

Subject: Acupuncture

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Description

This document addresses the use of acupuncture, the practice of stimulating specific points on the body using needles for the purpose of treating various health conditions. Manual manipulation or electrical stimulation of the needles may or may not be incorporated into therapy.

Clinical Indications

Medically Necessary:

The use of acupuncture is considered **medically necessary** when one or more of the following conditions is the target of therapy:

- A. Nausea or vomiting associated with surgery, chemotherapy, pregnancy; **or**
- B. Chronic osteoarthritis of the knee or of the hip that is significantly affecting daily activity; **or**
- C. Cancer pain; **or**
- D. Tension headache recurring for more than 12 weeks despite medication or behavioral therapy (such as biofeedback or relaxation therapy); **or**
- E. Migraine recurring for more than 12 weeks despite medication treatment; **or**
- F. Back or neck pain persisting for more than 12 weeks despite medication and physical therapy.

Continuing treatment:

Continuing use of acupuncture therapy is considered **medically necessary** when **both** of the following are met (A and B):

- A. The individual to be treated continues to experience one or more of the conditions listed above; **and**
- B. The requesting physician documents ongoing benefit from the use of acupuncture.

Not Medically Necessary:

Acupuncture is considered **not medically necessary** when the criteria above are not met, and for any other indication.

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy.

Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When services may be Medically Necessary when criteria are met:

CPT

97810	Acupuncture, 1 or more needles; without electrical stimulation, initial 15 minutes of personal one-on-one contact with the patient
97811	Acupuncture, 1 or more needles; without electrical stimulation, each additional 15 minutes of personal one-on-one contact with the patient, with re-insertion of needle(s)
97813	Acupuncture, 1 or more needles; with electrical stimulation, initial 15 minutes of personal one-on-one contact with the patient
97814	Acupuncture, 1 or more needles; with electrical stimulation, each additional 15 minutes of personal one-on-one contact with the patient, with re-insertion of needle(s)

ICD-10 Procedure

8E0H30Z	Acupuncture
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ICD-10 Diagnosis

All diagnoses

When services are Not Medically Necessary:

For the procedure codes listed above when criteria are not met, for the following procedure code, or when the code describes a procedure designated in the Clinical Indications section as not medically necessary.

ICD-10 Procedure

8E0H300	Acupuncture using anesthesia
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ICD-10 Diagnosis

All diagnoses

Discussion/General Information

Acupuncture is one of the oldest and most commonly used medical procedures in the world. Acupuncture has become a very popular form of complementary and alternative therapy in the United States (U.S.), with an estimated 3.5 million adults or approximately 1.5% of the population, undergoing treatment annually (Zia, 2017).

The core procedure in acupuncture involves stimulation of specific points on the body, acupoints, by insertion of fine needles. Typical treatments involve insertion of 5 to 20 needles at various depths. Traditional acupuncturists judge the effectiveness of their insertion by looking for a physiologic reaction called “de qi.” This is perceived as an aching or throbbing by the recipient and by a tightening of tissue around the needle point felt by the therapist. Needles are typically left in for less than 1 hour. Acupuncturists may increase the stimulation by manipulating the needles or by applying heat or electrical stimulation to the needles. An alternative technique uses laser rather than needles to stimulate acupoints.

Acupuncture’s exact mechanism of action is unknown. Traditional Chinese acupuncture theory is based on the premise that a form of energy called “qi” (pronounced “chee”) travels along prescribed pathways called meridians within the body. This theory proposes that qi is responsible for maintaining good health by providing homeostatic regulation of vital body function. Excess or deficiency in the flow of qi is thought to result in disease. Stimulation of specific acupoints along the body’s meridians can restore balance in the qi and return the individual to health.

Scientists have studied acupuncture for decades and have proposed other theories based on allopathic biomedical concepts. Studies in the 1970s and 1980s suggest that acupuncture may work by modifying nerve function at the spinal and supraspinal levels. Roles have been suggested for cytokines, endorphins, and neurotransmitters but the physiologic mechanism of action is not known. It has also been proposed that acupuncture stimulates a variety of central and peripheral physiological effects, although the relationship between these mechanisms and the observed responses are not understood (Zia, 2017).

There is objective evidence that acupuncture stimulation results in specific identifiable patterns in brain activity. Yan and colleagues (2005) performed functional MRI of the brain while stimulating real versus sham acupoints in the Liv3 and Liv4 vicinity. Stimulation at the acupoints resulted in activation and deactivation in specific brain areas in distinct response patterns. Stimulation of the acupoints showed a greater activation and deactivation response than stimulation of sham points. The authors noted these results were consistent with previously reported results.

Placebo treatments frequently produce significant pain improvement. Pain studies need to include appropriate inactive controls to evaluate this placebo effect. Many trials that have included sham acupuncture control groups do not report significant differences between real acupuncture and sham acupuncture. Several sham techniques have been used, including non-penetrating needles, sites not recognized as valid acupuncture sites, or sham devices such as nonfunctioning laser or electrical stimulation devices. Other studies have used needles on valid acupuncture sites at superficial depths or eliminated manipulation of the needles. The wide variation of methods used as controls may account for or contribute to the conflicting results associated with many acupuncture studies.

Some authors have proposed that sham acupuncture controls are not inert and may produce some therapeutic benefits (Furlan, 2012; Linde, 2009; Lund, 2006; Moffet, 2009; Zia, 2017). Alternatively, Linde and colleagues (2009) proposed that sham acupuncture may produce a larger than usual placebo effect or that biases may exist that researchers have not accounted for. The 2010 Agency for Healthcare Research and Quality (AHRQ) Evidence Report/Technology Assessment on complementary and alternative therapies for back pain noted that trials using sham acupuncture tended to produce results that were negative or statistically non-significant compared to those using other types of placebo. The authors noted it appears that different types of controls result in different effects. Other studies have also supported the concept that sham acupuncture may produce more benefits than other types of sham treatment (Hrobjartsson, 2010; Kaptchuk, 2006).

Linde and colleagues (2010) conducted a meta-analysis evaluating potential non-specific effects associated with acupuncture or sham acupuncture treatment. This review included 32 trials and 5754 individuals. In a comparison of sham acupuncture to no acupuncture, the authors reported an additional moderate, nonspecific effect in the sham acupuncture group compared to the no acupuncture group. However, the authors did note that trials with a large sample size and a low risk of bias showed less positive results.

The diversity of sham acupuncture techniques is only one of the issues confounding the evaluation of acupuncture in clinical trials. Acupuncture therapy is not standardized. Techniques can be based on traditional Chinese or allopathic paradigms. Some studies required practitioners to deliver a standardized protocol, while others allow practitioners to develop individualized plans based upon presenting symptoms. Trials have used different devices, including needles, laser, manual stimulation or electrical stimulation. There are no dosing standards addressing factors such as duration of therapy or number of treatments. In most cases, while participants and assessors may be blinded, it is difficult to blind the practitioner. Also, the concept of acupuncture may elicit strong reactions among study populations, either positive or negative. Outcomes primarily rely on subjective, self-reported data. All of these variables, coupled with the relatively unknown mechanism of action of acupuncture, make the interpretation of the evidence challenging.

The National Center for Complementary and Integrative Health (NCCIH, 2014) notes that millions of Americans use acupuncture every year, and that studies suggest acupuncture may be beneficial for chronic pain such as low back or neck pain, osteoarthritis (OA), or to reduce frequency of tension type headaches or migraines. However, other factors, such as expectation and beliefs may play a role in the positive outcomes of acupuncture treatment for pain.

The 2010 AHRQ Evidence Report/Technology Assessment on complementary and alternative therapies for back pain reported on six trials that included an acupuncture arm. The majority of studies that were specific to acupuncture evaluated neck pain that had been present for greater than 3 months. Acupuncture was categorized as “likely helpful or worth considering,” along with commonly used modalities such as manipulation, mobilization, supervised exercises, massage, low level laser therapy and analgesics for the treatment of neck pain not associated with whiplash-associated disorders. The authors noted that none of the modalities appeared to be superior in the short or long-term. There was inconsistent evidence that acupuncture was superior to sham.

Trinh and colleagues (2016) reviewed 27 trials on a variety of chronic neck pain conditions including myofascial neck pain, pain due to arthritic changes, non-specific neck pain, radicular neck pain and mechanical neck pain. Studies evaluating whiplash-associated disorders (acute and chronic) were also included. The authors concluded there was moderate quality evidence that acupuncture was more effective than some sham therapies or delayed therapy. There was limited evidence that acupuncture is more effective than sham acupuncture or inactive treatment in the short-term. The authors reported the effect does not appear to be sustainable in the long term. The authors noted that while quality of the studies is improved over the last review, there were few large trials that provided high-quality evidence.

A systematic review and meta-analysis by Fu and colleagues (2009) identified 14 studies for inclusion in an assessment of the effectiveness and efficacy of acupuncture to treat neck pain. Nine separate meta-analyses were performed. Meta-analysis was completed only when statistically significant heterogeneity was absent. A majority of the meta-analyses (7/9) reported statistically significant results favoring acupuncture over other interventions. These favorable results included short-term effectiveness, effectiveness of acupuncture on range of motion (ROM), long-term effectiveness, short-term effectiveness of acupuncture based on dichotomous data, comparison with sham acupuncture, comparison with sham TENS and comparison with sham laser. In addition to the meta-analysis, a systematic review was completed. The majority of the studies (9/14) reported a positive result. Several studies (4/14) were reported as showing a negative result and one study was mixed. Studies were defined as positive when acupuncture resulted in a statistically better outcome than control in the primary outcome. Studies were defined as negative in all other cases (acupuncture was similar to or worse than control, or acupuncture was better but result was statistically insignificant). Outcomes were different in high quality studies compared to those of low quality. Of the nine studies reporting positive outcomes, eight of those studies were considered high quality. Among the four studies reporting negative outcomes, two of them were considered low quality. The authors noted the evidence supporting the effectiveness was stronger than the evidence against acupuncture’s effectiveness.

Furlan and associates (2012) performed a meta-analysis and systematic review of studies of common complementary and alternative medicine (CAM) treatments for neck and low back pain published between 1978 and 2009. Out of the 147 randomized and 5 nonrandomized studies included in the report, 24 were specific to neck pain and acupuncture. The authors reported that there was no significant difference between acupuncture and sham based upon two meta-analyses. There was inconsistent evidence comparing acupuncture to pain medication, no treatment, or spinal manipulation. Acupuncture was found to be significantly better than massage. Due to the wide variety of controls, there were a limited number of trials included in each category. Similar to previous reviews, the authors report that the level of evidence was low to moderate.

While the evidence has been inconsistent regarding the efficacy of true acupuncture over sham, there are studies which show a benefit of true acupuncture over sham (Cameron, 2013; Liang 2011). Other conservative therapies typically used to treat neck pain include muscle relaxants, manual therapy, physical therapy, behavioral therapy, traction, cervical collar, electromagnetic therapy, massage or proprioceptive exercises. There has been limited high quality evidence supporting the effectiveness of these modalities (Bornstein, 2007, Hurwitz, 2009, Trinh, 2006). In general, studies evaluating conservative treatments of neck pain have shown little or no clinical benefit from these therapies. Chronic pain is a complex condition that requires a multifaceted treatment approach. Expert opinion and the preponderance of evidence noted above supports use of acupuncture in a multi-modal treatment plan for chronic neck pain.

Low Back Pain (LBP)

Back pain can be classified in several different ways including by location and symptom duration. The term acute LBP is typically used for pain lasting less than 4 weeks. Subacute LBP can last from 4 to 12 weeks while LBP lasting longer than 12 weeks is defined as chronic (Qaseem, 2017). While acute back pain only lasts a few days or weeks and resolves spontaneously, chronic LBP may require additional treatment. A fact sheet developed by the National Institute of Neurological Disorders and Stroke notes that while the evidence regarding potential benefits of acupuncture to treat acute LBP is conflicting, acupuncture is moderately effective in the treatment of chronic LBP. Since 2005, multiple other published studies have assessed the utility of acupuncture to treat chronic LBP compared to other treatments with varied results.

Cherkin and colleagues (2009) conducted a four-arm randomized, controlled trial (RCT) comparing acupuncture to usual care for lower back pain. A total of 638 individuals with mechanical LBP were randomized to receive individualized acupuncture, standardized acupuncture, simulated acupuncture or usual care. At 8 weeks, all acupuncture groups were significantly improved in dysfunction and pain bothersomeness scores compared to the usual care group. There were no significant differences between the acupuncture groups. The individualized and standardized acupuncture groups sustained significant differences for the dysfunction score throughout the 52-week follow-up.

In a single-blinded multicenter RCT, Cho and colleagues (2013) compared acupuncture to non-penetrating sham acupuncture in 130 subjects with chronic LBP. While both groups showed improvement in the visual analogue score (VAS) for bothersomeness, the acupuncture group reported significantly improved scores compared to the sham group (3.36 vs. 2.27) at 8 weeks. The authors note that this study appeared to have been the first study for LBP performed using non-penetrating needles as sham.

Several systemic reviews and meta-analyses comparing acupuncture to a variety of other treatments concluded that acupuncture is more effective than no treatment and might provide additional benefit when combined with usual care for LBP. However, in general, the evidence regarding the other treatments was conflicting and inconclusive (Furlan, 2005; Hutchinson, 2012; Lam, 2013; Manheimer, 2005; Rubinstein, 2010; Yuan, 2015).

A 2017 clinical practice guideline on LBP developed by the American College of Physicians (ACP) included recommendations regarding acute and chronic LBP. Although the ACP has graded these as strong recommendations, the following recommendations are based upon low or moderate quality evidence:

Given that most patients with acute or subacute low back pain improve over time regardless of treatment, clinicians and patients should select nonpharmacologic treatment with superficial heat (moderate-quality evidence), massage, acupuncture, or spinal manipulation (low-quality evidence). If pharmacologic treatment is desired, clinicians and patients should select nonsteroidal anti-inflammatory drugs or skeletal muscle relaxants (moderate-quality evidence). (Grade: strong recommendation).

For patients with chronic low back pain, clinicians and patients should initially select nonpharmacologic treatment with exercise, multidisciplinary rehabilitation, acupuncture, mindfulness-based stress reduction (moderate-quality evidence), tai chi, yoga, motor control exercise, progressive relaxation, electromyography biofeedback, low-level laser therapy, operant therapy, cognitive behavioral therapy, or spinal manipulation (low-quality evidence). (Grade: strong recommendation).

The 2010 AHRQ Evidence Report/Technology Assessment on complementary and alternative therapies for back pain notes there was low to moderate-grade evidence that acupuncture was better than sham acupuncture in improved outcomes immediately following treatment for LBP. There was moderate evidence that acupuncture for LBP was better than no treatment for pain, disability, function, range of motion, and well-being. In comparison to other therapies, acupuncture did not differ from pain medication, but was better than physical therapy for pain and disability in the immediate treatment phase.

In a double-blind RCT, Glazov and associates (2014) compared two levels of laser acupuncture (low and high) to sham laser acupuncture in 144 individuals with chronic LBP. While all groups reported reductions in pain at all assessment points, there was no significant difference between any of the groups. Weiss and colleagues (2013) reported on the results of a multicenter, double-blind

RCT comparing acupuncture to sham acupuncture using non-penetrating needles. A total of 143 participants being treated in an inpatient rehabilitation program for LBP lasting more than 6 months were randomized to receive either usual treatment only or usual treatment with acupuncture throughout the 21-day program. The results were mixed; while there were significant differences favoring acupuncture for pain levels while sitting or carrying heavier loads, there was no significant difference for pain while carrying lighter loads or walking.

The myriad of studies evaluating the effect of acupuncture on LBP have produced conflicting results. There is, however, evidence that acupuncture can improve chronic LBP. Authoritative guidelines recognize a role for acupuncture as an option for nonpharmacologic LBP treatment.

Headaches/Migraines

There have been numerous acupuncture trials involving individuals with headaches and migraines. In a large RCT, Jena and colleagues (2008) assessed the efficacy of acupuncture in individuals with a non-specific diagnosis of headache. Of the 15,056 individuals enrolled in this study, 47.8% were categorized as having tension-type headaches and 46.3% were categorized as having migraines. The remainder did not fall into either category. Individuals were randomized to either a treatment group that received up to 15 sessions of acupuncture over 3 months (n=1613) or to a control group that did not receive acupuncture treatment for the first 3 months (n=1569). The study also included a large nonrandomized arm comprised of individuals who declined randomization (n=11,874). These individuals received acupuncture immediately. The treatment group included both the randomized and nonrandomized groups who received acupuncture immediately. At 3 months, there was a significant decrease in the number of days with headache per month favoring the treatment group versus control (8.4 ± 7.2 to 4.7 ± 5.6 and 8.1 ± 6.8 to 7.5 ± 6.3 , respectively). The proportion of responders, those who reported at least a 50% reduction in headache frequency, significantly favored the treatment group (44.9% migraine; 46.7% tension-type) versus control (19.6% migraine; 17.5% tension-type). At 6 months, the migraines and tension-type headaches were not reported separately; however, the combined data indicates the improvement noted at 3 months was sustained. After 3 months, the group that initially received no treatment was treated with acupuncture. At 6 months, this group then showed improved headache frequency and there were no significant differences between the control group and the treatment group. While the results of this study were promising, there was a considerable potential for bias. The study was not blinded and participants were allowed to self-select treatments. In addition, rather than use headache diaries, individuals responded to monthly questionnaires about the number of headaches in the last month, potentially resulting in recall bias.

Sun and Gan (2008) published the results of a meta-analysis conducted to assess the efficacy of acupuncture in treating chronic headaches. The meta-analysis included 31 clinical trials; 10 studies for tension-type headaches, 17 studies for migraines and 4 studies with mixed (chronic) headaches. The authors used the response rate, defined as at least a 33% improvement in headache symptoms, as the primary outcome. In a comparison of 14 acupuncture-versus-sham trials, 53% (510/961) of acupuncture and 45% (373/829) of sham individuals were classified as responders. A subgroup analysis showed there was a significant difference in the tension-type group compared to control, but not a significant difference for migraine versus control. In an analysis of seven trials comparing acupuncture and medication, the acupuncture group showed a significantly higher response rate than the medication group (62% and 45%, respectively). This significant difference remained at 1-year follow-up. The authors noted that the medication group had a higher dropout rate than the acupuncture group and theorized this could have been related to medication side effects. Heterogeneity in control groups did not allow for meta-analysis among the four trials comparing acupuncture to other non-pharmacological modalities, but the study results showed the other modalities, including physiotherapy and massage, were significantly better than acupuncture in the treatment of chronic headaches and migraines. In the two studies that included a waiting list arm, the acupuncture groups reported better outcomes for headache frequency and intensity outcomes.

In an updated Cochrane review, Linde and colleagues (2016a) evaluated 22 migraine trials (n=4985). These trials included sham acupuncture, prophylactic drug treatment and no prophylactic treatment or routine care only as controls for acupuncture. The authors note that the evidence suggests there is a small effect of acupuncture over sham acupuncture. This particular comparison included 12 trials (n=1646) and moderate quality evidence with considerable heterogeneity. In addition, the authors noted that in the three largest trials that were described as unambiguously adequately blinded trials, the effects of acupuncture over sham were significantly smaller. In addition, the authors concluded that acupuncture is non-inferior to prophylactic drug treatment. This comparison included five trials,

four of these trials were unblinded and two of the trials reported relevant attrition in the drug treatment group. Due to additional concerns regarding study interventions or data reliability, only three studies were included in the meta-analysis. The authors noted that further studies are needed stating “it is unclear to what extent the effects of acupuncture are mainly mediated by context variables and generalized (i.e., not specific to traditional points) needling effects, and what contribution correct point location makes.” In addition, the establishment of standards regarding the reporting of outcome data would be beneficial in facilitating future analysis.

Several trials evaluating the use of acupuncture to treat migraines have produced mixed results. In a 2017 RCT by Zhao and associates, 249 individuals with migraines without aura were randomized to receive true acupuncture (TA), sham acupuncture (SA) or be placed on a waiting list (WL) to receive acupuncture following the 24 weeks study period. Individuals received either true or sham acupuncture 5 days a week for 4 weeks and were then followed for an additional 20 weeks. Sixteen weeks after randomization, migraine frequency decreased by 3.2 in the TA group, 2.1 in the SA group and 1.4 in the WL group. The differences between both the TA group compared to the SA group (1.1 attacks, 95% confidence interval [CI], 0.4-1.9; p=0.002) and the TA group compared to the WL group (1.8 attacks, 95% CI, 1.1 to 2.5, p<0.001) were significant. There were several limitations to this study including no comparison to standard migraine prophylaxis, substandard acupoint treatment and lack of blinding in the WL group. The authors noted further pragmatic studies are needed.

In 2011, Wang and colleagues reported on a multicenter, double-dummy, single-blinded RCT comparing acupuncture plus drug placebo to sham plus flunarizine in 140 individuals with migraines. Both groups reported a significant improvement in all outcome measurements from baseline through the 4 month follow-up period. There was a significant difference favoring acupuncture in responder rates after 4 weeks and 16 weeks.

A prospective RCT by Facco and colleagues (2013) compared acupuncture to a prophylactic dosage of valproic acid (n=100) in those with a diagnosis of migraines. Both groups reported significant improvements throughout the 6-month study period in the Midas Index score. There were no significant differences between the groups. However, 47.8% of the valproic acid group reported adverse events versus no reported adverse events in the acupuncture group.

A three-arm, partially blinded trial by Melchart and colleagues (2005) involving 270 participants with episodic or chronic tension type headaches randomized participants to acupuncture, minimal acupuncture or waiting list groups. The minimal acupuncture intervention consisted of the same treatment as acupuncture except for the use of fewer needles and the elimination of needle manipulation. Researchers labeled minimal acupuncture as a sham intervention, although they noted it is likely not a physiologically inert placebo. Both the acupuncture and the minimal acupuncture groups received 12 sessions over 8 weeks while the waiting list group received acupuncture at the end of 3 months. At 12 weeks, there was a significant improvement in the number of headache days per month from baseline in both acupuncture groups; this improvement persisted throughout the 6 month follow-up period. There was no significant difference between the acupuncture groups. At 6 months, improvement in number of headache days in the waiting list group who received delayed acupuncture treatment after 3 months was similar to the acupuncture groups.

A Cochrane review by Linde and colleagues (2016b) evaluated 12 trials with a total of 2349 participants with episodic or chronic tension-type headaches. Of the 12 included trials, two compared acupuncture to routine care or treatment of acute headaches, seven trials compared acupuncture to sham acupuncture, and four trials compared acupuncture with other interventions. The proportion of individuals who reported at least a 50% decrease in headache frequency was higher in the acupuncture group versus the routine care or treatment of acute headaches group (48% versus 19%). The proportion of individuals who reported at least a 50% decrease in headache frequency was also higher in the acupuncture group (51% versus 43%). Acupuncture was not found to be superior in those trials that compared other therapies and was found to be inferior for some outcomes. The authors suggest further studies, but note that the results suggest acupuncture may be an effective treatment of frequent episodic or chronic tension-type headaches.

Hao and colleagues (2013) acknowledged the conflicting outcomes associated with acupuncture studies for tension-type headaches and attempted to find an explanation for this. The authors included five studies considered of high methodological quality to evaluate a variety of acupuncture techniques. A meta-analysis of the five studies did not show a statistically significant difference between real and sham acupuncture outcomes for headache days; however, high heterogeneity was noted. Subgroup analysis of specific features

of the treatments revealed some significant differences between sham and real acupuncture when heterogeneity was reduced by removing trials that had drastically different clinical features. Following subgroup analysis, the authors identified mode of acupuncture stimulation, duration of needle retention, and frequency of treatment as potential contributing factors to results showing a lack of difference between sham and real acupuncture. The authors noted that adequacy of acupuncture treatment is equally as important as methodological quality and recommended that a standard acupuncture treatment plan is developed and accepted. This study appears to be one of the first of its kind, and additional research is needed in this area to confirm the author's findings. Since that time, there appears to be no additional studies published on the use of acupuncture for tension headaches to confirm or contradict this study.

Studies evaluating acupuncture's effectiveness in treating headaches and migraines have been generally limited by poor quality and inconsistent results. However, there are published RCTs and systematic literature reviews have shown that true acupuncture is more effective than sham acupuncture for headache treatment (Davis, 2008; Endres, 2007; Li, 2012). Acupuncture may provide an alternative to medications, including opiates, prescribed for treatment of this chronic condition.

Nausea and vomiting

In November 1997, a National Institutes of Health Consensus Development Panel (NIHCDP) addressed the use of acupuncture in a consensus statement. The authors concluded that the evidence in adults clearly showed that needle acupuncture is efficacious in treating nausea secondary to surgery or chemotherapy, and likely effective for nausea of pregnancy as well. The National Comprehensive Cancer Network[®] (NCCN) guidelines for antiemesis and palliative care include acupuncture as a non-pharmacologic treatment of nausea and vomiting. There have been several studies that support the use of acupuncture to treat nausea and vomiting (Liudden, 2011; Rithirangsiroj, 2015).

Osteoarthritis (OA)

The American College of Rheumatology Recommendations for Management of Osteoarthritis of the Hand, Hip, and Knee (2019) note that the use of acupuncture is conditionally recommended for individuals with OA of the knee, hip or hand, commenting:

Although a large number of trials have addressed the use of acupuncture for OA, its efficacy remains a subject of controversy. Issues related to the use of appropriate blinding, the validity of sham controls, sample size, effect size, and prior expectations have arisen with regard to this literature.

The American College of Rheumatology Recommendations for the Use of Nonpharmacologic and Pharmacologic Therapies in Osteoarthritis of the Hand, Hip, and Knee (2012) note that the use of traditional Chinese acupuncture for individuals with OA of the knee is a conditional recommendation, and commented:

These modalities are conditionally recommended only when the patient with knee osteoarthritis (OA) has chronic moderate to severe pain and is a candidate for total knee arthroplasty but either is unwilling to undergo the procedure, has comorbid medical conditions, or is taking concomitant medications that lead to a relative or absolute contraindication to surgery or a decision by the surgeon not to recommend the procedure.

A large meta-analysis of acupuncture and other physical treatments for the relief of pain due to OA of the knee was conducted by Corbett (2013). This study found that in a sensitivity analysis of satisfactory and good quality studies, most studies were of acupuncture (11 trials) or muscle-strengthening exercise (9 trials); both interventions were statistically significantly better than standard care, with acupuncture being statistically significantly better than muscle-strengthening exercise (standardized mean difference: 0.49, 95% credible interval 0.00-0.98). The authors concluded that their meta-analysis indicated that acupuncture can be considered as one of the more effective physical treatments for alleviating OA knee pain in the short-term.

Stener-Victorin and colleagues (2004) conducted a study of 45 subjects with hip OA awaiting hip replacement surgery that were randomized to receive hydrotherapy, electro-acupuncture, or education. While positive results of both electroacupuncture and hydrotherapy were reported compared to no changes in the education group, the small numbers in each group (n=15) require

confirmation in larger studies. Nevertheless, this study provides well-designed, if limited, evidence of the safety and efficacy of acupuncture for this indication.

A large meta-analysis conducted by Vickers and colleagues (2012) addressed the use of acupuncture for a variety of chronic pain conditions, including headache, shoulder, musculoskeletal pain, and osteoarthritis. The analysis included data from 17,922 individuals from 31 RCTs for that the authors could determine sufficient blinding. The report describes a large variation across trials with regard to the type of sham acupuncture used, as well as in other treatments subjects were allowed to have. Nonetheless, the authors report that acupuncture was significantly better compared to controls for all analyses. The authors conclude that acupuncture has a significant benefit, but that aspects of treatment traditionally considered crucial to treatment (such as correct location and depth of insertion) were not vital in outcomes. In 2014, Vickers and Linde updated the evidence search and concluded that the additional 7 published studies are very small or results are similar to the meta-analytic estimates and would not change the previously reported findings. In 2018, Vickers and associates updated their meta-analysis to include 10 recently published studies. A total of 39 trials with 20,827 individuals were included in the review that evaluated four separate areas: chronic headache, nonspecific musculoskeletal pain, osteoarthritis and shoulder pain. Outcome measurements varied from one month to 24 months. The authors note that acupuncture has an effect on pain which cannot be completely explained by placebo effects and that a trial of acupuncture is a reasonable option.

Cancer Pain

In 2018, Hershman and colleagues reported on the results of a multi-center RCT which that evaluated the effectiveness of acupuncture in reducing aromatase inhibitor-related joint pain. Women with early-stage breast cancer taking a third-generation aromatase inhibitor for more than 30 days with the intent to continue for at least one additional year and reported a score of 3 or greater on the Brief Pain Inventory-Short Form (BPI-SF) which that started or increased since aromatase inhibitor therapy was initiated were included. Participants were randomized to three groups: true acupuncture (n=226), sham acupuncture (n=59), or a wait list control group (n=57). Treatment in the sham acupuncture group consisted of minimally invasive shallow needles inserted at non-acupuncture points. Both true and sham acupuncture received treatment twice per week for 6 weeks followed by one session per week for 6 additional weeks. The waitlist group received no acupuncture or other intervention for 24 weeks. The primary endpoint was the BPI worst pain (BPI WP) score at 6 weeks of treatment, with a clinically meaningful change of 2 points on the scale. The BPI WP at 6 weeks was 2.05 points lower in the true acupuncture group, 1.07 points lower in the sham acupuncture group, and 0.99 points lower for the waitlist control group. The differences in scores between the true acupuncture group compared to either the sham acupuncture group or the waitlist group were significant. At 12 weeks, the true acupuncture group still had a significant improvement in the BPI WP score over the waitlist group but reported statistically significant scores in only the average pain component of the BPI WP score. There was no significant improvement in worst pain, pain interference, pain severity, or worst stiffness. Individuals in the true acupuncture group were more likely to believe they were receiving true acupuncture when compared to those in the sham acupuncture group, but the intervention effect for BPI WP did not differ between those who believed they were receiving true acupuncture compared to those who did not believe they were receiving true acupuncture. However, this finding does raise concerns regarding the effectiveness of the masking procedure. This study reported reduced pain in women receiving acupuncture treatment while being treated with third-generation aromatase inhibitors in the short term. Further studies of longer duration would be helpful to evaluate the long-term benefit of acupuncture.

In 2020, He and associates evaluated the evidence of acupuncture and acupressure in the treatment of cancer pain. Only RCTs were included in the systematic review (n=17) and meta-analysis (n=14). The evidence included sham-controlled and open label studies. With a moderate level of certainty, the authors found an association between real acupuncture and a greater reduction in pain intensity compared to sham acupuncture. Acupuncture, when used with analgesic therapy, was associated with reduced opioid use.

The NCCN Clinical Practice Guidelines (CPGs) recommend acupuncture along with pharmacologic therapy as needed. Acupuncture can be used as part of a comprehensive, integrative approach to treating cancer related pain. This recommendation is based on 2A category of evidence and uniform consensus (V1.2023). One RCT (n=58) reporting on acupuncture for pain control and dysfunction following neck dissection was cited for this recommendation. The American Society of Clinical Oncology (ASCO)

guideline on integrative management in treating cancer pain (Mao, 2022) notes that acupuncture can be offered to individuals experiencing various types of pain associated with cancer or cancer treatment.

Other Indications

The American Academy of Otolaryngology- Head and Neck Surgery (AAO-HNS) released clinical practice guidelines on allergic rhinitis (2015) and tinnitus (2014) that include references to acupuncture. The allergic rhinitis (AR) clinical practice guideline notes “Clinicians may offer acupuncture, or refer to a clinician who can offer acupuncture, for patients with AR who are interested in nonpharmacologic therapy.” This recommendation is rated as an option and is not based upon strong evidence, but rather on RCTs with limitations, and observational studies.

The clinical practice guideline for tinnitus notes “No recommendation can be made regarding the effect of acupuncture in patients with persistent bothersome tinnitus.” This recommendation is based upon the poor-quality trials available and acupuncture’s anticipated benefit and harm balance.

The Cochrane Library includes numerous reviews on the use of acupuncture for treatment of the following conditions: epilepsy, insomnia, restless leg syndrome, asthma, depression, stroke, uterine fibroids, smoking cessation, traumatic brain injury, and other indications (Chen, 2010; Cheong, 2013; Hargreaves, 2022; Law, 2013; Li, 2011; Lim, 2016; Manheimer, 2012; Paley, 2011; Smith, 2018, 2011; Walshe, 2012; Wei, 2011; White, 2014; Wong, 2013; Zhang, 2010; Zhu, 2011). The majority of these reviews concluded there was inadequate scientific data to determine whether acupuncture was superior to placebo.

Zhao and associates (2019) evaluated the efficacy of acupuncture as an adjunct to antianginal therapy in the treatment of chronic stable angina in multicenter RCT conducted in China. Individuals were randomized to 4 groups: acupoints on the disease-affected meridian (DAM), acupuncture on the acupoints on the non-affected meridian (NAM), sham acupuncture (SA), and no acupuncture (wait list [WL]). Individuals with at least a 3 month history of stable angina with attacks occurring at least twice a week were included. Treatment in the DAM group (n=99) consisted of bilateral acupoints considered in a relevant area along with the induction of *deqi* as well as electrical stimulation. Individuals in the NAM group (n=99) received the same treatment on bilateral acupoints considered to be non- relevant. The SA group (n=101) consisted of insertion of needles at sham points as well as electrical stimulation, however, without the induction of *deqi* sensation. All active group participants received acupuncture treatments three times a week for 4 weeks. The WL group (n=99) did not receive acupuncture. All participants received antianginal therapy for 16 weeks. The primary outcome was change in frequency of angina attacks from baseline to 16 weeks as self-reported in diaries. The frequency of angina attacks was significantly lower in the DAM group compared to the other groups at each evaluation from week 4 through week 16. The frequency decreased by 7.96 attacks in the DAM group, 3.89 attacks in the NAM group, by 2.78 attacks in the SA group, and by 2.33 attacks in the WL group (baseline 13.31). While the results of this study are promising, studies that evaluate the efficacy of acupuncture in decreasing angina pain in the longer term would be relevant for a chronic disease. In addition, the literature does not indicate that the effectiveness of the masking process was assessed. Individual beliefs regarding what type of treatment they were receiving (sham vs true) may have an impact regarding their perceptions of efficacy, particularly in a population that may have higher expectations of relief from acupuncture treatment than might be found in the United States.

In the past, experts were concerned that the use of acupuncture with or without electrical stimulation may interfere with the function of medical devices that are highly sensitive to disruptions in the body’s electrical field. However, no peer-reviewed publications regarding safety concerns related to the use of acupuncture in those with electrical sensing devices were located after a comprehensive review of the literature. In the 2005 American College of Cardiology (ACC) Expert Consensus Document on the role of complementary medicine combined with cardiovascular medicine, the authors report that the overall risk of adverse events is small and they do not voice any specific concerns about devices that are sensitive to electrical activity in the heart, such as pacemakers or automatic implantable cardiac defibrillators (AICDs). In addition, for individuals with a bleeding disorder, acupuncture may pose a bleeding risk. Use of acupuncture in this population should be used with caution.

General Considerations

Approximately 47% of individuals with cancer are inadequately treated for pain, with barriers to medication use, such as fear of addiction or concerns about side effects, being attributed to this problem (Liou, 2021). A cross sectional survey of individuals with cancer from diverse care settings was conducted to gauge whether acupuncture would be a preferable treatment option in those with attitudinal barriers to pharmacological pain management. Individuals with a cancer diagnosis currently in treatment who reported some pain in the previous 7 days (n=628) were questioned about preferences for taking a pain medication versus acupuncture for pain management. A total of 197 (31%) individuals preferred acupuncture for pain management, 146 (23%) preferred medication, the remaining 285 (45%) voiced no preference. Individuals citing a preference for acupuncture had a stronger belief that pain medications could not control pain and expressed greater fears about analgesic side effects than the overall group. The authors concluded that acupuncture could potentially address unmet pain management needs in those who are reluctant to use opioids or other analgesics.

In 2017, Crawford and colleagues performed a retrospective cohort analysis of individuals who had undergone at least 4 acupuncture sessions within 1 year (n=172). All individuals received care at a military base in which family medicine residents had been routinely trained in medical acupuncture. The primary measure was the number of prescriptions for opioid medications, muscle relaxants, benzodiazepines, and nonsteroidal anti-inflammatory drugs (NSAIDs) in the 60 days prior to the first acupuncture session compared to the number of corresponding prescriptions during the 60-day period 1 year later. The providers used a variety of acupuncture protocols and techniques for multiple conditions, the most common being low back pain (n=43), back pain (n=25), neck pain (n=21), knee/leg/ankle pain (n=16), and headache/migraine (n=11). There were reported decreases in prescription for morphine-equivalent units (45% reduction), muscle relaxers (34% reduction), NSAIDs (42% reduction), and benzodiazepines (14% reduction). In addition, individuals reported improved symptom control, ability to function, and sense of well-being following acupuncture treatment. There are several limitations associated with this study including the lack of a control group, the possibility of confounders that contributed to clinical improvement and lack of blinding. The authors summarized “these findings suggest that acupuncture might be associated with clinically significant reductions in medication use and improvements in clinical outcomes”.

In their systematic review and meta-analysis regarding acupuncture and cancer pain, He and colleagues (2020) noted that the results of acupuncture may be variable and might not be suitable as a standalone therapy for cancer pain. Acupuncture should be used as a component of pain management and has become an accepted cancer pain treatment. The authors noted “With the growing evidence of the efficacy of acupuncture, most National Cancer Institute–designated comprehensive cancer centers have begun offering acupuncture.”

Pham and associates (2021) compared clinical outcomes of those using acupuncture to those using other conservative treatment modalities (NSAIDs/physical therapy). In a retrospective, observational study of administrative claims in a large commercial insurance plan database, individuals who were treated with acupuncture were 1:1 propensity score matched to those who were treated with NSAIDs/physical therapy on baseline characteristics. The study included those with a diagnosis of neck pain, back pain, headache or migraine and at least one claim for acupuncture (n=52,346) or for NSAIDs/physical therapy (n=52,346). The primary clinical measures included opioid use, subsequent invasive surgical procedures, and healthcare utilization such as hospitalizations or emergency department (ED) visits. The baseline measures were taken during the 12-month period prior to the initial intervention and were compared to the 12-month period following the initial intervention. In those in the acupuncture group, there were fewer individuals initiating opioids following treatment versus prior to treatment. The acupuncture group reported a slight increase in invasive surgical procedures following treatment but had fewer emergency department visits compared to those treated with NSAIDs or physical therapy.

In 2016, in response to the opioid crisis, the Department of Vermont Health Access (DVHA) funded a study to assess the effectiveness of acupuncture as a treatment of chronic pain in the Medicaid population (Davis, 2018). Participants with chronic pain were offered up to 12 sessions of acupuncture within a 60-day period. Baseline self-reported scores on pain and related factors such as anxiety, function, sleep and depression were taken prior to treatment, using standardized instruments. Of the 156 participants enrolled, 13% did not receive any acupuncture, but 72% received 6 or more treatments. In those individuals who completed post-treatment assessments (n=113) the mean scores improved significantly. A total of 72% of participants reported using medication to

manage their pain prior to acupuncture treatment. Following the intervention, 57% (47/82) of medication users reported a decrease in any analgesic medication and 32% of opioid users reported a reduction in opioid use.

In 2019, in an attempt to address non-opioid acute and chronic pain relief, the Pain Management Best Practices Inter-Agency Task Force published a pain management best practices report. This committee was convened by the U.S. Department of Health and Human Services, the U.S. Department of Defense, the U.S. Department of Veterans Affairs and the Office of National Drug Control Policy. The group recommends that complementary and integrative approaches, including acupuncture, be considered in the treatment of acute and chronic pain. While the evidence is inconsistent, the task force notes acupuncture is considered safe with minimal risks.

The CDC guidelines for prescribing opioids for chronic pain (2016) address the use of nonpharmacologic therapies in the treatment of chronic pain noting:

Nonpharmacologic therapy and nonopioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient. If opioids are used, they should be combined with nonpharmacologic therapy and nonopioid pharmacologic therapy, as appropriate. (Recommendation category: A; evidence type: 3)

A *Category A* recommendation applies to all persons; most patients should receive the recommended course of action. An *evidence level base type of 3* is based on observational studies or randomized clinical trials with notable limitations.

In 2020, the Centers for Medicare and Medicaid Services (CMS) announced coverage for acupuncture for lower back pain. CMS noted the harms of opioid therapy that is often associated with the treatment of chronic pain:

Successful nonpharmacologic treatments may potentially decrease the need for, and the side effects of, assorted medications which are used to treat cLBP. Nonpharmacologic therapies have included various physical treatments, including acupuncture.

Evaluation of Pain

Pain is a complex process which involves psychological and physiological factors. Pain perception varies for different types of pain (Fainsinger, 2009). Pain intensity is a clinically relevant dimension of pain associated with functional capabilities and quality of life and has been thought to be a predictor of pain management difficulty. Higher levels of pain are associated with longer times to achieve stable pain control (Fainsinger, 2009). Differences in individual pain experience, the complexity of pain management and the use of multiple modalities to treat pain result in varying rate of response to acupuncture therapy. The treatment of pain should be guided by objective validated measurements of pain intensity (Ferreira-Valente, 2011; Hjermstad, 2011; Vaidya, 2021). There are several validated instruments for measuring pain intensity. These include the Brief Pain Inventory, Numerical Rating Scale, Visual Analog Scale, and the Verbal Rating Scale (Ferreira-Valente, 2011; He, 2020). The use of validated pain assessment instruments can improve the evaluation of pain treatment.

Summary

The evidence supporting the use of acupuncture in the treatment of select conditions is comparable to the evidence supporting other physical modalities, such as chiropractic manipulation and physical therapy. Like other physical modalities, acupuncture does not have addictive potential and is not associated with life-threatening side effects. Published evidence and expert opinion support the use of acupuncture to provide individuals with a non-pharmacological pain treatment.

References

Peer Reviewed Publications:

1. Assefi N, Sherman KJ, Jacobsen C, et al. A randomized clinical trial of acupuncture compared with sham acupuncture in fibromyalgia. *Ann Intern Med.* 2005; 143(1):10-19.
2. Bao T, Patil S, Chen C, et al. Effect of acupuncture vs sham procedure on chemotherapy-induced peripheral neuropathy symptoms: a randomized clinical trial. *JAMA Netw Open.* 2020; 3(3):e200681.
3. Berman BM, Langevin HM, Witt CM, Dubner R. Acupuncture for chronic low back pain. *N Engl J Med.* 2010; 363(5):454-461.
4. Berman BM, Lao L, Langenberg P, et al. Effectiveness of acupuncture as adjunctive therapy in osteoarthritis of the knee: a randomized, controlled trial. *Ann Intern Med.* 2004; 141(12):901-910.
5. Berman BM, Singh BB, Lao L, et al. A randomized trial of acupuncture as an adjunctive therapy in osteoarthritis of the knee. *Rheumatology (Oxford)* 1999; 38(4):346-354.
6. Borenstein DG. Chronic neck pain: how to approach treatment. *Curr Pain Headache Rep.* 2007; 11(6):436-439.
7. Cameron ID, Wang E, Sindhusake D. A randomized trial comparing acupuncture and simulated acupuncture for subacute and chronic whiplash. *Spine (Phila Pa 1976).* 2011; 36(26):E1659-E1665.
8. Cherkin DC, Sherman KJ, Avins AL, et al. A randomized trial comparing acupuncture, simulated acupuncture, and usual care for chronic low back pain. *Arch Intern Med.* 2009; 169(9):858-866.
9. Cho YJ, Song YK, Cha YY, et al. Acupuncture for chronic low back pain: a multicenter, randomized, patient-assessor blind, sham-controlled clinical trial. *Spine (Phila Pa 1976).* 2013; 38(7):549-557.
10. Corbett MS, Rice SJ, Madurasinghe V, et al. Acupuncture and other physical treatments for the relief of pain due to osteoarthritis of the knee: network meta-analysis. *Osteoarthritis Cartilage.* 2013; 21(9):1290-1298.
11. Crawford P, Penzien DB, Coeytaux R. Reduction in pain medication prescriptions and self-reported outcomes associated with acupuncture in a military patient population. *Med Acupunct.* 2017; 29(4):229-231.
12. Davis RT, Badger G, Valentine K, et al. Acupuncture for chronic pain in the Vermont Medicaid population: a prospective, pragmatic intervention trial. *Glob Adv Health Med.* 2018; 7:2164956118769557.
13. Davis MA, Kononowech RW, Rolin SA, Spierings EL. Acupuncture for tension-type headache: a meta-analysis of randomized, controlled trials. *J Pain.* 2008; 9(8):667-677.
14. Deng M, Wang XF. Acupuncture for amnesic mild cognitive impairment: a meta-analysis of randomised controlled trials. *Acupunct Med.* 2016; 35(5):342-348.
15. Endres HG, Böwing G, Diener HC, et al. Acupuncture for tension-type headache: a multicentre, sham-controlled, patient- and observer-blinded, randomized trial. *J Headache Pain.* 2007; 8(5):306-314.
16. Facco E, Liguori A, Petti F, et al. Acupuncture versus valproic acid in the prophylaxis of migraine without aura: a prospective controlled study. *Minerva Anesthesiol.* 2013; 79(6):634-642.
17. Fainsinger RL, Fairchild A, Nekolaichuk C, et al. Is pain intensity a predictor of the complexity of cancer pain management? *J Clin Oncol.* 2009; 27(4):585-590.
18. Ferreira-Valente MA, Pais-Ribeiro JL, Jensen MP. Validity of four pain intensity rating scales. *Pain.* 2011; 152(10):2399-2404.
19. Foster NE, Thomas E, Barlas P, et al. Acupuncture as an adjunct to exercise based physiotherapy for osteoarthritis of the knee: randomised controlled trial. *BMJ.* 2007; 335(7617):436.
20. Frey UH, Funk M, Löhlein C, Peters J. Effect of P6 acustimulation on post-operative nausea and vomiting in patients undergoing a laparoscopic cholecystectomy. *Acta Anaesthesiol Scand.* 2009; 53(10):1341-1347.
21. Fu LM, Li JT, Wu WS. Randomized controlled trials of acupuncture for neck pain: systematic review and meta-analysis. *J Altern Complement Med.* 2009; 15(2):133-145.
22. Furlan AD, Yazdi F, Tsertsvadze A, et al. A systematic review and meta-analysis of efficacy, cost-effectiveness, and safety of selected complementary and alternative medicine for neck and low-back pain. *Evid Based Complement Alternat Med.* 2012; 2012:953139.
23. Glazov G, Yelland M, Emery J. Low-dose laser acupuncture for non-specific chronic low back pain: a double-blind randomised controlled trial. *Acupunct Med.* 2014; 32(2):116-123.
24. Haake M, Müller HH, Schade-Brittinger C, et al. German Acupuncture Trials (GERAC) for chronic low back pain: randomized, multicenter, blinded, parallel-group trial with 3 groups. *Arch Intern Med.* 2007; 167(17):1892-1898.
25. Hao XA, Xue CC, Dong L, Zheng Z. Factors associated with conflicting findings on acupuncture for tension-type headache: qualitative and quantitative analyses. *J Altern Complement Med.* 2013; 19(4):285-297.

26. He Y, Guo X, May BH, et al. Clinical evidence for association of acupuncture and acupressure with improved cancer pain: A systematic review and meta-analysis. *JAMA Oncol.* 2020; 6(2):271-278.
27. Hershman DL, Unger JM, Greenlee H, et al. Effect of acupuncture vs sham acupuncture or waitlist control on joint pain related to aromatase inhibitors among women with early-stage breast cancer: a randomized clinical trial. *JAMA.* 2018; 320(2):167-176.
28. Hinman RS, McCrory P, Pirotta M, et al. Acupuncture for chronic knee pain: a randomized clinical trial. *JAMA.* 2014; 312(13):1313-1322.
29. Hjermstad MJ, Fayers PM, Haugen DF, et al; European Palliative Care Research Collaborative (EPCRC). Studies comparing numerical rating scales, verbal rating scales, and visual analogue scales for assessment of pain intensity in adults: a systematic literature review. *J Pain Symptom Manage.* 2011; 41(6):1073-1093.
30. Hurwitz EL, Carragee EJ, van der Velde G, et al. Treatment of neck pain: noninvasive interventions: results of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. *J Manipulative Physiol Ther* 2009; 32(2 Suppl):S141-S175.
31. Hutchinson AJ, Ball S, Andrews JC, Jones GG. The effectiveness of acupuncture in treating chronic non-specific low back pain: a systematic review of the literature. *J Orthop Surg Res.* 2012; 7:36.
32. Jena S, Witt CM, Brinkhaus B, et al. Acupuncture in patients with headache. *Cephalalgia.* 2008; 28(9):969-979.
33. Kaptchuk TJ, Stason WB, Davis RB, et al. Sham device v inert pill: randomised controlled trial of two placebo treatments. *BMJ.* 2006; 332(7538):391-397.
34. Kelly RB, Willis J. Acupuncture for pain. *Am Fam Physician.* 2019; 100(2):89-96.
35. Kvorning N, Holmberg C, Grennert L, et al. Acupuncture relieves pelvic and low-back pain in late pregnancy. *Acta Obstet Gynecol Scand.* 2004; 83(3):246-250.
36. Kwon YD, Pittler MH, Ernst E. Acupuncture for peripheral joint osteoarthritis: a systematic review and meta-analysis. *Rheumatology (Oxford).* 2006; 45(11):1331-1337.
37. Lam M, Galvin R, Curry P. Effectiveness of acupuncture for nonspecific chronic low back pain: a systematic review and meta-analysis. *Spine (Phila Pa 1976).* 2013; 38(24):2124-2138.
38. Lao L, Bergman S, Hamilton GR, et al. Evaluation of acupuncture for pain control after oral surgery: a placebo-controlled trial. *Arch Otolaryngol Head Neck Surg.* 1999; 125(5):567-572.
39. Li Y, Zheng H, Witt CM, et al. Acupuncture for migraine prophylaxis: a randomized controlled trial. *CMAJ.* 2012; 184(4):401-410.
40. Liang Z, Zhu X, Yang X, et al. Assessment of a traditional acupuncture therapy for chronic neck pain: a pilot randomised controlled study. *Complement Ther Med.* 2011; 19 Suppl 1:S26-S32.
41. Linde K, Niemann K, Schneider A, Meissner K. How large are the nonspecific effects of acupuncture? A meta-analysis of randomized controlled trials. *BMC Med.* 2010; 8:75.
42. Linde K, Streng A, Jürgens S, et al. Acupuncture for patients with migraine: a randomized controlled trial. *JAMA.* 2005; 293(17):2218-2225.
43. Liodden I, Howley M, Grimsgaard AS, et al. Perioperative acupuncture and postoperative acupressure can prevent postoperative vomiting following paediatric tonsillectomy or adenoidectomy: a pragmatic randomised controlled trial. *Acupunct Med.* 2011; 29(1):9-15.
44. Liou KT, Trevino KM, Meghani SH, et al. Fear of analgesic side effects predicts preference for acupuncture: a cross-sectional study of cancer patients with pain in the USA. *Support Care Cancer.* 2021; 29(1):427-435.
45. Lund I, Lundeberg T. Are minimal, superficial or sham acupuncture procedures acceptable as inert placebo controls? *Acupunct Med.* 2006; 24(1):13-15.
46. Madsen MV, Gøtzsche PC, Hróbjartsson A. Acupuncture treatment for pain: systematic review of randomised clinical trials with acupuncture, placebo acupuncture, and no acupuncture groups. *BMJ.* 2009; 338:a3115.
47. Manber R, Schnyer RN, Lyell D, et al. Acupuncture for depression during pregnancy: a randomized controlled trial. *Obstet Gynecol.* 2010; 115(3):511-520.
48. Manheimer E, Linde K, Lao L, et al. Meta-analysis: acupuncture for osteoarthritis of the knee. *Ann Intern Med.* 2007; 146(12):868-877.

49. Manheimer E, White A, Berman B, et al. Meta-analysis: acupuncture for low back pain. *Ann Intern Med.* 2005; 142(8):651-663.
50. Melchart D, Streng A, Hoppe A, et al. Acupuncture in patients with tension-type headache: randomised controlled trial. *BMJ.* 2005; 331(7513):376-382.
51. Moffet HH. Sham acupuncture may be as efficacious as true acupuncture: a systematic review of clinical trials. *J Altern Complement Med.* 2009; 15(3):213-216.
52. Pham T, Ma Q, Agiro A, et al. Do acupuncture services reduce subsequent utilization of opioids and surgical interventions compared to noninvasive therapies among patients with pain conditions? *Pain Med.* 2021; 22(11):2754-2762.
53. Rithirangsiroj K, Manchana T, Akkayagorn L. Efficacy of acupuncture in prevention of delayed chemotherapy induced nausea and vomiting in gynecologic cancer patients. *Gynecol Oncol.* 2015; 136(1):82-86.
54. Rubinstein SM, van Middelkoop M, et al. A systematic review on the effectiveness of complementary and alternative medicine for chronic non-specific low-back pain. *Eur Spine J.* 2010; 19(8):1213-1228.
55. Sangdee C, Teekachunhatean S, Sananpanich K, et al. Electroacupuncture versus diclofenac in symptomatic treatment of osteoarthritis of the knee: a randomized controlled trial. *BMC Complement Altern Med.* 2002; 2:3.
56. Stener-Victorin E, Kruse-Smidje C, Jung K. Comparison between electro-acupuncture and hydrotherapy, both in combination with patient education and patient education alone, on the symptomatic treatment of osteoarthritis of the hip. *Clin J Pain.* 2004; 20(3):179-185.
57. Streng A, Linde K, Hoppe A, et al. Effectiveness and tolerability of acupuncture compared with metoprolol in migraine prophylaxis. *Headache.* 2006; 46(10):1492-1502.
58. Suarez-Almazor ME, Looney C, Liu Y, et al. A randomized controlled trial of acupuncture for osteoarthritis of the knee: effects of patient-provider communication. *Arthritis Care Res (Hoboken).* 2010; 62(9):1229-1236.
59. Sun Y, Gan TJ. Acupuncture for the management of chronic headache: a systematic review. *Anesth Analg.* 2008; 107(6):2038-2047.
60. Sung YF, Kutner, MH, Cerine FC, Frederickson EL. Comparison of the effects of acupuncture and codeine on postoperative dental pain. *Anesth Analg.* 1977; 56(4):473-478.
61. Taechaarpornkul W, Suvapan D, Theppanom C, et al. Comparison of the effectiveness of six and two acupuncture point regimens in osteoarthritis of the knee: a randomised trial. *Acupunct Med.* 2009; 27(1):3-8.
62. Tough EA, White AR, Cummings TM, et al. Acupuncture and dry needling in the management of myofascial trigger point pain: a systematic review and meta-analysis of randomized controlled trials. *Eur J Pain.* 2009; 13(1):3-10.
63. Vaidya R, Washington A, Stine S, et al. The IPA, a modified numerical system for pain assessment and intervention. *J Am Acad Orthop Surg Glob Res Rev.* 2021; 5(9):e21.00174.
64. Vas J, Aranda JM, Modesto M, et al. Acupuncture in patients with acute low back pain: a multicentre randomised controlled clinical trial. *Pain.* 2012; 153(9):1883-1889.
65. Vas J, Mendez C, Perea-Milla E, et al. Acupuncture as a complementary therapy to the pharmacological treatment of osteoarthritis of the knee: randomised controlled trial. *BMJ.* 2004; 329(7476):1216-1219.
66. Vas J, Perea-Milla E, Méndez C, et al. Efficacy and safety of acupuncture for chronic uncomplicated neck pain: a randomised controlled study. *Pain.* 2006; 126(1-3):245-255.
67. Vickers AJ, Cronin AM, Maschino AC, et al.; Acupuncture Trialists' Collaboration. Acupuncture for chronic pain: individual patient data meta-analysis. *Arch Intern Med.* 2012; 172(19):1444-1453.
68. Vickers AJ, Linde K. Acupuncture for chronic pain. *JAMA.* 2014; 311(9):955-956.
69. Vickers AJ, Rees RW, Zollman CE, et al. Acupuncture for chronic headache in primary care: large, pragmatic, randomised trial. *BMJ.* 2004; 328(7442):744.
70. Vickers AJ, Vertosick EA, Lewith G, et al.; Acupuncture Trialists' Collaboration. Acupuncture for chronic pain: update of an individual patient data meta-analysis. *J Pain.* 2018; 19(5):455-474.
71. Wang Y, Xue CC, Helme R, et al. Acupuncture for frequent migraine: a randomized, patient/assessor blinded, controlled trial with one-year follow-up. *Evid Based Complement Alternat Med.* 2015; 2015:920353.
72. Wang LP, Zhang XZ, Guo J, et al. Efficacy of acupuncture for migraine prophylaxis: a single-blinded, double-dummy, randomized controlled trial. *Pain.* 2011; 152(8):1864-1871.

73. Weiner DK, Rudy TE, Morone N, et al. Efficacy of periosteal stimulation therapy for the treatment of osteoarthritis-associated chronic knee pain: an initial controlled clinical trial. *J Am Geriatr Soc.* 2007; 55(10):1541-1547.
74. Weiss J, Quante S, Xue F, et al. Effectiveness and acceptance of acupuncture in patients with chronic low back pain: results of a prospective, randomized, controlled trial. *J Altern Complement Med.* 2013; 19(12):935-941.
75. White P, Lewith G, Prescott P, Conway J. Acupuncture versus placebo for the treatment of chronic mechanical neck pain: a randomized, controlled trial. *Ann Intern Med.* 2004; 141(12):911-919.
76. Williamson L, Wyatt MR, Yein K, Melton JT. Severe knee osteoarthritis: a randomized controlled trial of acupuncture, physiotherapy (supervised exercise) and standard management for patients awaiting knee replacement. *Rheumatology (Oxford).* 2007; 46(9):1445-1449.
77. Witt C, Brinkhaus B, Jena S, et al. Acupuncture in patients with osteoarthritis of the knee: a randomised trial. *Lancet.* 2005; 366(9480):136-143.
78. Yan B, Li K, Xu J, et al. Acupoint-specific fMRI patterns in human brain. *Neurosci Lett.* 2005; 383(3):236-240.
79. Yuan QL, Guo TM, Liu L, et al. Traditional Chinese medicine for neck pain and low back pain: a systematic review and meta-analysis. *PLoS One.* 2015; 10(2):e0117146.
80. Yuan J, Purepong N, Kerr DP, et al. Effectiveness of acupuncture for low back pain: a systematic review. *Spine (Phila Pa 1976).* 2008; 33(23):E887-E900.
81. Zhao L, Chen J, Li Y, et al. The long-term effect of acupuncture for migraine prophylaxis: a randomized clinical trial. *JAMA Intern Med.* 2017; 177(4):508-515.
82. Zhao L, Li D, Zheng H, et al. Acupuncture as adjunctive therapy for chronic stable angina: a randomized clinical trial. *JAMA Intern Med.* 2019; 179(10):1388–1397.
83. Zick SM, Sen A, Hassett AL, et al. Impact of self-acupressure on co-occurring symptoms in cancer survivors. *JNCI Cancer Spectr.* 2018; 2(4):pky064.

Government Agency, Medical Society, and Other Authoritative Publications:

1. Agency for Healthcare Research and Quality (AHRQ).
 - Comparative Effectiveness Review Number 209. Noninvasive Nonpharmacological Treatment for Chronic Pain: A Systematic Review. June 2018. Available at: <https://effectivehealthcare.ahrq.gov/sites/default/files/pdf/nonpharmachronic-pain-cer-209.pdf>. Accessed on January 9, 2023.
 - Evidence Report/Technology Assessment. Number 194. Complementary and Alternative Therapies for Back Pain II. October 2010. Available at: <http://www.ahrq.gov/downloads/pub/evidence/pdf/backpainscam/backcam2.pdf>. Accessed on January 9, 2023.
2. American Academy of Orthopedic Surgeons (AAOS). Management of Osteoarthritis of the Knee (Non-Arthroplasty). August 21, 2021. Available at: <https://www.aaos.org/globalassets/quality-and-practice-resources/osteoarthritis-of-the-knee/oak3cpg.pdf>. Accessed on January 9, 2023.
3. CMS. National Coverage Determinations. Available at: <https://www.cms.gov/Medicare-Coverage-Database/search.aspx>. Accessed on January 9, 2023.
 - Acupuncture. NCD #30.3.
 - Acupuncture for Chronic Lower Back Pain (cLBP). NCD 30.3.3.
 - Acupuncture for Fibromyalgia. NCD #30.3.1.
 - Acupuncture for Osteoarthritis. NCD #30.3.2.
4. Chen N, Zhou M, He L, et al. Acupuncture for Bell's palsy. *Cochrane Database Syst Rev.* 2010;(8):CD002914.
5. Cheong YC, Dix S, Hung Yu Ng E, et al. Acupuncture and assisted reproductive technology. *Cochrane Database Syst Rev.* 2013;(7):CD006920.
6. Cheuk DK, Wong V. Acupuncture for epilepsy. *Cochrane Database Syst Rev.* 2014;(5):CD005062.
7. Cheuk DK, Wong V, Chen WX. Acupuncture for autism spectrum disorders (ASD). *Cochrane Database Syst Rev.* 2011;(9):CD007849.
8. Cheuk DK, Yeung WF, Chung KF, Wong V. Acupuncture for insomnia. *Cochrane Database Syst Rev.* 2012;(9):CD005472.

9. Chiu HY, Hsieh YJ, Tsai PS. Acupuncture to reduce sleep disturbances in perimenopausal and postmenopausal women: a systematic review and meta-analysis. *Obstet Gynecol.* 2016; 127(3):507-515.
10. Cui Y, Wang Y, Liu Z. Acupuncture for restless legs syndrome. *Cochrane Database Syst Rev.* 2008;(4):CD006457.
11. Deare JC, Zheng Z, Xue CC, et al. Acupuncture for treating fibromyalgia. *Cochrane Database Syst Rev.* 2013;(5):CD007070.
12. Dodin S, Blanchet C, Marc I, et al. Acupuncture for menopausal hot flashes. *Cochrane Database Syst Rev.* 2013; (7):CD007410.
13. Dowell D, Haegerich TM, Chou R. CDC Guideline for Prescribing Opioids for Chronic Pain--United States, 2016. *JAMA.* 2016; 315(15):1624-1645.
14. Furlan AD, van Tulder MW, Cherkin DC, et al. Acupuncture and dry-needling for low back pain. *Cochrane Database Syst Rev.* 2005;(1):CD001351.
15. Griffiths JD, Gyte GM, Paranjothy S, et al. Interventions for preventing nausea and vomiting in women undergoing regional anaesthesia for caesarean section. *Cochrane Database Syst Rev.* 2012;(9):CD007579.
16. Hargreaves E, Baker K, Barry G, et al. Acupuncture for treating overactive bladder in adults. *Cochrane Database Syst Rev.* 2022; 9(9):CD013519.
17. He J, Jia P, Zheng M, et al. Acupuncture for mumps in children. *Cochrane Database Syst Rev.* 2015; (2):CD008400.
18. Hróbjartsson A, Gøtzsche PC. Placebo interventions for all clinical conditions. *Cochrane Database Syst Rev.* 2010; (1):CD003974.
19. 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.
20. Kwan I, Bhattacharya S, Knox F, McNeil A. Pain relief for women undergoing oocyte retrieval for assisted reproduction. *Cochrane Database Syst Rev.* 2013;(1):CD004829.
21. Law SK, Li T. Acupuncture for glaucoma. *Cochrane Database Syst Rev.* 2013;(5):CD006030.
22. 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):CD003281.
23. Li S, Yu B, Zhou D, et al. Acupuncture for attention deficit hyperactivity disorder (ADHD) in children and adolescents. *Cochrane Database Syst Rev.* 2011;(4):CD007839.
24. Lim CE, Ng RW, Xu K, et al. Acupuncture for polycystic ovarian syndrome. *Cochrane Database Syst Rev.* 2016;(5):CD007689.
25. Linde K, Allais G, Brinkhaus B, et al. Acupuncture for the prevention of episodic migraine. *Cochrane Database Syst Rev.* 2016a;(6):CD001218.
26. Linde K, Allais G, Brinkhaus B, et al. Acupuncture for the prevention of tension-type headache. *Cochrane Database Syst Rev.* 2016b;(4):CD007587.
27. Manheimer E, Cheng K, Linde K, et al. Acupuncture for peripheral joint osteoarthritis. *Cochrane Database Syst Rev.* 2010; (1):CD001977.
28. Manheimer E, Cheng K, Wieland LS, et al. Acupuncture for treatment of irritable bowel syndrome. *Cochrane Database Syst Rev.* 2012;(5):CD005111.
29. 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.
30. NCCN Clinical Practice Guidelines in Oncology ©2023 National Comprehensive Cancer Network, Inc. For additional information visit the NCCN website: <http://www.nccn.org>. Accessed on January 30, 2023.
 - Adult Cancer Pain (V2.2022). Revised June 27, 2022.
 - Antiemesis (V2.2022). Revised March 23, 2022.
 - Palliative Care (V1.2023). Revised January 30, 2023.
31. Paley CA, Johnson MI, Tashani OA, Bagnall AM. Acupuncture for cancer pain in adults. *Cochrane Database Syst Rev.* 2015; (10):CD007753.
32. 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.

33. Richmond J, Hunter D, Irrgang J, et al.; American Academy of Orthopaedic Surgeons. Treatment of osteoarthritis of the knee (nonarthroplasty). *J Am Acad Orthop Surg*. 2009; 17(9):591-600.
34. Smith CA, Collins CT, Crowther CA, Levett KM. Acupuncture or acupressure for pain management in labour. *Cochrane Database Syst Rev*. 2011;(7):CD009232.
35. Smith CA, Armour M, Dahlen HG. Acupuncture or acupressure for induction of labour. *Cochrane Database Syst Rev*. 2017; (10):CD002962.
36. Smith CA, Armour M, Lee MS, et al. Acupuncture for depression. *Cochrane Database Syst Rev*. 2018;(3):CD004046.
37. Smith CA, Armour M, Zhu X, et al. Acupuncture for dysmenorrhoea. *Cochrane Database Syst Rev*. 2016;(4):CD007854.
38. Trinh K, Graham N, Irmich D, et al. Acupuncture for neck disorders. *Cochrane Database Syst Rev*. 2016;(5):CD004870.
39. U.S. Department of Health and Human Services. Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. 2019. Available at: <https://www.hhs.gov/sites/default/files/pmtf-final-report-2019-05-23.pdf>. Accessed on January 9, 2023.
40. Veterans Affairs/ Department of Defense. VA/DoD Clinical Practice Guideline for Opioid Therapy for Chronic Pain. V3. 2017. Available at: <https://www.healthquality.va.gov/guidelines/Pain/cot/VADoDOTCPG022717.pdf>. Accessed on January 9, 2023.
41. Walshe M, Smith M, Pennington L. Interventions for drooling in children with cerebral palsy. *Cochrane Database Syst Rev*. 2012;(11):CD008624.
42. Wang Y1, Zhishun L, Peng W, et al. Acupuncture for stress urinary incontinence in adults. *Cochrane Database Syst Rev*. 2013;(7):CD009408.
43. Wei ML, Liu JP, Li N, Liu M. Acupuncture for slowing the progression of myopia in children and adolescents. *Cochrane Database Syst Rev*. 2011;(9):CD007842.
44. White AR, Rampes H, Liu JP, et al. Acupuncture and related interventions for smoking cessation. *Cochrane Database Syst Rev*. 2014;(1):CD000009.
45. Wong V, Cheuk DK, Chu V. Acupuncture for hypoxic ischemic encephalopathy in neonates. *Cochrane Database Syst Rev*. 2013;(1):CD007968.
46. Wong V, Cheuk DK, Lee S, Chu V. Acupuncture for acute management and rehabilitation of traumatic brain injury. *Cochrane Database Syst Rev*. 2013;(3):CD007700.
47. World Health Organization (WHO). Evidence Based Acupuncture. Evidence Summaries. Available at: [Acupuncture: An Overview of Scientific Evidence \(evidencebasedacupuncture.org\)](https://www.who.int/evidence-based-acupuncture). Accessed on January 9, 2023.
 - Allergic Rhinitis. Developed 2018.
 - Anxiety. Developed 2018.
 - Cancer Pain. Developed 2018.
 - Menopausal Symptoms. Developed 2021.
 - Pain. Developed 2017.
 - Pediatric Acupuncture. Developed 2019.
 - Plantar Fasciitis. Developed 2017.
48. Zhang Y, Peng W, Clarke J, Liu Z. Acupuncture for uterine fibroids. *Cochrane Database Syst Rev*. 2010;(1):CD007221.
49. Zhu X, Hamilton KD, McNicol ED. Acupuncture for pain in endometriosis. *Cochrane Database Syst Rev*. 2011;(9):CD007864.
50. Zia FZ, Olaku O, Bao T, et al. The National Cancer Institute's Conference on Acupuncture for Symptom Management in Oncology: State of the Science, Evidence, and Research Gaps. *J Natl Cancer Inst Monogr*. 2017; 2017(52).

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History

Status	Date	Action
Reviewed	02/16/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated Discussion and References sections.
Revised	02/17/2022	MPTAC review. Updated Clinical Indications to include medically necessary indications for cancer pain, tension headaches, migraines and back pain. Added indications for when continued therapy is medically necessary. Updated Discussion and References sections.
Reviewed	08/12/2021	MPTAC review. Updated Discussion and References sections.
Reviewed	08/13/2020	MPTAC review. Updated Discussion and References sections. Reformatted Coding section.
Reviewed	08/22/2019	MPTAC review. Updated Discussion and References sections.
Reviewed	09/13/2018	MPTAC review. Updated Rationale, Discussion and References sections.
	05/02/2018	The document header wording updated from “Current Effective Date” to “Publish Date.”
Reviewed	08/03/2017	MPTAC review. Updated Discussion and References sections.
Reviewed	11/03/2016	MPTAC review. Updated Discussion and References sections.
Revised	11/05/2015	MPTAC review. Removed criteria regarding pacemaker or automatic implantable cardioverter-defibrillator (AICD) from the Clinical Indications for nausea and vomiting and osteoarthritis of the hip or knee. Removed criteria regarding radiographic evidence and absence of other causes of arthritis from the Clinical Indications for osteoarthritis of the hip or knee. Updated Description, Discussion, References and Index sections. Removed ICD-9 codes from Coding section.
Reviewed	08/06/2015	MPTAC review. Updated References section.
Reviewed	08/14/2014	MPTAC review. Updated References section.
Reviewed	08/08/2013	MPTAC review.
Reviewed	08/09/2012	MPTAC review. Updated Rationale and References sections. Updated Coding section to remove revenue codes 0374 and 2101.
Reviewed	08/18/2011	MPTAC review. Updated Coding, Rationale and References sections.
Reviewed	08/19/2010	MPTAC review.
Revised	08/27/2009	MPTAC review. Deleted “bleeding disorders” from medically necessary position statements. Updated Background and References sections. Updated Coding section with 10/01/2009 ICD-9 changes.
Reviewed	08/28/2008	MPTAC review.
Reviewed	08/23/2007	MPTAC review. Clarified position statement regarding the use of acupuncture in the presence of bleeding disorders, AICDs, or pacemakers. Updated Coding and References sections.
New	09/14/2006	MPTAC review. Transferred content from ANC.00002 Acupuncture to new Clinical Guideline CG-ANC-03 Acupuncture. Not Medically Necessary indications in new guideline previously considered Investigational/Not Medically Necessary. Coding updated; removed CPT 97780, 97781 deleted 12/31/04.
Revised	06/08/2006	MPTAC review. Added limits to use of acupuncture for individuals with pacemakers, AICDs, or bleeding disorders; added the use of acupuncture for the treatment of

		chronic osteoarthritis of the hip and knee as medically necessary; revised Rationale and References sections.
	11/17/2005	Added reference for Centers for Medicare and Medicaid Services (CMS) – National Coverage Determination (NCD).
Revised	09/22/2005	

Federal and State law, as well as contract language, and Medical Policy take precedence over Clinical UM Guidelines. We reserve the right to review and update Clinical UM Guidelines periodically. Clinical guidelines approved by the Medical Policy & Technology Assessment Committee are available for general adoption by plans or lines of business for consistent review of the medical necessity of services related to the clinical guideline when the plan performs utilization review for the subject. Due to variances in utilization patterns, each plan may choose whether to adopt a particular Clinical UM Guideline. To determine if review is required for this Clinical UM Guideline, please contact the customer service number on the member's card.

Alternatively, commercial or FEP plans or lines of business which determine there is not a need to adopt the guideline to review services generally across all providers delivering services to Plan's or line of business's members may instead use the clinical guideline for provider education and/or to review the medical necessity of services for any provider who has been notified that his/her/its claims will be reviewed for medical necessity due to billing practices or claims that are not consistent with other providers, in terms of frequency or in some other manner.

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