



CIGNA MEDICAL COVERAGE POLICY

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Subject Acupuncture

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Coverage Policy

Acupuncture is specifically excluded under many benefit plans. Please refer to the applicable benefit plan document to determine benefit availability and the terms, conditions and limitations of coverage.

If coverage is available for acupuncture, the following conditions of coverage apply.

CIGNA covers acupuncture in adults as medically necessary for any of the following indications:

- nausea and vomiting associated with pregnancy
- nausea and vomiting associated with chemotherapy
- postoperative nausea and vomiting
- postoperative dental pain, if the treatment of the dental condition was covered under the medical benefit
- headache
- back pain
- neck pain
- knee pain

CIGNA does not cover acupuncture for any other indication, because it is considered not medically necessary and/or experimental, investigational or unproven.

General Background

Acupuncture is a form of complementary and alternative medicine that has been widely practiced for many centuries. It involves the stimulation of specific anatomical locations on the skin through the penetration of fine needles, with the goal of relieving pain or treating disease. Stimulation can be accomplished manually (i.e., by a twisting motion of the hand) or through such methods as electrical stimulation (i.e., electroacupuncture), heating, laser, pressure, and herb moxibustion.

The theory of acupuncture is based on the assumption that there are patterns of energy flow (i.e., Qi) through the body that are essential for an individual's health. Proponents of acupuncture contend that illness can be traced to the imbalance of the Qi that runs in meridians or channels within the body. The insertion of needles in specific locations in various combinations and patterns along these meridians is claimed to restore the orderly energy flow, resulting in a return to a healthy state.

Acupuncture has been proposed as a treatment for acute and chronic pain conditions, including surgical analgesia, postoperative, musculoskeletal, neurological, vascular, and craniomandibular pain as well as the pain of malignancy. It has also been investigated as a treatment modality for a wide variety of other conditions, such as asthma, addictive behavior, nausea, vomiting, infertility, allergic rhinitis, depression, and bowel dysfunction, and as a weight-reduction method.

The clinical utility of acupuncture is widely debated. Determining the clinical efficacy of acupuncture is challenging primarily because of the difficulty of designing randomized trials with appropriate blinding of both patients and providers. Many studies lack appropriate controls, blinding procedures, adequate study size, randomization and/or consistent outcome measures. The robustness of the effects of acupuncture is debatable, and its clinical value continues to be questioned. Nonetheless, despite the poor quality of evidence, data exist to support acupuncture's possible usefulness as a sole method of treatment for some conditions and as an adjunctive procedure for other conditions when conventional treatment (e.g., massage and physical therapy, medications, rest, exercise) has failed.

Controls for comparing real acupuncture (also referred to as verum acupuncture) typically include a placebo, sham acupuncture, standard treatment, or no treatment. Sham acupuncture is the most often used control in studies evaluating the efficacy of acupuncture. However, there is no standardized method for employing sham acupuncture and no consensus on needle placement, making it difficult to generalize findings across studies. The goal of applying sham acupuncture is to refrain from stimulating acupuncture points. In many studies, sham is done at irrelevant acupuncture sites, however, evidence has shown sham acupuncture evokes physiological responses. Because the evidence suggests that sham acupuncture is not truly a physiologically neutral event, its use as a control in clinical trials is debatable. It is difficult to distinguish between the specific effects of treatment versus that of the placebo. Many trials have reported that the ratio of improvement in sham groups was substantially higher than in truly inert placebo groups (Ezzo, et al., 2000). Although initially believed to have no effect, some researchers contend that needle placement in any position invokes a biological response that may interfere with the interpretation of findings.

Additionally, there is no consensus in the scientific literature on the optimal number of acupuncture treatments to administer. In general, depending on the condition, a course of acupuncture may involve one to two treatments

per week for several weeks. Although session numbers vary widely across studies, the treatment regimen employed in clinical trials typically ranges from four to 12 sessions, provided on a weekly basis.

A majority of states provide licensure or registration for acupuncture practitioners, although the scope of practice allowed under state requirements varies. The National Institutes of Health (NIH) Consensus Panel and the U.S. Food and Drug Administration (FDA) consider acupuncture safe when performed by qualified practitioners using sterile needles. The FDA requires that sterile, nontoxic needles be used and that they be labeled for single use by qualified practitioners. Acupuncture appears to be a relatively safe treatment with rare serious adverse side effects when performed by qualified practitioners who consistently adhere to the recommendations of the FDA regarding the use of sterile needles.

The published, peer-reviewed scientific literature provides sufficiently strong evidence to indicate that acupuncture is safe and effective for the treatment of postoperative nausea and vomiting, nausea and vomiting associated with pregnancy or chemotherapy, and postoperative dental pain (NIH, 1997; Lao, et al., 1995; Lao, et al., 1999; Dundee, et al., 1989; Smith, et al., 2002; Smith and Crowther, 2002; Knight, et al., 2001). There is also sufficient data in the peer-reviewed, published scientific literature supporting safety and efficacy for the use of acupuncture as an adjunctive treatment modality for headaches, back pain, neck pain, and osteoarthritic knee pain.

Headaches

Evidence in the medical literature evaluating the safety and effectiveness of acupuncture as a treatment for headaches consists largely of randomized controlled trials, case reports/series, and systematic reviews. Although many of the clinical trials have limitations and do not lead to strong, definitive conclusions, they are suggestive of improved clinical outcomes (Sun, et al., 2008; Endres, et al., 2007; Alecrim-Adrade, et. al., 2007; Diener, et al., 2006; Coeytaux, et al., 2005; Vickers, et al., 2004; Malchert, et al., 2004; Malchert, et al., 2003; Allais, et al., 2003).

Sun and Gan (2008) recently published a systematic review evaluating the efficacy of acupuncture for treating various types of chronic headache. A total of 31 trials, using various sham designs, involving 3916 subjects were included in their review. Response rates (both early and late) of the acupuncture groups were significantly higher and showed a trend in favor of acupuncture. Furthermore, the authors noted that acupuncture was superior to medication therapy for headache intensity, headache frequency, physical function and response rate.

Data from randomized controlled trials has shown acupuncture to be effective for the treatment of various types of headaches, including migraine, tension-type and chronic daily headaches. Most of the studies compared acupuncture to sham acupuncture as the control group while some compared acupuncture to standard medical management or other forms of treatment such as transcutaneous nerve stimulation (TENS). Endres et al. (2007) reported that tension-type headache improves after acupuncture treatment, although the authors noted the rationale for the effect is not clearly established. Acupuncture has also been shown to reduce the frequency of migraine headache (Alecrim-Adrade, et al., 2007; Diener, et al., 2006; Vickers, et al., 2004). In addition, the study by Vickers, et al. (2004) supported the use of less medication per year, fewer visits to general practitioners, and use of fewer sick days per year in the acupuncture group when compared to a control group (i.e., subjects receiving only standard care). Coeytaux and associates (2005) evaluated acupuncture as an adjunctive treatment for chronic daily headaches and noted that acupuncture did improve clinical outcomes when used as an adjunct to medical management. Allais et al. (2003) reported acupuncture as the most effective treatment of migraine headaches in comparison to transcutaneous nerve stimulation (TENS) and infrared laser therapy.

Cochrane reviews have been published supporting acupuncture as having benefit for the treatment of idiopathic headaches, migraine headaches and tension-type headaches (Malchert, et al., 2001; Linde, et al., 2009a, Linde, et al., 2009b). In an earlier review, Malchert et al. (2001) stated that the evidence does support the value of acupuncture for the treatment of idiopathic headaches, although the quality and amount of evidence were not fully convincing. Linde et al. (2009a) reviewed trials that evaluated whether or not acupuncture was effective in the prophylaxis of migraine headache and concluded, "Collectively, the studies suggest that migraine patients benefit from acupuncture, although the correct placement of needles seems to be less relevant than is usually thought by acupuncturists." In a more recent Cochrane Review published by Linde, et al. (2009b) the author's evaluated acupuncture for treatment of tension-type headache and reviewed 11 trials in total. The authors

concluded the available evidence does suggest that acupuncture could be a valuable non-pharmacological tool in patients with frequent episodic or chronic tension-type headaches.

Pain Conditions

Acupuncture has also been investigated for the treatment of pain conditions such as neck and back pain; although some of the evidence supporting the efficacy of acupuncture for these treatments has been contradictory. Various studies have compared the effectiveness of acupuncture to that of sham acupuncture, placebo, and massage therapy, as well as to the effectiveness of self-care, for low back pain and neck pain.

Neck Pain: Neck pain is a common condition and is often treated with acupuncture. Although the evidence evaluating acupuncture as an alternative or adjunctive form of treatment for neck pain is limited, some authors report that acupuncture is beneficial in the treatment of neck pain (Irnich et al., 2001; Blossfeldt, 2004) while others claim there is a lack of evidence to support acupuncture as an effective treatment modality (White and Ernst, 1999). Nonetheless, while more robust research may be useful, the available evidence does suggest that acupuncture is a worthy option as an adjunct to other neck pain treatments.

The available evidence is primarily in the form of systematic reviews (with some overlapping of studies), randomized controlled trials, and prospective clinical trials. The authors of one systematic review concluded that there was no convincing evidence to support the effectiveness of acupuncture for the treatment of neck pain after the authors reviewed 14 randomized controlled trials (White and Ernst, 1999). Nonetheless, the results of a Cochrane Review (Trinh, et al., 2007) suggested there was moderate evidence to support acupuncture was more effective for pain relief compared to sham acupuncture, decreased pain at short-term follow-up, and was more effective than inactive treatments for relieving pain post-treatment and was maintained at short-term follow-up. More recently in a publication regarding the results of the “Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorder”, Hurwitz et al. (2008) reported, “The evidence suggests that manual and supervised exercise interventions, low-level laser therapy, and perhaps acupuncture are more effective than no treatment, sham, or alternative interventions.” However, the authors also noted none of the active treatments were clearly superior to any other in either the short- or long-term.

Despite limitations to the evidence, randomized controlled trials have supported the effectiveness of acupuncture as a treatment of neck pain. In a single-blind prospective study Vas et al., (2006) reported acupuncture was more effective compared to a placebo control (TENS placebo). The acupuncture group had a change in mean intensity of neck pain that was 62.2% compared to 20.4% among the control group. Witt and associates (2006) conducted a prospective, multicenter, randomized three-arm study to investigate the effectiveness of acupuncture combined with routine care in patients with chronic neck pain compared to treatment with routine care alone (the Acupuncture in Routine Care [ARC] Study, conducted in Germany). A total of 3451 patients accepted randomization; a total of 13,846 patients were included in the intention to treat analysis (nonrandomized group). After three months, neck pain and disability data were available for 89.6% of the patients and indicated that neck pain and disability improved by 16.2 to 38.3 and by 3.9 to 50.5, (difference of 12.3, [p<0.001]) in the acupuncture and control group, respectively. The treatment success was maintained through six months. In another randomized controlled trial, White and associates (2004) compared acupuncture to placebo for neck pain. Pain improved in both the acupuncture group and the placebo group, although the acupuncture group improved 6.3 mm (CI, 1.4–11.3mm) more than the placebo group, a statistically significant difference (p=0.01). However, the authors noted the difference was not clinically significant because it demonstrated a difference of just 12% between acupuncture and placebo. Irnich and colleagues (2001) conducted a prospective, randomized, placebo-controlled trial evaluating the efficacy of acupuncture compared to conventional massage therapy for the treatment of chronic neck pain. One week after five treatment sessions the acupuncture group showed a significantly greater improvement in motion related pain compared to the massage group (p=0.0052) although not when compared to sham laser group. The acupuncture group showed the best results in most secondary outcome measures.

Back Pain: The evidence reveals conflicting/contradictory reports regarding the efficacy of acupuncture for the treatment of (primarily) low back pain, some authors report that acupuncture may be beneficial (Carlsson, et al., 2001; Leibing, et al., 2002; Molsberger, et al., 2002) while others report the benefit is unclear (Ernst and White, 1998; van Tulder, et al., 1999; Cherkin, et al., 2003; Kerr, et al., 2003).

Evidence in the form of systematic reviews, randomized controlled trials, and observational studies can be found reporting favorable outcomes for the use of acupuncture in treating back pain. Yuan et al. (2008) published a

systematic review of RCTs evaluating the effectiveness of acupuncture for nonspecific low back pain. After reviewing 23 trials the authors concluded there was moderate evidence that acupuncture is more effective than no treatment, there was strong evidence that there is no significant difference between acupuncture and sham acupuncture for short-term pain relief and there was strong evidence supporting acupuncture as a useful supplement to other forms of conventional therapy for low back pain. Manheimer and associates (2005) published the results of a meta-analysis that was conducted to assess acupuncture's effectiveness for treating low back pain. Although the quality and quantity of the trials varied, 33 randomized controlled trials met inclusion criteria for the review. According to the results of the review, acupuncture effectively relieved chronic low back pain compared to no treatment, however, there was no evidence to indicate that acupuncture is more effective than other active therapies.

Some studies suggest acupuncture is superior to no treatment or sham therapy for short-term relief of back pain. Haake et al. (2007) reported the results of a randomized controlled trial (n=1162) evaluating whether acupuncture is more efficacious in reducing chronic low back pain than conventional therapy or sham acupuncture. Both acupuncture groups had improvement in pain intensity or back specific disability without concomitant therapies when compared to the conventional treatment group. Brinkhaus et al. (2006) reported acupuncture was more effective in improving pain than no acupuncture in patients with chronic low back pain, although there were no significant differences between acupuncture and minimal acupuncture. The study group consisted of 298 patients, randomized to treatment with acupuncture, minimal acupuncture, or a waiting list control. Inoue et al. (2006) randomized 31 patients with low back pain to receive either acupuncture or sham acupuncture performed at the most painful point on the lower back of patients. Their results suggested that acupuncture at the most painful point provided immediate relief of low back pain. Hsieh, et al. (2006) compared acupuncture (n= 64) to physical therapy (n=65) in patients with chronic low back pain and concluded that acupuncture was more efficacious in relieving back pain than physical therapy.

In a published observational study of patients with chronic low back pain (n=2564), conducted by Weidenhammer et al. (2007), the study results indicated that after six months follow-up, 45.5% of patients had clinically significant improvement in functional ability scores, and the mean number of days with pain was decreased by half.

Thomas et al. (2005) conducted a randomized controlled trial evaluating acupuncture as a treatment for chronic low back pain. The authors compared outcomes in two populations: patients who received traditional acupuncture in addition to conventional primary care (n=159) and patients who received usual care only (n=80) for persistent nonspecific low back pain. Traditional acupuncture care was safe and acceptable to patients with non-specific low back pain and both acupuncture and usual care were associated with clinically significant improvement at 12 and 24-month follow-up. Adding acupuncture was significantly more effective in reducing bodily pain than usual care at 24-month follow-up.

In a Cochrane review, Furlan et al. (2004) reported that no firm conclusions can be drawn regarding the effectiveness of acupuncture as a treatment for acute low back pain. Nonetheless, the results of their study found acupuncture to be more effective for pain relief and functional improvement of chronic low back pain than either no treatment or short-term sham treatment when patients were evaluated immediately after receiving treatment. In addition, the authors reported that acupuncture is no more effective than other conventional and "alternative" treatments and requires more high-quality trials.

Meng et al. (2003) conducted a randomized controlled trial to determine whether acupuncture was a safe and effective adjunct treatment to standard therapy in older patients with persistent low back pain. The subjects studied were age 60 or older and had experienced low back pain for longer than 12 weeks. The acupuncture group had greater improvement of symptoms, and fewer patients in that group developed medication-related side effects. In summarizing the available data, the evidence is limited; it does, however, support the claim that acupuncture produces positive patient outcomes when used as an adjunctive form of treatment.

Osteoarthritic Knee Pain: Researchers also suggest that acupuncture is an effective complement to standard care for osteoarthritis of the knee. Although clinical trials have yielded inconsistent results for a variety of reasons, there is some evidence supporting the efficacy of acupuncture as an adjunct or alternative treatment for osteoarthritis of the knee (Miller, et al., 2009; Jubb, et al., 2008; Manheimer, et al., 2007; White, et al., 2007; Williamson, et al., 2007; Scharf, et al., 2006; Witt, et al., 2006; Witt, et al., 2005; Berman, et al., 2004; Vas, et al., 2004; Ezzo, et al., 2001).

Miller and colleagues (2009) published the results of a randomized controlled clinical trial (n=55) assessing the efficacy of acupuncture as an adjunct therapy to standard care in a group of elderly patients with osteoarthritis of the knee. Primary outcome measures were changes in Knee Society Score (KSS) and in KSS function and pain ratings at therapy onset, after eight weeks and at 12 weeks. The authors noted significant improvements in all scores for both groups at eight weeks and 12 weeks compared with baseline. Acupuncture had a longer lasting effect—significant differences between the intervention group and control group in the KSS was not noticeable until after 12 weeks (eight weeks of therapy and one month follow-up).

Jubb et al. (2008) conducted a randomized controlled trial to monitor the effect of acupuncture on patients with symptomatic osteoarthritis of the knee. The study population consisted of 64 subjects: 34 who received acupuncture (manual and electroacupuncture) and 34 who received non-penetrating sham ('placebo' needle) acupuncture with a primary endpoint of change in pain after a course of 10 treatments, measured by the WOMAC pain subscale. At five weeks, the authors reported a statistically significant improvement ($p=0.035$) in favor of the acupuncture group however at nine weeks after treatment there was no longer a significant difference between the groups. Within group analysis showed a statistically significant difference in WOMAC stiffness or function and visual analog scale for pain (secondary outcomes) one month following treatment (i.e., nine weeks) although the difference between the groups had been lost.

Evidence in the form of systematic reviews can be found to support the effectiveness of acupuncture for the treatment of knee pain. Manheimer et al. (2007) published the results of a systematic review and meta-analysis of the effects of acupuncture for treating osteoarthritis of the knee. When evaluating efficacy, compared with sham acupuncture, real acupuncture provided clinically irrelevant short-term and long-term (six months after baseline) improvement in pain and function. When compared to waiting list and usual care groups, the patients reported clinically relevant short-term improvement in pain and function. White et al. (2007) published the results of a systematic review and meta-analysis of evidence from randomized controlled trials on acupuncture's effect in reducing pain and increasing function in patients with chronic knee pain. The authors noted that for pain reduction and improvement of function in the short term, acupuncture was significantly superior compared to sham acupuncture, and remained significantly superior at long-term outcome. Acupuncture was also superior compared to no additional care for both pain and function, although the authors reported that results were weakened by heterogeneity. The authors acknowledged there was some evidence that acupuncture is superior to placebo for chronic knee pain; however, further long-term large-scale studies are needed to provide a more definitive conclusion regarding acupuncture for knee arthritis.

Randomized controlled trials have also demonstrated the efficacy of acupuncture when used to treat osteoarthritic knee pain. Williamson and colleagues (2007) reported the results of a trial evaluating patients who received acupuncture (n=60), physiotherapy (n=60) or standard management (n=61) prior to knee surgery. At seven weeks, the acupuncture group had lower knee scores compared to the other groups, although this was not present at 12 weeks. Visual analog scores were lower at 12 weeks for the acupuncture and physiotherapy groups. Scharf et al. (2006) compared acupuncture with sham acupuncture and conservative therapy in patients with chronic osteoarthritic knee pain and noted the acupuncture groups had higher success rates when compared to conservative care. There was no difference between acupuncture groups. Witt and associates (2006) evaluated a group of patients with chronic pain (due to osteoarthritis of the knee and hip) as part of the Acupuncture in Routine Care Study (ARC). The authors compared acupuncture to control subjects who did not receive acupuncture and reported improvement in WOMAC scores, and quality of life improvements which were more pronounced in the acupuncture group compared to the control group, with treatment success maintained through six months. Acupuncture plus routine care was associated with clinical improvement in patients with osteoarthritis of the knee or hip. In 2005 Witt and colleagues investigated the efficacy of acupuncture compared with minimal acupuncture and with no acupuncture in patients with pain and dysfunction resulting from osteoarthritis of the knee. The results of the study indicated that the patients who received acupuncture had less pain and better function after eight weeks than patients who received minimal acupuncture or no acupuncture; significant improvements in WOMAC subscales; and significantly better results for almost all secondary outcome measures than did the other groups (Witt, et al., 2005).

In a randomized controlled phase III clinical trial, Berman and associates (2004) reported on the effectiveness of acupuncture as an adjunctive therapy for osteoarthritis of the knee. The multi-site study involved 570 patients

with osteoarthritis of the knee. Participants were randomly assigned to receive one of three treatments: acupuncture, sham acupuncture or participation in a control group that followed the Arthritis Foundation's self-help course for managing their condition. Patients in the true acupuncture group had greater improvement in WOMAC scores than the sham group at eight weeks. At 26 weeks, the acupuncture group had significantly greater improvement than the sham group in WOMAC function score, WOMAC pain score and patient global assessment.

Vas et al. (2004) conducted a randomized, controlled, single-blind trial evaluating the efficacy of acupuncture as a complementary method to the pharmacological treatment of osteoarthritis of the knee. The authors selected 97 patients to participate in the study. The patients were randomly separated into two groups: one group received acupuncture for 12 weeks plus diclofenac (n=48), and the second group received placebo acupuncture for 12 weeks plus diclofenac (n=49). The results indicate the WOMAC index presented a greater and significant reduction in the intervention group than in the control group. The same result was observed in the pain VAS. A reduction of 53.9 was observed in the total accumulated number of diclofenac tablets for the intervention group compared to the control group, and the profile of quality of life in the chronically ill (PQLC) results indicated acupuncture treatment produces significant changes in physical capability and psychological functioning. In terms of reducing pain and rigidity, and improving physical functioning and health related quality of life, the authors indicated that acupuncture as a complementary therapy to pharmacological treatment of osteoarthritis of the knee is more effective than pharmacological treatment alone.

Ezzo et al. (2001) reviewed trials of acupuncture for osteoarthritis of the knee. Their reported findings suggest limited evidence that, for pain and function, acupuncture is more effective than being wait-listed for treatment or having treatment as usual. For pain, there was strong evidence that real acupuncture is more effective than sham acupuncture; for function, however, evidence as to the relative effectiveness of real versus sham acupuncture was inconclusive. There was also insufficient evidence to determine whether the efficacy of acupuncture is similar to that of other treatments. Overall, the evidence suggests that acupuncture may play a role in the treatment of osteoarthritis, particularly for the treatment of pain.

Other Indications

The volume of literature reporting on the efficacy of acupuncture for other indications is extensive, especially for conditions including, but not limited to, menstrual cramps, tennis elbow, fibromyalgia, myofascial pain, carpal tunnel, temporomandibular joint pain, and correction of breech presentation, to name a few. However, the overall body of evidence is generally of poor quality, consisting of numerous uncontrolled studies, small case series, case reports, and anecdotal information.

In relation to other conditions for which acupuncture is used, the data are insufficient to support efficacy for the following reasons:

- Sample sizes are generally inadequate, with most studies failing to include sample sizes large enough to identify real differences between treatment and control groups.
- Data on long-term outcomes are deficient, with few studies reporting on the lasting effects of acupuncture.
- Patient selection criteria have not been established; nor have optimal treatment techniques, number of visits or needle placement.
- Well-designed, large-population, randomized, controlled clinical trials are lacking.

Furthermore, for many of the clinical trials that have been conducted regarding these conditions there is failure to adequately demonstrate the true treatment effect of acupuncture. There is no consensus on optimal sham needle placement or optimal sham technique. Much of the available data is inconsistent and often contradictory. Several systematic reviews of the literature involving acupuncture have concluded that, while acupuncture may be superior to various controls, there is insufficient evidence to conclude that it is better than placebo for most indications.

In 2003, the Centers for Medicare & Medicaid Services (CMS) commissioned a review of the literature on acupuncture for fibromyalgia and osteoarthritis from the Agency for Healthcare Research and Quality (AHRQ). The AHRQ concluded the following:

- There is insufficient evidence to conclude that acupuncture has efficacy for the treatment of fibromyalgia.
- The currently available evidence is insufficient to determine whether acupuncture has a specific beneficial effect on osteoarthritis.

Professional Societies/Organizations

Professional societies and organizations have studied and commented on the efficacy of acupuncture for various diseases and conditions. The World Health Organization (WHO) conducted a symposium in 1979 on acupuncture, with a follow-up symposium in 1996. The participants initially developed a list of 43 diseases that might benefit from acupuncture; however, the list was not created based on formal clinical trials. A review published by the WHO (2003) evaluated controlled clinical trials published up to 1998 and early 1999 and categorized disorders according to evidence. According to the report, acupuncture may be appropriate for numerous conditions. The WHO has also specifically defined conditions in which acupuncture should be avoided and specific precautions to be taken when performing acupuncture (WHO, 2003).

The NIH Consensus Statement on acupuncture reviewed more than 2,000 studies and found evidence to support acupuncture as an adjunct or alternative treatment for a number of conditions (NIH, 1997). According to the NIH Consensus Statement, reasonable evidence indicates that acupuncture may be useful as an adjunctive or alternative treatment, or may be included as part of a comprehensive management program, for the following conditions:

- menstrual cramps
- tennis elbow
- fibromyalgia
- osteoarthritis
- low back pain
- myofascial pain
- epicondylitis
- addiction
- headache
- asthma
- stroke rehabilitation
- carpal tunnel syndrome

Recommendations by the United Kingdom National Health Service (NHS) Centre for Reviews and Dissemination (2001) indicate, "Acupuncture is most often used in the NHS as a second- or third-line treatment for chronic pain. A typical patient has arthritis, back pain or headache and is not responding to conventional management, not tolerating medication, or experiencing recurrent pain. Current levels of evidence from randomized controlled trials of acupuncture for chronic pain are probably sufficient to justify this practice. However, there is insufficient evidence to warrant first-line treatment."

The Alberta Heritage Foundation for Medical Research conducted a technology assessment of acupuncture (Tait, et al., 2002). Their objective was to provide an overview of evidence from systematic reviews and meta-analysis on the effectiveness of acupuncture for any condition that had been assessed in that manner. The authors reported, "Among the studies reviewed there were wide variations of treatments such as manual or electrical stimulation, number of needles per treatment, technique of needle insertion, and frequency of treatment." Their conclusions confirmed previous reports of effectiveness for postoperative nausea/vomiting and dental pain. The evidence for other conditions such as idiopathic headaches, chronic pain, smoking and fibromyalgia is debatable and questionable, although some reviews indicate promising results. Furthermore, they reported that the results from the reviews for the previously mentioned conditions found acupuncture to be as effective in the short term as alternative interventions or no treatment.

The American College of Physicians (ACP) and American Pain Society developed evidence-based clinical practice guidelines for diagnosing and treating low back pain in the primary care setting. According to the guideline recommendations, acupuncture is considered a moderately effective nonpharmacologic therapy for treating chronic low back pain (Chou, et al., 2007).

The American Academy of Orthopaedic Surgeons (AAOS) published clinical practice guidelines for the treatment of osteoarthritis of the knee (AAOS, 2008). According to this guideline, due to conflicting evidence regarding the benefits of acupuncture, the AAOS was unable to recommend for or against the use of acupuncture as an adjunctive therapy for pain in patients with symptomatic osteoarthritis of the knee.

Summary

Despite the lack of strong scientific evidence, acupuncture is widely accepted as a form of complementary and alternative medicine for selected conditions, including treatment of postoperative nausea and vomiting, nausea and vomiting associated with pregnancy or chemotherapy, and postoperative dental pain. Recent clinical studies provide some evidence to support the effectiveness of acupuncture for the treatment of headaches, back and neck pain and osteoarthritis of the knee. Acupuncture may be a viable option as a method of adjunctive treatment for these conditions when other conventional modalities have failed.

There is insufficient evidence in the published, peer-reviewed scientific literature to conclude that acupuncture is effective for any indication other than those noted above, including, but not limited to, any of the following conditions:

- acute pain
- addictive behaviors, including chemical and tobacco addictions
- allergies
- as a weight reduction modality
- asthma
- attention-deficit/hyperactivity disorder
- bowel dysfunction
- bursitis
- carpal tunnel syndrome
- correction of breech presentation
- depression
- dermatitis or psoriasis
- dysmenorrhea
- epicondylitis (tennis elbow)
- fibromyalgia
- hypertension
- in lieu of traditional anesthesia
- infertility
- labor
- myofascial pain syndrome
- neuropathies
- pain of malignancy
- post-stroke rehabilitation
- reflex sympathetic dystrophy
- temporomandibular joint disorders (TMJ)
- tinnitus
- urinary incontinence (all types)

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Covered when medically necessary:

CPT [®] * Codes	Description
97810	Acupuncture, one or more needles without electrical stimulation; initial 15 minutes of personal one-on-one contact with the patient

97811	Acupuncture, one or more needles without electrical stimulation; each additional 15 minutes of personal one-one contact with the patient, with re-insertion of needle(s) (List separately in addition to code for primary procedure)
97813	Acupuncture, one or more needles with electrical stimulation; initial 15 minutes of personal one-on-one contact with the patient
97814	Acupuncture, one or more needles with electrical stimulation; each additional 15 minutes of personal one-one contact with the patient, with re-insertion of needle(s) (List separately in addition to code for primary procedure)

ICD-9-CM Diagnosis Codes	Description
525.9	Unspecified disorder of the teeth and supporting structures
536.2	Persistent vomiting
643.03	Mild hyperemesis gravidarum, antepartum
643.13	Hyperemesis gravidarum with metabolic disturbance, antepartum
643.23	Late vomiting of pregnancy, antepartum
643.83	Other vomiting complicating pregnancy, antepartum
715.96	Osteoarthritis, unspecified whether generalized or localized, lower leg
723.1	Cervicalgia
724.2	Lumbago
724.5	Unspecified backache
784.0	Headache
787.01	Nausea with vomiting
787.02	Nausea alone
787.03	Vomiting alone

*Current Procedural Terminology (CPT®) © 2008 American Medical Association: Chicago, IL.

References

1. Agency for Healthcare Research and Quality (AHRQ). Acupuncture for fibromyalgia. Technology assessment. 2003 Jun. Accessed January 22, 2008. Available at URL address: <http://www.ahrq.gov/clinic/techix.htm#completed>
2. Agency for Healthcare Research and Quality (AHRQ). Acupuncture for osteoarthritis. Technology assessment. 2003 Jun. Accessed January 22, 2008. Available at URL address: <http://www.ahrq.gov/clinic/techix.htm#completed>
3. Alecrim-Andrade J, Maciel-Júnior JA, Carnè X, Severino Vasconcelos GM, Correa-Filho HR. Acupuncture in Migraine Prevention: A Randomized Sham Controlled Study With 6-months Posttreatment Follow-up. Clin J Pain. 2008 Feb;24(2):98-105.
4. Alimi D, Rubino C, Pichard-Leandri E, Femand-Brule S, Dubreuil-Lemaire ML, Hill C. Analgesic effect of auricular acupuncture for cancer pain: a randomized, blinded, controlled trial. J Clin Oncol. 2003 Nov;21(22):4120-6.
5. Allais G, DeLorenzo C, Quirico PE, Airola G, Tolardo G, Mana O, Benedetto C. Acupuncture in the prophylactic treatment of migraine without aura: a comparison with flunarizine. Headache. 2002 Oct; 42(9):855-61.
6. Allais G, De Lorenzo C, Quirico PE, Lupi G, Airola G, Mana O, Benedetto C. Non-pharmacological approaches to chronic headaches: transcutaneous electrical nerve stimulation, laser therapy and acupuncture in transformed migraine treatment. Neurol Sci. 2003 May;24 Suppl2:S138-42.

7. American Academy of Orthopaedic Surgeons. Treatment of Osteoarthritis of the knee (non-arthroplasty). Full Guideline. December 6, 2008. Accessed January 30, 2009. Available at URL address: <http://www.aaos.org/Research/guidelines/guide.asp>
8. Berman BM. Clinical applications of acupuncture: an overview of the evidence. *J Altern Complement Med.* 2001;7Suppl 1:S111-8.
9. Berman BM, Lao L, Langenberg P, Lee WL, Gilpin AMK, Hochberg MC. Effectiveness of acupuncture as adjunctive therapy in osteoarthritis of the knee: a randomized, controlled trial. *Ann Intern Med.* 2004 Dec;141(2):901-10.
10. Berman BM, Singh BB, Lao L, Langenberg P, Li H, Hadhazy V, et al. A randomized trial of acupuncture as an adjunctive therapy in osteoarthritis of the knee. *Rheumatology (Oxford).* 1999 Apr;38(4):346-54.
11. Berman BM, Ezzo J, Hadhazy V, Swyers JP. Is acupuncture effective in the treatment of fibromyalgia? *J Fam Pract.* 1999 Mar;48(3):213-8.
12. Berman BM, Swyers JP, Ezzo J. The evidence for acupuncture as a treatment for rheumatologic conditions. *Rheum Dis Clin North Am.* 2000 Feb;26(1):103-15, ix-x.
13. Bier ID, Wilson J, Studt P, Shakleton M. Auricular acupuncture, education, and smoking cessation: a randomized, sham-controlled trial. *Am J Public Health.* 2002 Oct;92(10):1642-7.
14. Blossfeldt P. Acupuncture for chronic neck pain—a cohort study in an NHS pain clinic. *Acupunct Med.* 2004 Sep;22(3):146-51.
15. Brinkhaus B, Witt CM, Jena S, Linde K, Streng A, Wagenpfeil S, et al. Acupuncture in patients with chronic low back pain: a randomized controlled trial. *Arch Intern Med.* 2006 Feb 27;166(4):450-7.
16. Bullock ML, Kiresuk TJ, Sherman RE, Lenz SK, Culliton PD, Boucher TA, Nolan CJ. A large randomized placebo controlled study of auricular acupuncture for alcohol dependence. *J Subst Abuse Treat.* 2002 Mar;22(2):71-7.
17. Cardini F, Lombardo P, Regalia AL, Regaldo G, Zanini A, Negri MG, Panepuccia L, Todros T. A randomised controlled trial of moxibustion for breech presentation. *BJOG.* 2005 Jun;112(6):743-7.
18. Carlsson CP, Axemo P, Bodin A, Carstensen H, Ehrenroth B, Madegard-Lind I, Navander C. Manual acupuncture reduces hyperemesis gravidarum: a placebo-controlled, randomized, single-blind, cross-over study. *J Pain Symptom Manage.* 2000 Oct;20(4):273-9.
19. Carlsson CP, Sjolund BH. Acupuncture for chronic low back pain: a randomized placebo-controlled study with long-term follow-up. *Clin J Pain.* 2001 Dec;17(4):296-305.
20. Casimiro L, Brousseau L, Milne S, Robinson V, Wells G, Tugwell P. Acupuncture and electroacupuncture for the treatment of RA. *Cochrane Database Systematic Reviews.* In: The Cochrane Library, Issue 2. Copyright © 2005 The Cochrane Collaboration.
21. Ceccherelli F, Rigoni MT, Gagliardi G, Ruzzante L. Comparison of superficial and deep acupuncture in the treatment of lumbar myofascial pain: a double-blind randomized controlled study. *Clin J Pain.* 2002 May-Jun;18(3):149-53.
22. Centers for Medicare & Medicaid Services (CMS). Acupuncture for fibromyalgia; acupuncture for osteoarthritis. National coverage determination (NCD). Pub. 100-03. Effective 2004 Apr 16. Accessed January 22, 2008. Available at URL address: <http://www.umd.nycpic.com/cgi-bin/bookmgr/bookmgr.exe/BOOKS/PB200406/4.17?DT=20040601200013>
23. Chenot JF, Becker A, Leonhardt C, Keller S, Donner-Banzhoff N, Baum E, Pfinsten M, Hildebrandt J, Basler HD, Kochen MM. Use of complementary alternative medicine for low back pain consulting in

- general practice: a cohort study. *BMC Complement Altern Med*. 2007 Dec 18;7(1):42 [Epub ahead of print].
24. Cherkin DC, Eisenberg D, Sherman KJ, Barlow W, Kaptchuk TJ, Street J, Deyo RA. Randomized trial comparing traditional Chinese medical acupuncture, therapeutic massage, and self-care education for chronic low back pain. *Arch Intern Med*. 2001 Apr 23;161(8):1081-8.
 25. Cherkin DC, Sherman KJ, Deyo RA, Shekelle PG. A review of the evidence for the effectiveness, safety, and cost of acupuncture, massage therapy, and spinal manipulation for back pain. *Ann Intern Med*. 2003 Jun 3;138(11):898-906.
 26. Chou R, Qaseem A, Snow V, Casey D, Cross JT Jr, Shekelle P, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians; American College of Physicians; American Pain Society Low Back Pain Guidelines Panel. Diagnosis and treatment of low back pain: A joint clinical practice guideline from the American College of Physicians and the American Pain Society. October 2, 2007. Accessed February 2, 2009. Available at URL address: http://www.acponline.org/clinical_information/guidelines/
 27. Coeytaux RR, Kaufman JS, Kaptchuk TJ, Chen W, Miller WC, Callahan LF, Mann JD. A randomized, controlled trial of acupuncture for chronic daily headache. *Headache*. 2005 Oct;45(9):1113-23.
 28. Council of Acupuncture and Oriental Medicine Associates (CAOMA), Foundation for Acupuncture Research. Acupuncture and electroacupuncture. Evidence-based treatment guidelines. Calistoga (CA): Council of Acupuncture and Oriental Medicine Associates (CAOMA); 2004 Dec.
 29. Coyle ME, Smith CA, Peat B. Cephalic version by moxibustion for breech presentation. *The Cochrane Database of Systematic Reviews* 2007. In: *The Cochrane Library Issue 1*. Copyright © 2007The Cochrane Collaboration.
 30. David J, Townsend S, Sathanathan S, Kriss S, Doré CJ. The effect of acupuncture on patients with rheumatoid arthritis: a randomized, placebo-controlled cross-over study. *Rheumatology (Oxford)*. 1999 Sep;38(9):864-9.
 31. Diener HC, Kronfeld K, Boewing G, Lungenhausen M, Maier C, Molsberger A, Tegenthoff M, Trampisch HJ, Zenz M, Meinert R; GERAC Migraine Study Group. Efficacy of acupuncture for the prophylaxis of migraine: a multicentre randomised controlled clinical trial. *Lancet Neurol*. 2006 Apr;5(4):310-6.
 32. Endres HG, Böwing G, Diener HC, Lange S, Maier C, Molsberger A, Zenz M, Vickers AJ, Tegenthoff M. Acupuncture for tension-type headache: a multicentre, sham-controlled, patient-and observer-blinded, randomised trial. *J Headache Pain*. 2007 Oct;8(5):306-14. Epub 2007 Oct 23.
 33. Ernst E, White AR. Acupuncture as a treatment for temporomandibular joint dysfunction: a systematic review of randomized trials. *Arch Otolaryngol Head Neck Surg*. 1999 Mar;125(3):269-72.
 34. Ernst E, White AR. Acupuncture for back pain: a meta-analysis of randomized controlled trials. *Arch Intern Med*. 1998 Nov 9;158(20):2235-41.
 35. Ezzo J, Berman B, Hadhazy VA, Jadad AR, Lao L, Singh BB. Is acupuncture effective for the treatment of chronic pain? A systematic review. *Pain*. 2000 Jun;86(3):217-25.
 36. Ezzo J, Hadhazy V, Birch S, Lao L, Kaplan G, Hochberg M, Berman B. Acupuncture for osteoarthritis of the knee: A systematic review. *Arthritis Rheum*. 2001 Apr;44(4):819-25.
 37. Ezzo JM, Richardson MA, Vickers A, Allen C, Dibble SL, Issell BF, Lao L, Pearl M, Ramirez G, Roscoe JA, Shen J, Shivan JC, Streitberger K, Treish I, Zhang G. Acupuncture-point stimulation for chemotherapy-induced nausea or vomiting. *Cochrane Database of Systematic Reviews* 2006, Issue 2. Copyright © 2007The Cochrane Collaboration.

38. Ewies A, Olah K. Moxibustion in breech version--a descriptive review. *Acupunct Med.* 2002 Mar;20(1):26-9.
39. Filshie J, Hester J. Guidelines for providing acupuncture treatment for cancer patients - a peer-reviewed sample policy document. *Acupunct Med.* 2006 Dec;24(4):172-82.
40. Fink M, Wolkenstein E, Karst M, Gehrke A. Acupuncture in chronic epicondylitis: a randomized controlled trial. *Rheumatology (Oxford).* 2002 Feb;41(2):205-9.
41. França DL, Senna-Fernandes V, Cortez CM, Jackson MN, Bernardo-Filho M, Guimarães MA. Tension neck syndrome treated by acupuncture combined with physiotherapy: A comparative clinical trial (pilot study). *Complement Ther Med.* 2008 Oct;16(5):268-77. Epub 2008 Apr 9.
42. Furlan AD, van Tulder MW, Cherkin DC, Tsukayama H, Lao L, Koes BW, Berman BM. Acupuncture and dry-needling for low back pain. *Cochrane Database Systematic Reviews.* In: *The Cochrane Library, 2005 Issue 2.* Copyright © 2007 The Cochrane Collaboration.
43. Gosman-Hedstrom G, Claesson L, Klingenstierna U, Carlsson J, Olausson B, Frizell M, et al. Effects of acupuncture treatment on daily life activities and quality of life: a controlled, prospective, and randomized study of stroke patients. *Stroke.* 1998 Oct;29(10):2100-8.
44. Green S, Buchbinder R, Hetrick S. Acupuncture for shoulder pain. *Cochrane Database Systematic Reviews.* In: *The Cochrane Library, 2005 Issue 2.* Copyright © 2005 The Cochrane Collaboration.
45. Green S, Buchbinder R, Barnsley L, Hall S, White M, Smidt N, Assendelft W. Acupuncture for lateral elbow pain. *Cochrane Database Systematic Reviews.* In: *The Cochrane Library, 2005 Issue 4.* Copyright © 2007 The Cochrane Collaboration.
46. Haake M, Müller HH, Schade-Brittinger C, Basler HD, Schäfer H, Maier C, Endres HG, Trampisch HJ, Molsberger A. German Acupuncture Trials (GERAC) for chronic low back pain: randomized, multicenter, blinded, parallel-group trial with 3 groups. *Arch Intern Med.* 2007 Sep 24;167(17):1892-8.
47. HAYES Medical Technology Directory™. Acupuncture for Addictive Behavior. Lansdale, PA: HAYES, Inc.; ©2008 Winifred S. Hayes, Inc. 2005 May. Updated search May 25, 2006, June 13, 2007.
48. HAYES Medical Technology Directory™. Acupuncture and Acupressure for the Treatment of Nausea and Vomiting. Lansdale, PA: HAYES, Inc.; ©2008 Winifred S. Hayes, Inc. 2005 Jun. Updated search June 4, 2006, June 15, 2007.
49. HAYES Medical Technology Directory™. Acupuncture for the Treatment of Pain. Lansdale, PA: HAYES, Inc.; ©2008 Winifred S. Hayes, Inc. 2005 Jan. Updated search January 7, 2006; January 7, 2007.
50. HAYES Medical Technology Directory™. HAYES Alert. Acupuncture for chronic headache. *Clinical studies.* Volume VII, Number 4. Lansdale, PA: HAYES, Inc.; ©2007 Winifred S. Hayes, Inc. 2004 Apr.
51. He L, Zhou D, Wu B, Li N, Zhou MK. Acupuncture for Bell's palsy. *The Cochrane Database of Systematic Reviews* 2004, Issue 1. Copyright © 200 The Cochrane Collaboration.
52. Hsieh LL, Kuo CH, Lee LH, Yen AM, Chien KL, Chen TH. Treatment of low back pain by acupressure and physical therapy: randomised controlled trial. *BMJ.* 2006 Mar 25;332(7543):696-700. Epub 2006 Feb 17.
53. Hurwitz EL, Carragee EJ, van der Velde G, Carroll LJ, Nordin M, Guzman J, Peloso PM, Holm LW, Côté P, Hogg-Johnson S, Cassidy JD, Haldeman S; Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. Treatment of neck pain: noninvasive interventions: results of the Bone and Joint Decade 2000-2010 Task Force on Neck Pain and Its Associated Disorders. *Spine.* 2008 Feb 15;33(4 Suppl):S123-52.

54. Inoue M, Kitakoji H, Ishizaki N, Tawa M, Yano T, Katsumi Y, Kawakita K. Relief of low back pain immediately after acupuncture treatment--a randomised, placebo controlled trial. *Acupunct Med*. 2006 Sep;24(3):103-8.
55. Institute Clinical Systems Improvement (ICSI). Acupuncture for chronic osteoarthritis pain, headache, and low back pain. Technology Assessment #036. Released 1997, updated 2000. Inactivated 04/2005. Accessed January 22, 2008. Available at URL address: http://www.icsi.org/technology_assessment_reports_-_inactive/ta_acupuncture_for_chronic_osteoarthritis_pain__headache__and_low_back_pain_-_inactivated_04_2005.html
56. Institute Clinical Systems Improvement (ICSI). Acupuncture for treatment of chemical dependency. Technology Assessment #018. Released 1994, Inactivated 04/2005. Accessed January 22, 2008. Available at URL address: http://www.icsi.org/guidelines_and_more/technology_assessment_reports/technology_assessment_reports_-_inactive/acupuncture_for_treatment_of_chemical_dependency_-_inactivated_04_2005.html
57. Irnich D, Behrens N, Molzen H, Konig A, Gleditsch J, Krauss M, et al. Randomised trial of acupuncture compared with conventional massage and "sham" laser acupuncture for treatment of chronic neck pain. *BMJ*. 2001 Jun;322(7302):1574-8.
58. Irnich D, Behrens N, Gleditsch JM, Stor W, Schreiber MA, Schops P, et al. Immediate effects of dry needling and acupuncture at distant points in chronic neck pain: results of a randomized, double-blind, sham-controlled crossover trial. *Pain*. 2002 Sep;99(1-2):83-9.
59. Jamtvedt G, Dahm KT, Christie A, Moe RH, Haavardsholm E, Holm I, Hagen KB. Physical therapy interventions for patients with osteoarthritis of the knee: an overview of systematic reviews. *Phys Ther*. 2008 Jan;88(1):123-36.
60. Johnstone PA, Bloom TL, Niemtow RC, Crain D, Riffenburgh RH, Amling CL. A prospective, randomized pilot trial of acupuncture of the kidney-bladder distinct meridian for lower urinary tract symptoms. *J Urol*. 2003 Mar;169(3):1037-9.
61. Jubb RW, Tukmachi ES, Jones PW, Dempsey E, Waterhouse L, Brailsford S. A blinded randomised trial of acupuncture (manual and electroacupuncture) compared with a non-penetrating sham for the symptoms of osteoarthritis of the knee. *Acupunct Med*. 2008 Jun;26(2):69-78.
62. Kerr DP, Walsh DM, Baxter D. Acupuncture in the management of chronic low back pain: a blinded randomized controlled trial. *Clin J Pain*. 2003 Nov-Dec;19(6):364-70.
63. Knight B, Mudge C, Openshaw S, White A, Hart A. Effect of acupuncture on nausea of pregnancy: a randomized, controlled trial. *Obstet Gynecol*. 2001 Feb;97(2):184-8.
64. Kwon YD, Pittler MH, Ernst E. Acupuncture for peripheral joint osteoarthritis: a systematic review and meta-analysis. *Rheumatology (Oxford)*. 2006 Nov;45(11):1331-7. Epub 2006 Aug 27.
65. Lao L, Bergman S, Hamilton GR, Langenberg P, Berman B. Evaluation of acupuncture for pain control after oral surgery: a placebo-controlled trial. *Arch Otolaryngol Head Neck Surg*. 1999 May;125(5):567-72.
66. Lao L, Bergman S, Langenberg P, Wong RH, Berman B. Efficacy of Chinese acupuncture on postoperative oral surgery pain. *Oral Surg Oral Med Oral Pathol Oral Radiol Endod*. 1995 Apr;79(4):423-8.
67. Lee A, Done ML. The use of nonpharmacologic techniques to prevent postoperative nausea and vomiting: a meta-analysis. *Anesth Analg*. 1999 Jun;88(6):1362-9.

68. Lee A, Done ML. Stimulation of the wrist acupuncture point P6 for preventing postoperative nausea and vomiting. *Cochrane Database Systematic Reviews*. In: *The Cochrane Library*, 2005, Issue 2. Copyright © 2005 The Cochrane Collaboration.
69. Lee BY, LaRiccia PJ, Newberg AB. Acupuncture in theory and practice part 1: theoretical basis and physiologic effects. *Hospital Physician*. 2004 Apr;40(4):11-8.
70. Lee BY, LaRiccia PJ, Newberg AB. Acupuncture in theory and practice part 2: clinical indications, efficacy and safety. *Hospital Physician*. 2004 May;40(5):33-8.
71. Leibing E, Leonhardt U, Koster G, Goerlitz A, Rosenfeldt JA, Hilgers R, Ramadori G. Acupuncture treatment of chronic low-back pain: a randomized, blinded, placebo-controlled trial with 9-month follow-up. *Pain*. 2002 Mar;96(1-2):189-96.
72. Linde K, Allais G, Brinkhaus B, Manheimer E, Vickers A, White AR. Acupuncture for tension-type headache. *The Cochrane Database of Systematic Reviews* 2009 Issue 1, Copyright © 2009 The Cochrane Collaboration (a)
73. Linde K, Allais G, Brinkhaus B, Manheimer E, Vickers A, White AR. Acupuncture for migraine prophylaxis. *The Cochrane Database of Systematic Reviews* 2009 Issue 1, Copyright © 2009 The Cochrane Collaboration (b).
74. Linde K, Jobst K, Panton J. Acupuncture for chronic asthma. *Cochrane Database Systematic Reviews*. In: *The Cochrane Library*, 2005 Issue 2. Copyright © 2005 The Cochrane Collaboration.
75. Manheimer E, Linde K, Lao L, Bouter LM, Berman BM. Meta-analysis: acupuncture for osteoarthritis of the knee. *Ann Intern Med*. 2007 Jun 19;146(12):868-77.
76. Manheimer E, White A, Berman B, Forys K, Ernst E. Meta-analysis: acupuncture for low back pain. *Ann Intern Med*. 2005 Apr 19;142(8):651-63.
77. Manias P, Tagaris G, Karageorgiou K. Acupuncture in headache: a critical review. *Clin J Pain*. 2000 Dec;16(4):334-9.
78. McCarney RW, Brinkhaus B, Lasserson TJ, Linde K. Acupuncture for chronic asthma. *Cochrane Database Syst Rev*. In: *The Cochrane Library*, Issue 4. Copyright © 2007 The Cochrane Collaboration
79. McNeely ML, Armijo Olivo S, Magee DJ. A systematic review of the effectiveness of physical therapy interventions for temporomandibular disorders. *Phys Ther*. 2006 May;86(5):710-25.
80. Melchart D, Linde K, Fischer P, Berman B, White A, Vickers A, Allais G. Acupuncture for idiopathic headache. *Cochrane Database Systematic Reviews*. In: *The Cochrane Library*, 2001 Issue 2. Copyright © 2007 The Cochrane Collaboration. Updated April 15, 2008.
81. Melchart D, Linde K, Fischer P, White A, Allais G, Vickers A, Berman B. Acupuncture for recurrent headaches: a systematic review of randomized controlled trials. *Cephalalgia*. 1999 Nov;19(9):779-86; discussion 765.
82. Melchart D, Thormaehlen J, Hager S, Liao J, Linde K, Weidenhammer W. Acupuncture versus placebo versus sumatriptan for early treatment of migraine attacks: a randomized controlled trial. *J Intern Med*. 2003 Feb;253(2):181-8.
83. Meng CF, Wang D, Ngeow J, Lao L, Peterson M, Paget S. Acupuncture for chronic low back pain in older patients: a randomized, controlled trial. *Rheumatology (Oxford)*. 2003 Dec;42(12):1508-17. Epub 2003 Jul 30.
84. Mayhew E, Ernst E. Acupuncture for fibromyalgia--a systematic review of randomized clinical trials. *Rheumatology (Oxford)*. 2007 May;46(5):801-4. Epub 2006 Dec 19.

85. Miller E, Maimon Y, Rosenblatt Y, Mendler A, Hasner A, Barad A, Amir H, Dekel S, Lev-Ari S. Delayed Effect of Acupuncture Treatment in OA of the Knee: A Blinded, Randomized, Controlled Trial. *Evid Based Complement Alternat Med*. 2009 Jan 5.
86. Milliman Care Guidelines 12th Edition. Acupuncture. Milliman Care Guidelines® Ambulatory Care 11th Edition. Copyright © 1996, 1997, 1999, 2001, 2002, 2005, 2006, 2007, 2008 Milliman Care Guidelines LLC.
87. Molsberger AF, Mau J, Palwelec DB, Winkler J. Does acupuncture improve the orthopedic management of chronic low back pain: a randomized, blinded, controlled trial with 3 months follow up. *Pain*. 2002 Oct;99(3):579-87.
88. National Institutes of Health (NIH). Acupuncture. Consensus statement online. 1997 Nov 3-5;15(5):1-34. Accessed January 22, 2008. Available at URL address: <http://consensus.nih.gov/1997/1997Acupuncture107html.htm>
89. National Institutes of Health (NIH). National Center for Complementary and Alternative Medicine (NCCAM). Acupuncture. NCCAM Publication No. D003. Revised Dec, 2004. Accessed January 22, 2008. Available at URL address: <http://nccam.nih.gov/health/acupuncture/>
90. Neri I, Airola G, Contu G, Allais G, Facchinetti F, Benedetto C. Acupuncture plus moxibustion to resolve breech presentation: a randomized controlled study. *J Matern Fetal Neonatal Med*. 2004 Apr;15(4):247-52.
91. Neri I, De Pace V, Venturini P, Facchinetti F. Effects of Three Different Stimulations (Acupuncture, Moxibustion, Acupuncture Plus Moxibustion) of BL.67 Acupoint at Small Toe on Fetal Behavior of Breech Presentation. *Am J Chin Med*. 2007;35(1):27-33.
92. Park J, Hopwood V, White AR, Ernst E. Effectiveness of acupuncture for stroke: a systematic review. *J Neurol*. 2001 Jul;248(7):558-63.
93. Park J, White AR, Ernst E. Efficacy of acupuncture as a treatment for tinnitus: a systematic review. *Arch Otolaryngol Head Neck Surg*. 2000 Apr;126(4):489-92.
94. Passalacqua G, Bousquet PJ, Carlsen KH, Kemp J, Lockey RF, Niggemann B, Pawankar R, Price D, Bousquet J. ARIA update: I--Systematic review of complementary and alternative medicine for rhinitis and asthma. *J Allergy Clin Immunol*. 2006 May;117(5):1054-62.
95. Patel G, Euler D, Audette JF. Complementary and alternative medicine for noncancer pain. *Med Clin North Am*. 2007 Jan;91(1):141-67.
96. Prady SL, Thomas K, Esmonde L, Crouch S, Macpherson H. The natural history of back pain after a randomised controlled trial of acupuncture vs usual care - long term outcomes. *Acupunct Med*. 2007 Dec;25(4):121-9.
97. Rakel D. Acupuncture for neck pain. In: *Integrative medicine*. 1st ed. Philadelphia, PA: W.B. Saunders Company; 2003. p. 438.
98. Ramnero A, Hanson U, Kihlgren M. Acupuncture treatment during labour: a randomised controlled trial. *BJOG*. 2002 Jun;109(6):637-44.
99. Rosted P, Bundgaard M, Pedersen AM. The use of acupuncture in the treatment of temporomandibular dysfunction--an audit. *Acupunct Med*. 2006 Mar;24(1):16-22.
100. Scharf HP, Mansmann U, Streitberger K, Witte S, Kramer J, Maier C, Trampisch J, Victor N. Acupuncture and knee osteoarthritis: a three-armed randomized trial. *Ann Intern Med*. 2006 Jul 4;145(1):12-20.

101. Selfe TK, Taylor AG. Acupuncture and osteoarthritis of the knee: a review of randomized, controlled trials. *Fam Community Health*. 2008 Jul-Sep;31(3):247-54.
102. Shapira MY, Berkman N, Ben-David G, Avital A, Bardach E, Breuer R. Short-term acupuncture therapy is of no benefit in patients with moderate persistent asthma. *Chest*. 2002 May;121(5):1396-400.
103. Shen J, Wenger N, Glaspy J, Hays RD, Albert PS, Choi C, Shekelle PG. Electroacupuncture for control of myeloablative chemotherapy-induced emesis: a randomized controlled trial. *JAMA*. 2000 Dec 6;284(21):2755-61.
104. Smith CA, Hay PPJ. Acupuncture for depression. *The Cochrane Database of Systematic Reviews* 2004, Issue 3. Copyright © 2007 The Cochrane Collaboration.
105. Smith CA, Crowther CA. Acupuncture for induction of labour. *Cochrane Database Systematic Reviews*. In: *The Cochrane Library*, 2004 Issue 4. Copyright © 2007 The Cochrane Collaboration.
106. Smith C, Crowther C. The placebo response and effect of time in a trial of acupuncture to treat nausea and vomiting in early pregnancy. *Complement Ther Med*. 2002 Dec;10(4):210-4.
107. Smith C, Crowther C, Beilby J. Acupuncture to treat nausea and vomiting in early pregnancy: a randomized controlled trial. *Birth*. 2002 Mar;29(1):1-9.
108. Smith P, Mossdrop D, Davies S, Al-Ani Z. The efficacy of acupuncture in the treatment of temporomandibular joint myofascial pain: A randomised controlled trial. *J Dent*. 2007 Mar;35(3):259-67. Epub 2006 Nov 13.
109. Soderberg E, Carlsson J, Stener-Victorin E. Chronic tension-type headache treated with acupuncture, physical training and relaxation training. Between-group differences. *Cephalalgia*. 2006 Nov;26(11):1320-9.
110. Sun Y, Gan TJ. Acupuncture for the management of chronic headache: a systematic review. *Anesth Analg*. 2008 Dec;107(6):2038-47.
111. Tait PL, Brooks L, Harstall C. Acupuncture: evidence from systemic reviews and meta-analyses. HTA 27: series A.. Health technology assessment. Alberta Heritage Foundation for Medical Research. 2002 Mar. Accessed January 12,2006. Available at URL address: <http://www.ahfmr.ca/hta/hta-publications/reports/acupuncture.pdf>
112. Thomas KJ, MacPherson H, Ratcliffe J, Thorpe L, Brazier J, Campbell, et al. Longer term clinical and economic benefits of offering acupuncture care to patients with chronic low back pain. *Health Technol Assess*. 2005 Aug;9(32):iii-iv, ix-x, 1-109.
113. Thomas KJ, MacPherson H, Thorpe L, Brazier J, Fitter M, Campbell MJ, Roman M, Walters SJ, Nicholl J. Randomised controlled trial of a short course of traditional acupuncture compared with usual care for persistent non-specific low back pain. *BMJ*. 2006 Sep 23;333(7569):623. Epub 2006 Sep 15.
114. Trinh K, Graham N, Gross A, Goldsmith C, Wang E, Cameron I, Kay T. Acupuncture for neck disorders. *Spine*. 2007 Jan 15;32(2):236-43.
115. U.S. Food and Drug Administration (FDA). Acupuncture needles no longer investigational. Updates. *FDA Consumer*. 1996 Jun;30(5). Accessed January 22, 2008. Available at URL address: http://www.fda.gov/fdac/departs/596_upd.html
116. van Tulder MW, Cherkin DC, Berman B, Lao L, Koes BW. The effectiveness of acupuncture in the management of acute and chronic low back pain. A systematic review within the framework of the Cochrane Collaboration Back Review Group. *Spine*. 1999 Jun 1;24(11):1113-23.

117. Vas J, Mendez C, Perea-Milla E, Vega E, Panadero MD, Leon JM, et al. Acupuncture as a complementary therapy to the pharmacological treatment of osteoarthritis of the knee: randomised controlled trial. *BMJ*. 2004 Nov;329(7476):1216. Epub 2004 Oct 19.
118. Vas J, Perea-Milla E, Méndez C, Sánchez Navarro C, León Rubio JM, Brioso M García Obrero I. Efficacy and safety of acupuncture for chronic uncomplicated neck pain: a randomised controlled study. *Pain*. 2006 Dec 15;126(1-3):245-55. Epub 2006 Aug 23.
119. Vickers A; United Kingdom National Health Service (NHS) Centre for Reviews and Dissemination. Effective health care on acupuncture. *Effective Health Bulletins*. 2001 Nov;7(2):1-12. Accessed January 22, 2008. Available at URL address: <http://www.york.ac.uk/inst/crd/ehcb.htm>
120. Vickers AJ, Rees RW, Zollman CE, McCarney R, Smith CM, Ellis N, et al. Acupuncture of chronic headache disorders in primary care: randomised controlled trial and economic analysis. *Health Technol Assess*. 2004 Nov;8(48):1-50.
121. Washington State Department of Labor and Industries. Assessment and evaluation of the efficacy of acupuncture. Technology assessment. 1998 Mar. Accessed January 22, 2008. Available at URL address: <http://www.lni.wa.gov/ClaimsIns/Providers/Treatment/CovMedDev/TechAssess/default.asp>
122. Weidenhammer W, Linde K, Streng A, Hoppe A, Melchart D. Acupuncture for chronic low back pain in routine care: a multicenter observational study. *Clin J Pain*. 2007 Feb;23(2):128-35.
123. White AR, Ernst E. A systemic review of randomized controlled trials of acupuncture for neck pain. *Rheumatology (Oxford)*. 1999 Feb;38(2):143-7.
124. White A, Foster NE, Cummings M, Barlas P. Acupuncture treatment for chronic knee pain: a systematic review. *Rheumatology (Oxford)*. 2007 Mar;46(3):384-90. Epub 2007 Jan 10.
125. 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 Dec;141(12):911-9.
126. White AR, Rampes H, Ernst E. Acupuncture for smoking cessation. *Cochrane Database Systematic Reviews*. In: *The Cochrane Library*, 2005 Issue 4. Copyright © 2007 The Cochrane Collaboration.
127. White AR, Resch KL, Chan JC, Norris CD, Modi SK, Patel JN, Ernst E. Acupuncture for episodic tension-type headache: a multicentre randomized controlled trial. *Cephalalgia*. 2000 Sep;20(7):632-7.
128. 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 Sep;46(9):1445-9. Epub 2007 Jun 29.
129. Witt CM, Jena S, Brinkhaus B, Liecker B, Wegscheider K, Willich SN. Acupuncture in patients with osteoarthritis of the knee or hip: a randomized, controlled trial with an additional nonrandomized arm. *Arthritis Rheum*. 2006 Nov;54(11):3485-93.
130. Witt CM, Jena S, Brinkhaus B, Liecker B, Wegscheider K, Willich SN. Acupuncture for patients with chronic neck pain. *Pain*. 2006 Nov;125(1-2):98-106. Epub 2006 Jun 14.
131. Witt C, Brinkhaus B, Jena S, Linde K, Streng A, Wagenpfeil S, et al. Acupuncture in patients with osteoarthritis of the knee: a randomised trial. *Lancet*. 2005 Jul 9-15;366(9480):136-43.
132. Wonderling D, Vickers AJ, Grieve R, McCarney R. Cost effectiveness analysis of a randomised trial of acupuncture for chronic headache. *BMJ*. 2004 Mar 27;328(7442):747. Epub 2004 Mar 15.
133. World Health Organization (WHO). Medicines documentation. Acupuncture: Review and analysis of reports on controlled clinical trials. WHO; 2003. Accessed January 22, 2008. Available at URL address:

<http://www.who.int/medicinedocs/index.fcgi?sid=7Cj5oqQa9ee80ca60000000047461a16&a=d&cl=&d=Js4926e&az=A>0&gc=&ihs=0&gc=1>

134. Yuan J, Purepong N, Kerr DP, Park J, Bradbury I, McDonough S. Effectiveness of acupuncture for low back pain: a systematic review. *Spine*. 2008 Nov 1;33(23):E887-900.
135. Zhang SH, Liu M, Asplund K, Li L. Acupuncture for acute stroke. *The Cochrane Database of Systematic Reviews* 2005, Issue 2. Copyright © 2007 The Cochrane Collaboration

Policy History

Pre-Merger Organizations	Last Review Date	Policy Number	Title
CIGNA HealthCare	3/15/2008	0024	Acupuncture

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