

# Acupuncture

Clinical Policy ID: CCP.1155

Recent review date: 5/2024

Next review date: 9/2025

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

*AmeriHealth Caritas Ohio has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas Ohio's clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS). AmeriHealth Caritas Ohio has developed clinical policies to assist with making coverage determinations. AmeriHealth Caritas Ohio'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, on a case by case basis, by AmeriHealth Caritas Ohio 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. AmeriHealth Caritas Ohio'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. AmeriHealth Caritas Ohio's clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, AmeriHealth Caritas Ohio will update its clinical policies as necessary. AmeriHealth Caritas Ohio'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 the following criteria are met:

- For members age 18 years or older:
- For one of the following medical conditions:
  - Chemotherapy-induced or postoperative nausea and vomiting (Lau, 2016; Lee, 2015).
  - 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 (Manyanga, 2014; Vickers, 2018; Zhang, 2017).
  - Temporomandibular disorders (Fernandes, 2017; Gil-Martínez, 2018; Wu, 2017).
  - As adjunctive treatment when either of the following conditions applies:
    - Other standard treatment options inadequately control symptoms.
    - Member refuses treatment or experiences adverse effects from such treatment.
- For members ages 7 - 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 considered experimental/investigational and not clinically proven.

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 considered experimental/investigational and not clinically proven.

For chronic tension-type headaches in youth over 12 years old, up to 10 sessions of acupuncture over five to eight weeks may be provided.

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, 2016). 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 (21CFR880.5580).

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 21 states and the District of Columbia specify National Certification Commission for Acupuncture and Oriental Medicine certification as a prerequisite for licensure (2020). Board certification in medical acupuncture is granted by the American Board of Medical Acupuncture (2022). Certification entails:

- Meeting minimum general requirements.
- Meeting education and training requirements.
- Meeting experience requirements.
- Successfully passing the American Board of Medical Acupuncture examination.

## Findings

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

### Professional Clinical Guidelines

A 2022 narrative review examining the state of acupuncture recommendations in clinical practice guidelines found that from 2010-2020, 133 guidelines worldwide included over 430 acupuncture recommendations, with 49% relying on systematic reviews of evidence (higher than the 31% in general medicine guidelines). Approximately half used the GRADE approach to assess evidence. 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 American College of Physicians guideline issued strong recommendations for acupuncture as a nonpharmacologic treatment for acute (< 4 weeks), subacute (4-12 weeks), or chronic (> 12 weeks) lower back pain based on low to moderate quality evidence (Qaseem, 2017).
- The American Psychiatric Association guideline found insufficient evidence to recommend acupuncture for the treatment of post-traumatic stress disorder (2017).
- The National Institute for Health and Care Excellence (2017) does not recommend acupuncture for eating disorders.
- 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 5-8 weeks.

### Systematic Reviews

- Systematic reviews found evidence supporting the use of acupuncture for postoperative or chemotherapy-induced nausea and vomiting (Lau, 2016), 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).
- 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).

### 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 and added to the Medicare section a new coverage indication for chronic low back pain, namely National Coverage Determination 30.3.3 (Centers for Medicare and Medicaid Services, 2020). No other policy changes are warranted.

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

The study reviewed 22 systematic reviews, 17 of which included meta-analyses (n = 13,065) found there is substantial evidence supporting the effectiveness of acupuncture therapy for acute pain management in perioperative, emergency department, and urgent care settings. Overall, the findings indicate that 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 also found to be a safe treatment with a low risk of adverse events (Nielsen, 2022).

## References

On March 13, 2024, 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.

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

American Psychiatric Association. Clinical practice guideline for the treatment of post-traumatic stress disorder in adults. <https://www.apa.org/ptsd-guideline>. Published 2017.

Brittner M, Le Pertel N, Gold MA. Acupuncture in pediatrics. *Curr Probl Pediatr Adolesc Health Care*. 2016;46(6):179–183pmid: 179-83. Doi: 10.1016/j.cppeds.2015.12.005.

Chan YY, Lo WY, Yang SN, Chen YH, Lin JG. The benefit of combined acupuncture and antidepressant medication for depression: A systematic review and meta-analysis. *J Affect Disord*. 2015;176:106-117. Doi: 10.1016/j.jad.2015.01.048.

Chen Y-Y, Li J, Chen M, Yue L, She T-W, Zheng H. Acupuncture versus propranolol in migraine prophylaxis: An indirect treatment comparison meta-analysis. *J Neurol*. 2020;267(1):14-25. Doi: 10.1007/s00415-019-09510-x.

Chien TJ, Liu CY, Fang CJ, Kuo CY. The maintenance effect of acupuncture on breast cancer-related menopause symptoms: A systematic review. *Climacteric*. 2019:1-10. Doi: 10.1080/13697137.2019.1664460.

Cui X, Zhou J, Qin Z, Liu Z. Acupuncture for erectile dysfunction: A systematic review. *Biomed Res Int*. 2016;2171923. Doi: 10.1155/2016/2171923.

del Pino-Sedeno T, Trujillo-Martin MM, Ruiz-Irastorza G, et al. Effectiveness of nonpharmacologic interventions for decreasing fatigue in adults with systemic lupus erythematosus: A systematic review. *Arthritis Care Res (Hoboken)*. 2016;68(1):141-148. Doi: 10.1002/acr.22675.

Dong W, Goost H, Lin XB, et al. Treatments for shoulder impingement syndrome: a PRISMA systematic review and network meta-analysis. *Medicine (Baltimore)*. 2015;94(10):e510. Doi: 10.1097/MD.0000000000000510.

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.

Feng S, Han M, Fan Y, et al. Acupuncture for the treatment of allergic rhinitis: A systematic review and meta-analysis. *Am J Rhinol Allergy*. 2015;29(1):57-62. Doi: 10.2500/ajra.2015.29.4116.

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.

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.

Gutke A, Betten C, Degerskar K, Pousette S, Olsen MF. Treatments for pregnancy-related lumbopelvic pain: A systematic review of physiotherapy modalities. *Acta Obstet Gynecol Scand*. 2015;94(11):1156-1167. Doi: 10.1111/aogs.12681.

He M, Li X, Liu Y, et al. Electroacupuncture for Tinnitus: A systematic review. *PLoS One*. 2016;11(3):e0150600. Doi: 10.1371/journal.pone.0150600.

Hempel S, Taylor SL, Solloway MR, et al. Evidence Map of Acupuncture [Internet]. Washington, D.C. Department of Veterans Affairs. VA-ESP Project #05-226. <https://www.ncbi.nlm.nih.gov/books/NBK185071/>. Published January 2014.

Hsieh P-C, Yang M-C, Wu Y-K, et al. Acupuncture therapy improves health-related quality of life in patients with chronic obstructive pulmonary disease: A systematic review and meta-analysis. *Complement Ther Clin Pract*. 2019;35:208-218. Doi: 10.1016/j.ctcp.2019.02.016.

Huang Q, Luo D, Chen L, Liang F-X, Chen R. Effectiveness of acupuncture for Alzheimer's disease: An updated systematic review and meta-analysis. *Curr Med Sci*. 2019;39(3):500-511. Doi: 10.1007/s11596-019-2065-8.

Hung CY-F, Wu X-Y, Chung VC-H, Tang EC-H, Wu JC-Y, Lau AY-L. Overview of systematic reviews with meta-analyses on acupuncture in post-stroke cognitive impairment and depression management. *Integr Med Res*. 2019;8(3):145-159. Doi: 10.1016/j.imr.2019.05.001.

Jiang C, Jiang L, Qin Q. Conventional treatments plus acupuncture for asthma in adults and adolescent: A systematic review and meta-analysis. *Evid Based Complement Alternat Med*. 2019;2019:9580670-9580670. Doi: 10.1155/2019/9580670.

Kim J, Kim S-R, Lee H, Nam D-H. Comparing Verum and sham acupuncture in fibromyalgia syndrome: A systematic review and meta-analysis. *Evid Based Complement Alternat Med*. 2019;2019:8757685. Doi: 10.1155/2019/8757685.

Kim KH, Lee MS, Kim TH, et al. Acupuncture and related interventions for symptoms of chronic kidney disease. *Cochrane Database Syst Rev*. 2016;(6):Cd009440. Doi: 10.1002/14651858.CD009440.pub2.

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.

Law D, McDonough S, Bleakley C, Baxter GD, Tumilty S. Laser acupuncture for treating musculoskeletal pain: A systematic review with meta-analysis. *J Acupunct Meridian Stud*. 2015;8(1):2-16. Doi: 10.1016/j.jams.2014.06.015.

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.

Lim CE, Ng RW, Xu K, et al. Acupuncture for polycystic ovarian syndrome. *Cochrane Database Syst Rev*. 2016;(5):Cd007689. Doi: 10.1002/14651858.CD007689.pub3.

- 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 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.
- 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.
- 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.
- Mora DC, Overvag G, Jong MC, et al. Complementary and alternative medicine modalities used to treat adverse effects of anti-cancer treatment among children and young adults: A systematic review and meta-analysis of randomized controlled trials. *BMC Complement Med Ther*. 2022;22(1):97. Doi: 10.1186/s12906-022-03537-w.
- 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 Center for Complementary and Integrative Health. Acupuncture: In Depth. <https://www.nccih.nih.gov/health/acupuncture-in-depth>. Updated January 2016.
- National Certification Commission of Acupuncture and Oriental Medicine (NCCAOM). State licensure requirements. <https://www.nccaom.org/advocacy-regulatory/state-relations/>. Undated.
- 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.

- 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.
- Nishishinya Aquino MB, Pereda CA, Muñoz-Ortego J. Efficacy of acupuncture in rheumatic diseases with spine involvement: systematic review. *Med Clin (Barc)*. 2019;153(6):250-255. Doi: 10.1016/j.medcli.2019.04.020.
- Pang P, Shi Y, Xu H, Deng L, Wu S, Chen X. Acupuncture methods put to the test for a tinnitus study: A Bayesian analysis. *Complement Ther Med*. 2019;42:205-213. Doi: 10.1016/j.ctim.2018.11.017.
- 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.
- Pouy S, Etebarian A, Azizi-Qadikolaee A, Saeidi S. The effect of acupuncture on postoperative pain, nausea and vomiting after pediatric tonsillectomy: A systematic review. *Int J Adolesc Med Health*. 2019;33(5). Doi: 10.1515/ijamh-2018-0285.
- Qaseem A, Barry MJ, Kansagara D. Nonpharmacologic versus pharmacologic treatment of adult patients with major depressive disorder: A clinical practice guideline from the American College of Physicians. *Ann Intern Med*. 2016;164(5):350–359. Doi: 10.7326/M15-2570.
- 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 Apr 4;166(7):514-30. Doi: 10.7326/M16-2367.
- Qin Z, Wu J, Zhou J, Liu Z. Systematic review of acupuncture for chronic prostatitis/chronic pelvic pain syndrome. *Medicine*. 2016;95(11):e3095. Doi: 10.1097/MD.0000000000003095.
- 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.
- Smith CA, Armour M, Zhu X, et al. Acupuncture for dysmenorrhoea. *Cochrane Database Syst Rev*. 2016;4:CD007854. Doi: 10.1002/14651858.CD007854.pub3.
- Song Y, Li T, Ma C, Liu H, Liang F, Yang Y. Comparative efficacy of acupuncture-related therapy for migraine: A systematic review and network meta-analysis. *Front Neurol*. 2022;12:1010410. Doi: 10.3389/fneur.2022.1010410.
- Su L, Meng L, Chen R, et al. Acupoint application for asthma therapy in adults: A systematic review and meta-analysis of randomized controlled trials. *Forsch Komplementmed*. 2016;23(1):16-21. Doi: 10.1159/000443813.
- 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.
- Trinh KV, Diep D, Chen KJQ. Systematic review of episodic migraine prophylaxis: Efficacy of conventional treatments used in comparisons with acupuncture. *Med Acupunct*. 2019;31(2):85-97. Doi: 10.1089/acu.2019.1337.
- Van den Heuvel E, Goossens M, Vanderhaegen H, Sun HX, Buntinx F. Effect of acustimulation on nausea and vomiting and on hyperemesis in pregnancy: A systematic review of Western and Chinese literature. *BMC Complement Altern Med*. 2016;16:13. Doi: 10.1186/s12906-016-0985-4.
- Vickers AJ, Vertosick EA, Lewith G, et al. Acupuncture for chronic pain: Update of an individual; patient data meta-analysis. *J Pain*. 2018 May;19(5):455-474. Doi: 10.1016/j.jpain.2017.11.005.
- 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.
- Winkelman JW, Armstrong MJ, Allen RP, et al. Practice guideline summary: Treatment of restless legs syndrome in adults: Report of the Guideline Development, Dissemination, and Implementation Subcommittee of the American Academy of Neurology. *Neurology*. 2016;87(24):2585-2593. Doi: 10.1212/WNL.0000000000003388.
- Wu JY, Zhang C, Xu YP, et al. Acupuncture therapy in the management of the clinical outcomes for temporomandibular disorders: A PRISMA-compliant meta-analysis. *Medicine*. 2017;96(9):e6064. Doi: 10.1097/md.0000000000006064.
- 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.
- Wu MS, Chen KH, Chen IF, et al. The efficacy of acupuncture in post-operative pain management: A systematic review and meta-analysis. *PLoS One*. 2016;11(3):e0150367. Doi: 10.1371/journal.pone.0150367.
- Yang A, Wu HM, Tang JL, et al. Acupuncture for stroke rehabilitation. *Cochrane Database Syst Rev*. 2016;(8):Cd004131. Doi: 10.1002/14651858.CD004131.pub3.
- Yang C, Hao Z, Zhang LL, Guo Q. Efficacy and safety of acupuncture in children: An overview of systematic reviews. *Pediatr Res*. 2015;78(2):112-119. Doi: 10.1038/pr.2015.91.
- 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.

Yang J, Wang Y, Xu J, et al. Acupuncture for low back and/or pelvic pain during pregnancy: A systematic review and meta-analysis of randomized controlled trials. *BMJ Open*. 2022;12(12):e056878. Doi: 10.1136/bmjopen-2021-056878.

Yuan QL, Guo TM, Liu L, Sun F, Zhang YG. Traditional Chinese medicine for neck pain and low back pain: A systematic review and meta-analysis. *PLoS One*. 2015;10(2):e0117146. Doi: 10.1371/journal.pone.0117146.

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.

Zhang X-Y, Li Y-X, Liu D-L, Zhang B-Y, Chen D-M. The effectiveness of acupuncture therapy in patients with post-stroke depression: An updated meta-analysis of randomized controlled trials. *Medicine (Baltimore)*. 2019;98(22):e15894-e15894. Doi: 10.1097/MD.00000000000015894.

Zhou J, Peng W, Xu M, Li W, Liu Z. The effectiveness and safety of acupuncture for patients with Alzheimer disease: A systematic review and meta-analysis of randomized controlled trials. *Medicine (Baltimore)*. 2015;94(22): e933. Doi: 10.1097/MD.0000000000000933.

## 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.