Washington State Health Care Authority

Final Key Questions

Acupuncture for Chronic Migraine and Chronic Tension-type Headache

September 30, 2021

Background

Headaches are among the most common reasons for patient visits in primary care and neurology settings. Headache is considered primary when a disease or other medical condition does not cause the headache. Tension-type headache is the most common primary headache and accounts for 90% of all headaches; it is characterized by a dull, non-pulsatile, diffuse, band-like (or vice-like) pain of mild to moderate intensity in the head, scalp or neck. There is no clear cause of tension-type headaches even though it has been associated with muscle contraction and stress. Migraines are the second most frequently occurring primary headaches. Migraine headache is characterized by recurrent unilateral pulsatile headaches lasting 4-72 hours; nausea, vomiting and sensitivity to light and sound are frequent co-existent symptoms. The two major subtypes are common migraine (without aura) and classic migraine (with aura or neurological symptoms). Migraine and tension headache attacks are classified as episodic if they occur less than 15 days per month. Headaches are considered chronic if they occur 15 or more days each month for at least 3 months or more than 180 days a year. Episodic migraine and tension-type headache may evolve to become chronic. Chronic tension-type headache (CTTH) and chronic migraine (CM) features differ but the two may coexist. CCTH and CM will be evaluated in this report. Both chronic tension-type headache and chronic migraine are associated with substantial impact on the physical, psychological, and social well-being of patients as well as healthcare costs. They are a leading cause of disability and diminished quality of life.

Usual (standard) management of tension-type headache includes pharmacotherapy, psychological therapy and physical therapy. Migraine management generally focuses on pharmacological therapy. While abortive therapy for acute episodes is necessary for both CTTH and CM, the focus of management for CCTH and CM is on preventive treatments. Primary goals of preventive therapy are to reduce the number, severity and/or duration of acute episodes and reduce disability. Some of the treatments that are used in the acute setting are also employed for prevention/long term treatment.

A variety of interventions may be used to manage chronic migraine and chronic tension-type headache, many of which were covered in a 2017 health technology assessment, including the use of acupuncture. Acupuncture has been used for thousands of years and is based in the Eastern philosophy of activating or correcting qi, the believed vital energy source in humans. Acupuncture involves the insertion of solid, filiform needles into the body (with or without manual or electrical stimulation) to directly or indirectly stimulate acupuncture points, including trigger points and other tissues, to promote health and treat organic or functional disorders.

Policy context/ reason for selection

Acupuncture for chronic migraine or chronic tension type headache has been selected for re-review by the Health Care Authority Director. Technologies are selected for re-review when new evidence may be available that could change a previous determination. Acupuncture was originally reviewed together

with other interventions for prevention of chronic migraine and chronic tension type headache. Those interventions will not be part of this re-review.

Objective:

The aim of this report is to update the acupuncture portion of the 2017 HTA on Treatment of Chronic Migraine and Chronic Tension-type Headache by systematically reviewing, critically appraising and analyzing new research evidence comparing the efficacy and safety of acupuncture with usual (standard) treatments, placebo or sham treatments, no treatment or waitlist controls. This re-review will follow the same Key Questions, definitions, and scope as the prior report as they apply to acupuncture.

Research Key Questions:

In adults with chronic migraine or chronic tension-type headache:

1. What is the evidence of the short- and long-term efficacy and effectiveness of acupuncture, compared with standard alternative treatment options, placebo, sham, waitlist or no treatment?

2. What is the evidence regarding short- and long-term harms and complications of acupuncture with standard alternative treatment options, placebo, sham, waitlist or no treatment?

3. Is there evidence of differential efficacy, effectiveness, or safety of acupuncture compared with standard alternative treatment options, placebo sham, waitlist or no treatment? Include consideration of age, sex, race, ethnicity, socioeconomic status, payer, and worker's compensation.

4. What is the evidence of cost-effectiveness of acupuncture compared with standard alternative treatment options, placebo, sham, waitlist or no treatment?

Scope:

Population: Adults with chronic migraine (with or without aura) or chronic tension-type headache. Chronic headache is defined as 15 or more days each month for at least 3 months or more than 180 days a year (International Classification of Headache Disorders, 3rd edition definition). Studies reporting populations with a mean of ≥12 headache days per month or ≥12 headache episodes or attacks per month were considered to meet the criteria for chronic headache in the original report and chronic daily headache was defined as combined migraine and tension headache.

Interventions: Acupuncture.

Comparators: Standard/usual alternative treatment(s), sham, placebo, waitlist or no treatment.

Outcomes: Primary/critical outcomes are 1) the proportion of treatment responders, 2) complete cessation/prevention of headache, 3) function/disability (based on validated outcomes measures), 4) treatment related adverse events/harms, 5) quality of life. Economic outcomes are cost-effectiveness (e.g., cost per improved outcome), cost-utility (e.g., cost per quality adjusted life year (QALY), incremental cost effectiveness ratio (ICER) outcomes.

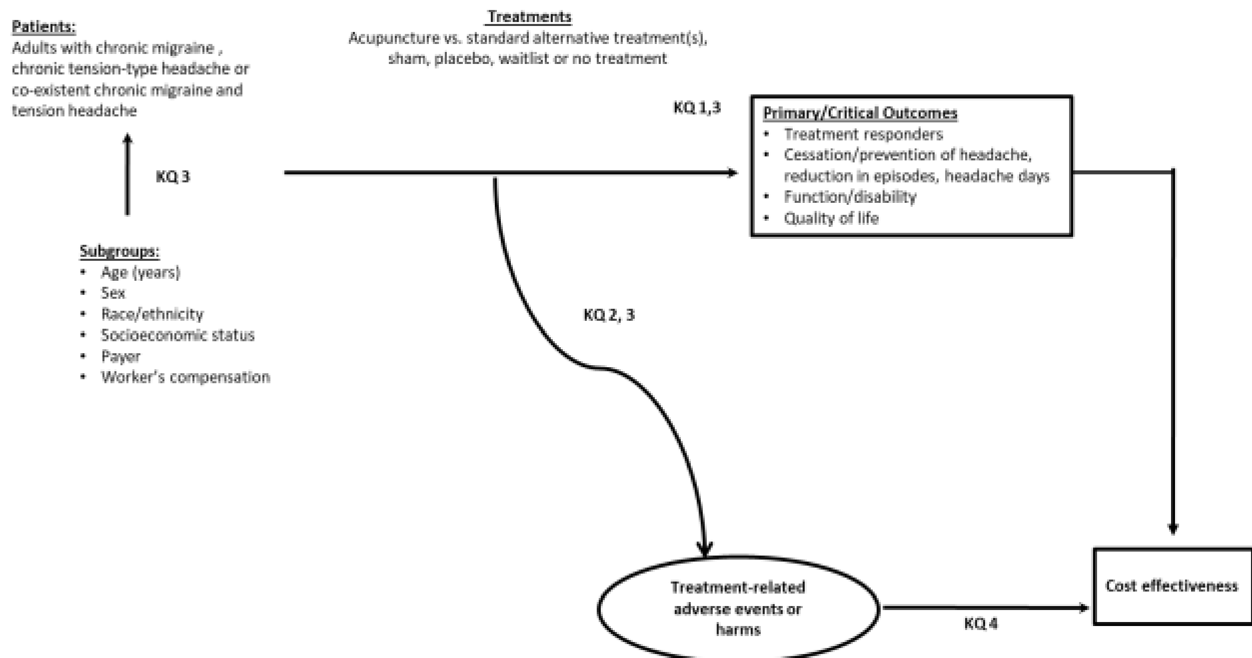
Studies:

Studies must report at least one of the primary outcomes**.** Focus will be on studies with the least potential for bias such as high-quality systematic reviews of randomized controlled trials which focus on the population of interest for this review and randomized controlled trials and full economic studies.

Timing:

Focus will be on intermediate (>6 months) and long term (> 12months) for efficacy outcomes, particularly cessation/ prevention; any timeframe for harms.

Analytic framework



Public comment and response:

All comments received regarding the draft key questions have been published in a separate document.