during pregnancy: A systematic review and meta-analysis. *Complement Ther Med.* 2024;85:103079. Doi: 10.1016/j.ctim.2024.103079.
- Kolasinski SL, Neogi T, Hochberg MC, et al. 2019 American College of Rheumatology/Arthritis Foundation guideline for the management of osteoarthritis of the hand, hip, and knee. *Arthritis Rheumatol.* 2020;72(2):220-233. Doi: 10.1002/art.41142.
- Lau CH, Wu X, Chung VC, et al. Acupuncture and related therapies for symptom management in palliative cancer care: Systematic review and meta-analysis. *Medicine.* 2016;95(9):e2901. Doi: 10.1097/MD.0000000000002901.
- Lee A, Chan SK, Fan LT. Stimulation of the wrist acupuncture point PC6 for preventing postoperative nausea and vomiting. *Cochrane Database Syst Rev.* 2015;11(11):CD003281. Doi: 10.1002/14651858.CD003281.pub4.
- Lee B, Kim T-H, Birch S, et al. Comparative effectiveness of acupuncture in sham-controlled trials for knee osteoarthritis: A systematic review and network meta-analysis. *Front Med (Lausanne).* 2023;9:1061878. Doi: 10.3389/fmed.2022.1061878.
- Lee S-H, Lim S. Clinical effectiveness of acupuncture on Parkinson disease: A PRISMA-compliant systematic review and meta-analysis. Pany S, ed. *Medicine.* 2017;96(3):e5836. Doi: 10.1097/MD.0000000000005836.
- Linde K, Allais G, Brinkhaus B, et al. Acupuncture for the prevention of tension-type headache. *Cochrane Database Syst Rev.* 2016;4:Cd007587. Doi: 10.1002/14651858.CD007587.pub2.(a)
- Linde K, Allais G, Brinkhaus B, et al. Acupuncture for the prevention of episodic migraine. *Cochrane Database Syst Rev.* 2016;6:Cd001218. Doi: 10.1002/14651858.CD007587.pub2.(b)
- Liu G-F, Gao Z, Liu Z-N, Yang M, Zhang S, Tan T-P. Effects of warm needle acupuncture on temporomandibular joint disorders: A systematic review and meta-analysis of randomized controlled trials. *Evid Based Complement Alternat Med.* 2021;2021:6868625. Doi: 10.1155/2021/6868625.
- Liu H, Chen L, Zhang Z, et al. Effectiveness and safety of acupuncture combined with Madopar for Parkinson's disease: A systematic review with meta-analysis. *Acupunct Med.* 2017;35:404-412. Doi: 10.1136/acupmed-2016-011342.
- Manyanga T, Froese M, Zarychanski R, et al. Pain management with acupuncture in osteoarthritis: a systematic review and meta-analysis. *BMC Complement Altern Med.* 2014;14:312. Doi: 10.1186/1472-6882-14-312.
- Mao JJ, Ismaila N, Bao T, et al. Integrative medicine for pain management in oncology: Society for Integrative Oncology-ASCO guideline. *J Clin Oncol.* 2022;40(34):3998-4024. Doi: 10.1200/jco.22.01357.
- Mu J, Furlan AD, Lam WY, Hsu MY, Ning Z, Lao L. Acupuncture for chronic nonspecific low back pain. *Cochrane Database Syst Rev.* 2020;12(12):CD013814. Doi: 10.1002/14651858.CD013814.
- Naguit N, Laeeq S, Jakkoju R, et al. Is acupuncture safe and effective treatment for migraine? A systematic review of randomized controlled trials. *Cureus.* 2022;14(1):e20888. Doi: 10.7759/cureus.20888.
- National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Adult cancer pain. Version 3.2024. www.nccn.org. Updated November 25, 2024. (a)

National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology (NCCN Guidelines®). Antiemesis. Version 2.2024. www.nccn.org. Updated September 27, 2024. (b)

National Center for Complementary and Integrative Health. Acupuncture: In depth. <https://www.nccih.nih.gov/health/acupuncture-in-depth>. Updated October 2022.

National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM). State licensure requirements. <https://www.nccaom.org/advocacy-regulatory/state-relations/>. Undated.

National Institute for Health and Care Excellence. Depression in adults: Treatment and management. NICE guideline [NG222]. <https://www.nice.org.uk/guidance/NG222/chapter/recommendations>. Published June 29, 2022. (a)

National Institute for Health and Care Excellence. Eating disorders: Recognition and treatment. London (UK): National Institute for Health and Care Excellence (NICE) guideline; no. 69. <https://www.nice.org.uk/guidance/ng69/chapter/Recommendations>. Published May 23, 2017. Updated December 16, 2020.

National Institute for Health and Care Excellence. Headaches in over 12s: Diagnosis and management. Clinical guideline [CG150]. <https://www.nice.org.uk/guidance/cg150/chapter/Recommendations>. Published September 19, 2012. Updated December 17, 2021.

National Institute for Health and Care Excellence. Osteoarthritis in over 16s: Diagnosis and management. NICE guideline [NG226]. <https://www.nice.org.uk/guidance/NG226/chapter/recommendations>. Published October 19, 2022. (b)

Nielsen A, Dusek JA, Taylor-Swanson L, Tick H. Acupuncture therapy as an evidence-based nonpharmacologic strategy for comprehensive acute pain care: The Academic Consortium Pain Task Force white paper update. *Pain Med*. 2022;23(9):1582-1612. Doi:10.1093/pm/pnac056.

Peixoto KO, Abrantes PS, De Carvalho IHG, De Almeida EO, Barbosa GAS. Temporomandibular disorders and the use of traditional and laser acupuncture: A systematic review. *Cranio*. 2021;1-7. Doi: 10.1080/08869634.2021.1873605.

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. *Ann Intern Med*. 2017;166(7):514-530. Doi: 10.7326/M16-2367.

Qin Z, Guo J, Chen H, Wu J. Acupuncture for chronic prostatitis/chronic pelvic pain syndrome: A grade-assessed systematic review and meta-analysis. *Eur Urol Open Sci*. 2022;46:55-67. Doi: 10.1016/j.euros.2022.10.005.

Shi X, Yu W, Zhang W, et al. A comparison of the effects of electroacupuncture versus transcutaneous electrical nerve stimulation for pain control in knee osteoarthritis: A Bayesian network meta-analysis of randomized controlled trials. *Acupunct Med*. 2021;39(3):163-174. Doi: 10.1177/0964528420921193.

Su X, Qian H, Chen B, et al. Acupuncture for acute low back pain: A systematic review and meta-analysis. *Ann Palliat Med*. 2021;10(4):3924-3936. Doi: 10.21037/apm-20-1998.

Sung S-H, Kim D, Park M, et al. Electroacupuncture for temporomandibular disorders: A systematic review of randomized controlled trials. *Healthcare (Basel)*. 2021;9(11):1497. Doi: 10.3390/healthcare9111497.

Wang L, Yin Z, Zhang Y, et al. Optimal acupuncture methods for nonspecific low back pain: A systematic review and Bayesian network meta-analysis of randomized controlled trials. *J Pain Res*. 2021;14:1097-1112. Doi: 10.2147/JPR.S310385.

- Wang Z, Wang Y, Wang C, et al. Systematic review and network meta-analysis of acupuncture combined with massage in treating knee osteoarthritis. *Biomed Res Int*. 2022;2022:4048550. Doi: 10.1155/2022/4048550.
- Witt CM, Pach D, Brinkhaus B, et al. Safety of acupuncture: Results of a prospective observational study with 229,230 patients and introduction of a medical information and consent form. *Forsch Komplementmed*. 2009;16(2):91-97. Doi: 10.1159/000209315.
- Wu B, Yang L, Fu C, et al. Efficacy and safety of acupuncture in treating acute low back pain: A systematic review and Bayesian network meta-analysis. *Ann Palliat Med*. 2021;10(6):6156-6167. Doi: 10.21037/apm-21-551.
- Yang F, Chen Y, Lu Z, et al. Treatment of knee osteoarthritis with acupuncture combined with Chinese herbal medicine: A systematic review and meta-analysis. *Ann Palliat Med*. 2021;10(11):11430-11444. Doi: 10.21037/apm-21-2565.
- Yao L, Sadeghirad B, Li M, et al. Management of chronic pain secondary to temporomandibular disorders: A systematic review and network meta-analysis of randomised trials. *BMJ*. 2023;383:e076226. Doi: 10.1136/bmj-2023-076226.
- Zhang X, Liu C, Qin S, et al. Acupuncture as an independent or adjuvant therapy to standard management for menopausal insomnia: A systematic review and meta-analysis. *PloS one*. 2025;20(2):e0318562. Doi: 10.1371/journal.pone.0318562.
- Zhang Y, Lin L, Li H, Hu Y, Tian L. Effects of acupuncture on cancer-related fatigue: A meta-analysis. *Support Care Cancer*. 2018;26(2):415-425. Doi: 10.1007/s00520-017-3955-6.
- Zhang Q, Yue J, Golianu B, Sun Z, Lu Y. Updated systematic review and meta-analysis of acupuncture for chronic knee pain. *Acupunct Med*. 2017;35(6):392-403. Doi: 10.1136/acupmed-2016-011306.
- Zhang YQ, Lu L, Xu N, et al. Increasing the usefulness of acupuncture guideline recommendations. *BMJ*. 2022;376:e070533. Doi:10.1136/bmj-2022-070533.

Policy updates

- 1/2015: initial review date and clinical policy effective date: 4/2015
- 2016: Policy references updated.
- 2017: Policy references updated.
- 2/2018: Policy references updated. Coverage changed to include acute or subacute lower back pain.
- 4/2019: Policy references updated. Policy ID changed. Coverage expanded.
- 2/2020: Policy references updated.
- 4/2021: Policy references updated. Medicare coverage expanded.
- 5/2022: Policy references updated.
- 5/2023: Policy references updated.
- 5/2024: Policy references updated.
- 5/2025: Policy references updated. Coverage modified.