
Evidence Map of Acupuncture as Treatment for Adult Health Conditions

Update from 2013–2021

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VA



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AUTHORS

Author roles, affiliations, and contributions to the present report (using the [CRediT taxonomy](#)) are summarized in the table below.

Author	Role and Affiliation	Report Contribution
Paul Shekelle, MD, PhD, MPH	Director, VA Greater Los Angeles Evidence Synthesis Program Los Angeles, CA	Conceptualization, Data curation, Formal analysis, Funding acquisition, Investigation, Methodology, Resources, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing
Jennifer Allen, ANP-BC APHN-C	Nurse Practitioner, PACT Same Day Care at VA Greater Los Angeles Healthcare System Whole Health Program Manager, Acting Los Angeles, CA	Conceptualization, Formal analysis, Investigation, Methodology, Validation, Visualization, Writing – original draft, Writing – review & editing
Selene Mak, PhD, MPH	Program Manager, VA Greater Los Angeles Evidence Synthesis Program Los Angeles, CA	Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing
Meron Begashaw, MPH	Project Coordinator, VA Greater Los Angeles Evidence Synthesis Program Los Angeles, CA	Data curation, Project administration, Software, Validation, Visualization, Writing – original draft, Writing – review & editing
Isomi Miake-Lye, PhD, MPH	Co-Director, VA Greater Los Angeles Evidence Synthesis Program Los Angeles, CA	Conceptualization, Funding Acquisition, Methodology, Project administration, Resources, Software, Supervision, Visualization
Jessica Severin, BA	Administrative Coordinator, VA Greater Los Angeles Evidence Synthesis Program Los Angeles, CA	Data curation, Project administration
Jody Larkin, MS	Supervisor Research Librarian, RAND Corporation Santa Monica, CA	Data curation

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The findings and conclusions in this document are those of the author(s) who are responsible for its contents and do not necessarily represent the views of the Department of Veterans Affairs or the United States government. Therefore, no statement in this article should be construed as an official position of the Department of Veterans Affairs. No investigators have any affiliations or financial involvement (eg, employment, consultancies, honoraria, stock ownership or options, expert testimony, grants or patents received or pending, or royalties) that conflict with material presented in the report.

PREFACE

The VA Evidence Synthesis Program (ESP) was established in 2007 to provide timely and accurate syntheses of targeted health care topics of importance to clinicians, managers, and policymakers as they work to improve the health and health care of Veterans. These reports help:

- Develop clinical policies informed by evidence;
- Implement effective services to improve patient outcomes and to support VA clinical practice guidelines and performance measures; and
- Set the direction for future research to address gaps in clinical knowledge.

The program comprises four ESP Centers across the US and a Coordinating Center located in Portland, Oregon. Center Directors are VA clinicians and recognized leaders in the field of evidence synthesis with close ties to the AHRQ Evidence-based Practice Center Program. The Coordinating Center was created to manage program operations, ensure methodological consistency and quality of products, interface with stakeholders, and address urgent evidence needs. To ensure responsiveness to the needs of decision-makers, the program is governed by a Steering Committee composed of health system leadership and researchers. The program solicits nominations for review topics several times a year via the [program website](#).

The present report was developed in response to a request from the Integrative Health Coordinating Center under the Office of Patient Centered Care & Cultural Transformation. The scope was further developed with input from Operational Partners (below), the ESP Coordinating Center, and the review team. The ESP consulted several technical and content experts in designing the research questions and review methodology. In seeking broad expertise and perspectives, divergent and conflicting opinions are common and perceived as healthy scientific discourse that results in a thoughtful, relevant systematic review. Ultimately, however, research questions, design, methodologic approaches, and/or conclusions of the review may not necessarily represent the views of individual technical and content experts.

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Operational Partners

Operational partners are system-level stakeholders who help ensure relevance of the review topic to the VA, contribute to the development of and approve final project scope and timeframe for completion, provide feedback on the draft report, and provide consultation on strategies for dissemination of the report to the field and relevant groups.

Juli Olson, DC, DACM

National Lead for Acupuncture

Integrative Health Coordinating Center

VHA Office of Patient Centered Care & Cultural Transformation

Benjamin Kligler, MD, MPH

Executive Director

VHA Office of Patient Centered Care & Cultural Transformation

Peer Reviewers

The Coordinating Center sought input from external peer reviewers to review the draft report and provide feedback on the objectives, scope, methods used, perception of bias, and omitted evidence (see Appendix F for disposition of comments). Peer reviewers must disclose any relevant financial or non-financial conflicts of interest. Because of their unique clinical or content expertise, individuals with potential conflicts may be retained. The Coordinating Center works to balance, manage, or mitigate any potential nonfinancial conflicts of interest identified.

TABLE OF CONTENTS

Authors.....	i
Preface.....	iii
Acknowledgments.....	iii
Introduction.....	1
Purpose.....	1
Background.....	1
Methods.....	2
Topic Development.....	2
Data Sources and Searches.....	2
Study Selection.....	2
Data Abstraction and Assessment.....	4
Synthesis.....	4
Results.....	5
Literature Flow.....	5
Literature Overview.....	5
Evidence Maps.....	8
Discussion.....	24
Limitations.....	24
Future Research.....	25
Conclusions.....	25
References.....	26
Appendix A. Search Strategies.....	31
Appendix B. Excluded Reviews Meeting Eligibility Criteria Not Included in Evidence Map	32
Appendix C. Excluded Publications.....	34
Appendix D. Conditions and Sub-Conditions of Included Systematic Reviews.....	37
Appendix E. Conclusions from Systematic Reviews Included in the Evidence Map.....	40
Appendix F. Peer Review Disposition.....	55

FIGURES AND TABLES

Figure 1. Literature Flowchart.....	5
Table 1. Conditions in 2022 Evidence Map Not in 2014 Evidence Map.....	7
Table 2. Selected Conditions in 2014 Evidence Map Not in 2022 Evidence Map.....	7
Figure 2. Condition Maps.....	10

Table 3. Conclusions Rated as High Certainty of Evidence from Systematic Reviews Included in the Evidence Map 16

Table 4. Conclusions Rated as Moderate Certainty of Evidence from Systematic Reviews Included in the Evidence Map 16

Figure 3. Adverse Events 21

Table 5. Certainty of Evidence Conclusions for Adverse Events in Reviews Included in Evidence Map 22

EVIDENCE MAP

INTRODUCTION

PURPOSE

The Evidence Synthesis Program (ESP) is responding to a request from the VHA Office of Patient Centered Care & Cultural Transformation, Integrative Health Coordinating Center to provide current evidence regarding use of acupuncture for adult health conditions of interest to VA. Findings from this review will be used by VA referring providers, site leadership, and policy makers to improve Veteran access to non-pharmacologic treatment approaches and improve outcomes for Veterans by utilizing evidence-based care pathways.

BACKGROUND

Acupuncture is a technique that is part of a larger system of care often referred to as Traditional Chinese Medicine. The *Huangdi Neijing*, also known as the *Yellow Emperor's Inner Classic*, dates to approximately the second century BCE and is one of the oldest known medical texts with references to acupuncture.¹ Trained practitioners stimulate specific points on the body, commonly by inserting thin needles into the skin with the intention of restoring and balancing the *qi* or energy of the mind and body and promoting health.² Acupuncture has continued to grow in popularity since a *New York Times* journalist wrote in 1971 about receiving acupuncture for pain after an emergency appendectomy, and the following year, the use of acupuncture in the surgical setting was observed during a Presidential visit to China.³

Multiple national surveys in the early 1990s showed that many individuals, including Veterans, were using complementary and integrative health (CIH) approaches. In 1998, the NIH formed the National Center for Complementary and Alternative Medicine (NCCAM). Since its inception it has funded research for and supported the use of acupuncture in certain pain conditions.⁴ In 2011, the Office of Patient Centered Care and Cultural Transformation (OPCC&CT) was established by the Veteran's Health Administration, and in 2014 leadership launched the Integrative Health Coordinating Center (IHCC) to work to bring CIH approaches to the VA. In 2017, the VHA Whole Health System of care included acupuncture as one of the complementary and integrative health modalities, VHA Directive 1137-Provision of Complementary and Integrative Health, included in the VA's medical benefits package.⁵

The VA strives to promote evidence-based practice and utilizes evidence maps such as this to provide guidance to VA leadership and to inform policy and clinical decision-making. The original Evidence Synthesis Program (ESP) report published in 2014 by VA Health Services Research & Development (HSR&D) has for years been among the most highly downloaded report from the ESP database.⁶ With the increasing popularity of acupuncture among both Veterans and civilians and a growing body of available research on acupuncture, an update of this report was essential.

METHODS

TOPIC DEVELOPMENT

This topic was developed in response to a nomination from Juli Olson, DC, DACM, National Lead for Acupuncture, Integrative Health Coordinating Center. The scope was further developed with input from the topic nominator, the ESP Coordinating Center, and the review team. The scope of this report includes the following:

1. Evidence maps that provide a visual overview of the distribution of evidence for acupuncture.
2. An accompanying narrative that helps stakeholders interpret the state of the evidence to inform policy and clinical decision-making.

DATA SOURCES AND SEARCHES

The literature searches used for these maps are based on the searches used for the original Evidence Map of acupuncture completed in 2012 and early 2013. Four databases were included in the search, which covered March 2013 to April 2021: PubMed, Allied and Complementary Medicine Database (AMED), Cochrane Database of Systematic Reviews (CDSR), and DARE (Database of Abstracts of Reviews of Effects, ending search in 2014 when DARE ceased production). See Appendix A for full search strategies.

STUDY SELECTION

Each title was screened independently by 2 authors for relevance; any article chosen by either reviewer was included in the abstract screen. Abstracts were then reviewed in duplicate with any discrepancies resolved by group discussion. In order to be included, abstracts or titles needed to be about efficacy or effectiveness of acupuncture for an adult health condition and be a systematic review. A systematic review was defined as a review that had a documented systematic method for identifying and critically appraising evidence. At this stage, we also selected titles and abstracts of systematic reviews about treatments and conditions for which acupuncture might be included; for example, we included titles such as “Interventions for the reduction of prescribed opioid use in chronic non-cancer pain” or “Non-pharmacologic treatments for symptoms of diabetic peripheral neuropathy: A systematic review.” Systematic reviews were still eligible if they covered other interventions and results for acupuncture were reported separately. We did so because reviews with mixed acupuncture modalities included mostly manual acupuncture studies. Interventions such as laser acupuncture, moxibustion alone, needling, and traditional Chinese medicine (TCM) without mention of acupuncture and fire acupuncture were excluded.

We abstracted condition type when reviewing abstracts and presented a list of conditions for which we found reviews to the Operational Partner to determine which conditions were of interest to the VA. Any conditions not selected by the Operational Partner were then excluded from further review.

From this large collection of systematic reviews that included acupuncture as a treatment, we next restricted eligibility to reviews that used formal methods to assess the certainty (or strength

or quality) of the evidence for conclusions. In general, this meant using Grading of Recommendations, Assessment, Development and Evaluations (GRADE).⁷ However, other formal methods were also included, such as the approach utilized by the US Agency for Healthcare Research & Quality Evidence-based Practice Center program.⁸ To remain eligible, an included review had to both 1) state or cite the method used and 2) report the certainty (or strength or quality) of evidence for each conclusion (see footnote 1).

After applying this restriction, many health conditions had only 1 systematic review meeting eligibility criteria, and we used this review for the map.

For some conditions, we identified more than 1 review meeting the eligibility criteria. For these conditions, we first assessed whether the reviews differed in some other feature used to classify reviews on our map – for example, a systematic review on condition X included only studies comparing acupuncture to sham, while another systematic review on condition X only included studies comparing acupuncture to other active therapies. In such cases, we included both reviews on the map, with the appropriate designations (such as “versus sham” and “versus active therapy”). If there were multiple reviews on the same condition, and they did not differ in some other feature, then we selected the 1 systematic review that we judged as being most informative for readers. In general, this was the most recent review or the review with the greatest number of included studies. Systematic reviews otherwise meeting eligibility criteria that were not included in the map for this reason are listed in Appendix B.

Eligibility Criteria

The ESP included studies that met the following criteria:

<i>Population:</i>	Adult conditions that may be addressed by acupuncture
<i>Intervention:</i>	Acupuncture, Electro-acupuncture, Battlefield Acupuncture, National Acupuncture Detoxification Association (NADA) protocol
<i>Comparator:</i>	Sham/placebo, usual care, other therapies, no treatment
<i>Outcomes:</i>	Health outcomes
<i>Timing:</i>	Any
<i>Setting:</i>	Any
<i>Study Design:</i>	Systematic reviews

Footnote 1. We made one exception to this rule for the individual patient data (IPD) meta-analysis by Vickers and colleagues.⁹ An IPD meta-analysis can be more informative than a conventional meta-analysis of aggregate data, but they are often not given certainty of evidence assessments because some GRADE criteria, such as consistency, are not as applicable in an IPD meta-analysis. Rather than exclude the Vickers review, which would essentially be penalizing it for being a stronger study design than a conventional review, we applied the GRADE criteria to that portion of the Vickers review that was a conventional meta-analysis, which yielded a Certainty of Evidence rating of “Moderate” (reduced 1 level from “High” due to inconsistency).

DATA ABSTRACTION AND ASSESSMENT

Each included systematic review had data abstracted by 1 reviewer and verified by a second reviewer. Abstracted data included: number of studies included in the review that had acupuncture as the intervention, condition, type of acupuncture, comparators, certainty of evidence statement(s), and main findings relevant to acupuncture as treatment for condition.

SYNTHESIS

Our evidence mapping process resulted in a visual depiction of the evidence for acupuncture, as well as an accompanying narrative with ancillary figures and tables. The visual depiction or evidence map uses a bubble plot format to display information on 4 dimensions: bubble size, bubble label, x-axis, and y-axis. This allowed us to provide the following types of information about each included systematic review, as follows:

Number of articles in systematic review (bubble size): Each systematic review bubble's size is proportional to the number of primary research studies included in that systematic review related to the effect of acupuncture.

Condition (bubble label): Each bubble is labeled with the condition discussed by that systematic review.

Shapes and colors: Intervention characteristics for each condition are presented in the form of shapes (type of acupuncture) and colors (comparators). For type of acupuncture, rectangle denotes electro-acupuncture only and circle denotes all other types (manual/standard, electro-acupuncture). For comparators, the color red represents sham/placebo, blue for active/usual care, purple for mixed comparators with subgroups, and gray for mixed comparators with no subgroups. A condition can show up more than once if multiple systematic reviews had included either different acupuncture interventions and/or different comparators.

Strength of findings (rows): Each condition is plotted on the map based on the certainty of evidence statement as reported in the systematic review. Many reviews report more than 1 conclusion. Thus, to keep reviews mutually exclusive, we have 3 categories: "All conclusions are rated as low or very low certainty," "at least 1 conclusion rated as moderate certainty," and "at least one conclusion rated as high or strong certainty." For reviews with multiple certainty of evidence statements, we selected the highest certainty of evidence statement.

Effect of acupuncture (columns): Each condition is plotted in either "benefit" or "no benefit" as effect of acupuncture based on conclusion of systematic review.

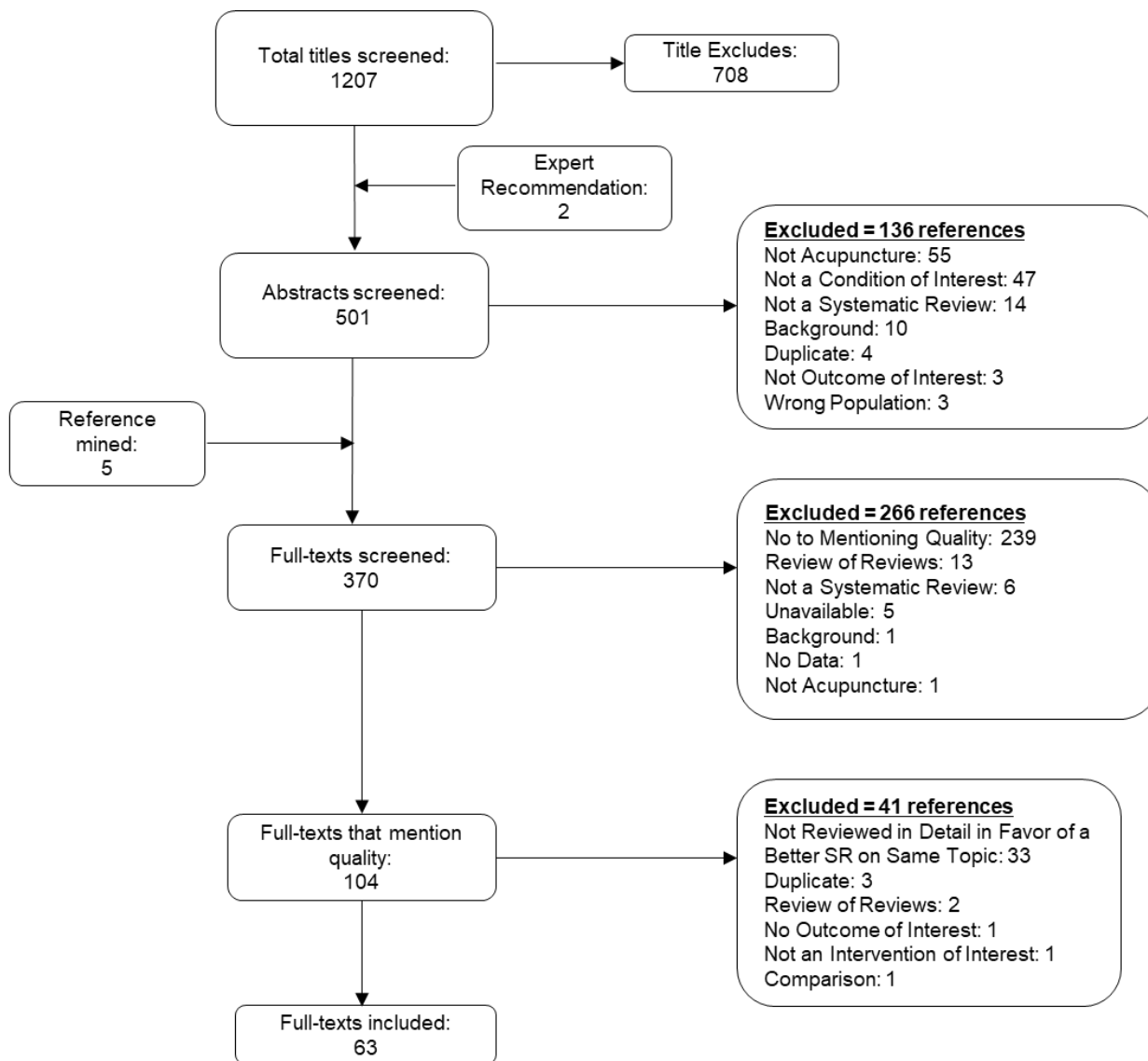
Narrative synthesis: The narrative synthesis expands upon the visual evidence map to provide overarching conclusions from the maps. Details about the conclusions in individual reviews are included in an appendix.

RESULTS

LITERATURE FLOW

The literature flow diagram (Figure 1) summarizes the results of the study selection process (full list of excluded studies available in Appendix C).

Figure 1. Literature Flowchart



LITERATURE OVERVIEW

We identified 1,207 potentially relevant citations (Figure 1). Including 2 publications recommended by experts, we applied the inclusion and exclusion criteria to these 1,209 titles. A total of 501 abstracts were reviewed at abstract stage. From these, a total of 136 abstracts were excluded for the following reasons: not acupuncture ($N = 55$), not a condition of interest ($N = 47$), not a systematic review ($N = 14$), background ($N = 10$), duplicate ($N = 4$), not outcome of

interest ($N = 3$), and wrong population ($N = 3$). After reference mining the cited literature in our screened full-text articles, we identified an additional 5 titles to be reviewed at the full-text stage, resulting in a total of 370 publications. From these, 266 publications were excluded for the following reasons: did not use formal method for grading evidence ($N = 239$), review of reviews ($N = 13$), not a systematic review ($N = 6$), unavailable ($N = 5$), background ($N = 1$), no data ($N = 1$), and not acupuncture ($N = 1$). A full list of excluded reviews from the full-text review is included in Appendix C.

A total of 104 publications were retained for further review to potentially be included on the map. Of these, 41 reviews were excluded from the map for the following reasons: the review overlapped a more recent/larger review which was already included on the map ($N = 33$), duplicate ($N = 3$), review of reviews ($N = 2$), no outcome of interest ($N = 1$), not an intervention of interest ($N = 1$), and comparison ($N = 1$). See Appendix B for a full list of publications not included on the map because they overlapped with an included review. We included 63 publications in this map.

Characteristics of Included Reviews

The number of studies included for acupuncture in the included reviews ranged from 1 study to 73 studies. Twenty-eight reviews included fewer than 10 studies about acupuncture, 25 reviews included 10 to 25 studies, and 10 reviews included 25 or more studies. Eighteen of the included reviews were completed by the Cochrane Collaboration, with 1 review published as a journal article in a peer-reviewed journal.⁹ The US Agency for Health Research and Quality conducted 3 of the included reviews, with 1 review published as a journal article in a peer-reviewed journal.¹⁰

The country of origin for reviews varied, with the highest number of reviews originating from China ($N = 22$). Other countries included Australia ($N = 4$), Brazil ($N = 1$), Italy ($N = 1$), Korea ($N = 6$), Taiwan ($N = 1$), United Kingdom ($N = 2$), and the United States ($N = 7$). Nineteen reviews involved teams from multiple countries; teams included reviewers from China and Norway,¹¹ China and Australia,¹² China (Hong Kong) and the United Kingdom,¹³ Spain and the United Kingdom,¹⁴ Canada and the United Kingdom,¹⁵ Germany, the United Kingdom, and the United States,¹⁶ and Korea and the United States.¹⁷

Forty-seven reviews included more than 1 type of acupuncture, while 16 reviews included only 1 type of acupuncture as the intervention. Almost all of the mapped reviews included manual or standard acupuncture as the intervention, with the exception of 1 review including only electro-acupuncture as the intervention for the reduction of prescribed opioid use in chronic non-cancer pain.¹⁸ A variety of comparators were included in the reviews, often involving more than 1 comparator. Thirty-six reviews included more than 1 comparator and conducted separate analyses of the effect of acupuncture by comparator, while 7 reviews that had included more than 1 comparator did not conduct separate analyses. Fourteen reviews employed active or usual care only, and 8 reviews included sham or placebo as comparator only.

The included 63 reviews were categorized into 41 conditions, of which 14 conditions were further categorized into sub-conditions: back pain ($N = 4$), cancer-related pain ($N = 4$), chronic fatigue syndrome ($N = 2$), depression ($N = 4$), fertility ($N = 4$), fibromyalgia ($N = 4$), headache ($N = 5$), insomnia ($N = 2$), mixed pain-not specific ($N = 3$), osteoarthritis ($N = 2$), other acute pain ($N = 3$), post-operative pain ($N = 3$), shoulder pain ($N = 2$), and substance use disorder ($N = 2$). These conditions and sub-conditions were then grouped by type of condition, resulting in 5

maps (Figure 2). Three reviews discussed multiple conditions and thus appeared in the maps more than once.¹⁹⁻²¹ Most conditions were related to pain, which were separated into 2 maps: general pain ($N = 23$) and musculoskeletal pain ($N = 11$). The remaining conditions were categorized into maps for mental health ($N = 12$), women's health ($N = 9$), and other conditions ($N = 9$). Appendix D shows the breakdown of conditions and related sub-conditions by map.

This map includes 9 conditions that were not part of the 2014 map (Table 1).

Table 1. Conditions in 2022 Evidence Map Not in 2014 Evidence Map

Angina	Irritable Bowel Disorder
Diabetic Peripheral Neuropathy	Lateral Elbow Pain
Dyspepsia	Peripheral Neuropathy
Herpes Zoster	Post-herpetic Neuralgia
Primary Trigeminal Neuralgia	

Because we applied an additional criterion that reviews had to report a method used for grading certainty of evidence in order to be included in this map, a few conditions that had appeared in the 2014 map were not included in this map (Table 2). Four such conditions are plantar heel pain, nausea, restless leg syndrome, and blood pressure. For plantar heel pain, we identified 1 publication for inclusion but it did not use a formal method for grading certainty of evidence and was not included in the map. For nausea, we did not identify citations to be reviewed at full text. For restless leg syndrome, we identified 2 publications for inclusion but neither used a formal method for grading certainty of evidence and were not included in the map. For blood pressure, we identified 2 publications for full-text review. One review was excluded because it was not about acupuncture, and the other did not use a formal method for grading certainty of evidence and was not included in map.

Table 2. Selected Conditions in 2014 Evidence Map Not in 2022 Evidence Map

Condition	New Systematic Review Identified in Update Search?	Used Formal Method for Grading Evidence?
Plantar heel pain	Yes	No
Nausea	No	N/A
Restless Leg Syndrome	Yes	No
Blood Pressure	Yes	No

For ease of comparison, we divided the included conditions into 5 evidence maps:

- All pain (other than musculoskeletal pain)^{9, 13, 15, 17-19, 22-38} (Figure 2A)
- Musculoskeletal pain^{10, 12, 14, 16, 20, 21, 39-43} (Figure 2B)
- Mental health conditions⁴⁴⁻⁵⁴ (Figure 2C)
- Women's health⁵⁵⁻⁶³ (Figure 2D)
- Other conditions^{11, 64-71} (Figure 2E)

EVIDENCE MAPS

In each evidence map, columns correspond to whether a conclusion of the review was that 1) there was a benefit of acupuncture relative to a comparison treatment, or 2) there was no benefit of acupuncture relative to the comparison treatment. Columns *are not* mutually exclusive. A review could have more than 1 conclusion, and those conclusions could differ in the benefit of acupuncture.

Rows correspond to GRADE Working Group grades of evidence:⁷

- High certainty: We are very confident that the true effect lies close to that of the estimate of the effect.
- Moderate certainty: We are moderately confident in the effect estimate: the true effect is likely to be close to the estimate of the effect, but there is a possibility that it is substantially different.
- Low certainty: Our confidence in the effect estimate is limited: the true effect may be substantially different from the estimate of the effect.
- Very low certainty: We have very little confidence in the effect estimate: the true effect is likely to be substantially different from the estimate of effect.

All rows *are* mutually exclusive. The top row indicates that at least 1 conclusion in the review was rated by its authors as having high (or strong) certainty of evidence (also sometimes called strength of evidence or quality of evidence). The middle row indicates that at least 1 conclusion was rated as moderate certainty of evidence (and none rated as high or strong, in which case it would be in the right-hand column). The bottom row indicates that all conclusions in the review were rated as low or very low certainty of evidence. Since GRADE assesses certainty of evidence, it is possible for a body of evidence to demonstrate low or moderate estimates of effect but with high certainty of evidence; conversely, it is possible to have evidence demonstrating high effectiveness but with low certainty.

Each conclusion (or general conclusion, see below) is then mapped onto this framework and identified by the name of the condition or sub-condition, *eg*, “pain management in cancer,” “fibromyalgia,” “migraine,” *etc*. Colors are used to distinguish between the types of comparison treatments: conclusions only about comparisons to sham/placebo, conclusions only about comparisons to active therapies or usual care, conclusions where the comparison treatments were a mix of these and no subgroup analysis was presented, and conclusions where comparison treatments were a mix of these with subgroup analyses. Symbols are used to identify the few reviews specific to certain types of acupuncture, namely reviews of electro-acupuncture only. We were only able to report to the degree of specificity the original authors report. When they called it manual acupuncture, we called it manual acupuncture. When they called it electro-acupuncture, we called it electro-acupuncture only. When they referred to it simply as acupuncture, we classified it as manual acupuncture, since the systematic reviews that included multiple types of acupuncture and specified the type for each included study had shown the great majority of included studies were about manual acupuncture.

The size of the bubble is used to indicate how many original research studies were included in the review. For example, in Figure 2A, the large yellow circle in the left-hand column indicates

there is a review about fibromyalgia that included between 10-25 original studies and had at least 1 conclusion that was rated as high certainty of evidence that acupuncture was better than the comparison treatment of sham/placebo. In the same figure, the small light blue dot in the lower right-hand corner indicates there is a review about kidney stone pain that included fewer than 10 original studies where all conclusions were rated as low or very low certainty of evidence that acupuncture was not of greater benefit than the comparison treatment of active/usual care.

As noted above, reviews could contain more than 1 conclusion and enter the map at different spots. Also note that for ease of presentation we made the following decisions. If a review had 3 or fewer conclusions, we extracted and mapped them all. If a review had more than 3 conclusions (some reviews had >10 conclusions with, for example, separate statements for each kind of acupuncture assessed, each different comparison treatment, and each different assessed outcome), rather than attempt to map all of these, we instead mapped the overall conclusion the review authors gave to the overall body of evidence (usually found in the abstract or summary).

Figure 2. Condition Maps

2A. All Pain Other than Musculoskeletal Pain

	Benefit for Acupuncture	No Benefit for Acupuncture
At least 1 Conclusion Rated as High or Strong Certainty	<ul style="list-style-type: none"> Fibromyalgia-- pain, fatigue, sleep quality 	
At least 1 Conclusion Rated as Moderate Certainty	<ul style="list-style-type: none"> Chronic prostatitis/chronic pelvic pain syndrome Post-op pain Fibromyalgia Migraine Tension headache 	<ul style="list-style-type: none"> Post herpetic neuralgia Migraine Post-op pain
All Conclusions are Rated as Low or Very Low Certainty	<ul style="list-style-type: none"> Post-caesarean pain Post-op pain* Painful conditions in emergency department Chemotherapy-induced peripheral neuropathy Migraine headache without aura Pain management in cancer Related side effects in breast cancer associated with hormone therapy 	<ul style="list-style-type: none"> Peripheral neuropathy Kidney stone* Post-op dental pain* Chronic non-cancer pain Diabetic peripheral neuropathy

Number of Included Studies

- > 25 included studies
- 10 – 25 included studies
- < 10 included studies

Type of Acupuncture Used

- Manual Acupuncture Studies (may include auricular acupuncture or electroacupuncture)
- Electroacupuncture Only

Comparators

- Mixed – No Subgroups
- Mixed – With Subgroups
- Sham/Placebo
- Other Active Therapy/Usual Care

*This review included distinct conclusions about separate conditions and comparators, and so it appears in this map more than once.



2B. Musculoskeletal Pain

	Benefit for Acupuncture	No Benefit for Acupuncture
At least 1 Conclusion Rated as High or Strong Certainty	<ul style="list-style-type: none"> Shoulder pain* 	
At least 1 Conclusion Rated as Moderate Certainty	<ul style="list-style-type: none"> Immediate pain relief in musculoskeletal pain conditions Chronic musculoskeletal pain Temporomandibular joint dysfunction* 	<ul style="list-style-type: none"> Knee pain* Hip pain
All Conclusions are Rated as Low or Very Low Certainty	<ul style="list-style-type: none"> Chronic low back pain* Chronic neck pain* Chronic low back pain* Frozen shoulder Lateral elbow pain Acute low back pain* Low back pain– herniated disc Post-stroke shoulder-hand syndrome 	<ul style="list-style-type: none"> Ankle sprain/pain

Number of Included Studies

- > 25 included studies
- 10 – 25 included studies
- < 10 included studies

Type of Acupuncture Used

- Manual Acupuncture Studies (may include auricular acupuncture or electroacupuncture)
- Electroacupuncture Only

Comparators

- Mixed – No Subgroups
- Mixed – With Subgroups
- Sham/Placebo
- Other Active Therapy/Usual Care

*This review included distinct conclusions about separate conditions and comparators, and so it appears in this map more than once.

2C. Mental Health

	Benefit for Acupuncture	No Benefit for Acupuncture
At least 1 Conclusion Rated as High or Strong Certainty		
At least 1 Conclusion Rated as Moderate Certainty	<ul style="list-style-type: none"> ● Pre-op anxiety ● Insomnia in elderly ● Depression in pregnancy ● Tobacco use disorder 	<ul style="list-style-type: none"> ● Opioid use disorder*
All Conclusions are Rated as Low or Very Low Certainty	<ul style="list-style-type: none"> ● Opioid use disorder* ● Major Depressive Disorder ● Depression ● Primary Insomnia ● Post-Traumatic Stress Disorder ● Post-stroke depression ● Schizophrenia 	

Number of Included Studies

- > 25 included studies
- 10 – 25 included studies
- < 10 included studies

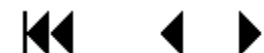
Type of Acupuncture Used

- Manual Acupuncture Studies (may include auricular acupuncture or electroacupuncture)
- Electroacupuncture Only

Comparators

- Mixed – No Subgroups
- Mixed – With Subgroups
- Sham/Placebo
- Other Active Therapy/Usual Care

*This review included distinct conclusions about separate conditions and comparators, and so it appears in this map more than once.



2D. Women's Health

	Benefit for Acupuncture	No Benefit for Acupuncture
At least 1 Conclusion Rated as High or Strong Certainty		● Assistive reproductive therapy
At least 1 Conclusion Rated as Moderate Certainty	● Pregnancy - low back and pelvic pain	
All Conclusions are Rated as Low or Very Low Certainty	<ul style="list-style-type: none"> ● Polycystic ovary syndrome/ovarian hyperstimulation ● Resumption of menses ● Oocyte retrieval ● Premenstrual syndrome ● Menopause 	<ul style="list-style-type: none"> ● Anovulatory fertility ● Dysmenorrhea

Number of Included Studies

- > 25 included studies
- 10 – 25 included studies
- < 10 included studies

Type of Acupuncture Used

- Manual Acupuncture Studies (may include auricular acupuncture or electroacupuncture)
- Electroacupuncture Only

Comparators

- Mixed – No Subgroups
- Mixed – With Subgroups
- Sham/Placebo
- Other Active Therapy/Usual Care



2E. Other Conditions

	Benefit for Acupuncture	No Benefit for Acupuncture
At least 1 Conclusion Rated as High or Strong Certainty		
At least 1 Conclusion Rated as Moderate Certainty	<ul style="list-style-type: none"> ● Chronic fatigue syndrome ● Angina ● Herpes zoster ● Improvement of cognitive impairment after stroke ● Inflammatory bowel disease ● Irritable bowel syndrome 	
All Conclusions are Rated as Low or Very Low Certainty	<ul style="list-style-type: none"> ● Chronic fatigue syndrome ● Functional dyspepsia 	<ul style="list-style-type: none"> ● Health-related quality of life in cancer patients ● Tinnitus

Number of Included Studies

- > 25 included studies
- 10 – 25 included studies
- < 10 included studies

Type of Acupuncture Used

- Manual Acupuncture Studies (may include auricular acupuncture or electroacupuncture)
- Electroacupuncture Only

Comparators

- Mixed – No Subgroups
- Mixed – With Subgroups
- Sham/Placebo
- Other Active Therapy/Usual Care

Three high-level observations are worth making. First, most published reviews were about painful conditions, and there are more mapped conclusions for painful conditions than for all other conditions combined. Second, the number of reviews with at least 1 conclusion rated as high certainty of evidence is very small ($N = 3$). Third, although a greater number of reviews have at least 1 conclusion rated as moderate certainty of evidence, the majority of reviews reported conclusions rated as low or very low certainty of evidence.

In addition to these maps, we collected all conclusions rated as high certainty of evidence in Table 3 and all conclusions rated as moderate certainty of evidence in Table 4. Lastly, all conclusions from mapped reviews are collected in a large appendix table (Appendix E).

The conclusions from the 3 systematic reviews graded as high certainty of evidence by the original review authors (Table 3) are:

- No difference between acupuncture and sham acupuncture in birth outcomes in patients undergoing embryo transfer (as part of in vitro fertilization).⁵⁷
- Better pain, sleep, and general status outcomes in patients with fibromyalgia syndrome treated with acupuncture compared to sham.⁷²
- Better pain relief in patients with shoulder pain treated with acupuncture compared to sham.²¹

There are many more conclusions authors of included systematic reviews graded as moderate certainty of evidence (see Table 4). More than 75% of these conclusions were comparing acupuncture to sham or control acupuncture, or no treatment. Only a small number of these conclusions were about comparisons of acupuncture to usual care or other active therapies. About 25% of the conclusions rated as moderate certainty were findings that acupuncture was no better than the comparator. A little more than half of the conclusions rated as moderate certainty were about painful conditions or pain outcomes.

All of the remaining conclusions from the remaining reviews were judged by the original authors as being low or very low certainty of evidence, meaning “Our confidence in the effect estimate is limited. The true effect may be substantially different from the estimate of effect” or “We have very little confidence in the effect estimate.” See Appendix E.

Table 3. Conclusions Rated as High Certainty of Evidence from Systematic Reviews Included in the Evidence Map

Author, Year	Condition	Sub-Condition	High Certainty of Evidence Conclusion
Coyle, 2021 ⁵⁷	Fertility	Assistive Reproductive Therapy	When compared with sham acupuncture, acupuncture performed at the time of embryo transfer does not result in better outcomes for live birth rate or for miscarriage rate.
Kim, 2019 ⁷²	Fibromyalgia	Pain, Fatigue, Sleep Quality	Verum acupuncture is more effective than sham acupuncture for pain relief, improving sleep quality, and improving general status in fibromyalgia syndrome post-treatment.
Yuan, 2016 ²¹	Shoulder Pain	None	Acupuncture is superior to sham acupuncture in the relief of pain.

Table 4. Conclusions Rated as Moderate Certainty of Evidence from Systematic Reviews Included in the Evidence Map

Author, Year	Condition	Sub-Condition	Moderate Certainty of Evidence Conclusion
Yang, 2019 ⁶⁴	Angina	None	Compared to sham acupuncture, acupuncture may be effective for improving average pain intensity, 6-minute walk test, anxiety level and depression level.
Tong, 2021 ⁴⁴	Anxiety	Pre-operative Anxiety	Acupuncture therapy, compared with sham therapy, significantly reduced the STAI-S score for patients with preoperative anxiety.
Wang, 2014 ¹¹	Chronic Fatigue Syndrome	None	No statistically significant difference in physical symptoms as measured by the Chalder Fatigue Scale-1 between acupuncture and sham.
Vickers, 2018 ¹⁶	Chronic Musculoskeletal Pain	None	Acupuncture is effective for the treatment of chronic pain, with treatment effects persisting over time.
Smith, 2019 ⁴⁶	Depression	Depression in Pregnancy	Acupuncture compared to control may reduce antenatal depression.
Zhang, 2019 ²⁷	Fibromyalgia	None	Compared to sham, real acupuncture was more effective in reducing pain and improving quality of life after treatment in the short term.
Giovanardi, 2020 ²⁸	Headache	Migraine	Acupuncture is mildly more effective and much safer than medication for the prophylaxis of migraine.
Linde, 2016 ³²	Headache	Tension-type Headache	Acupuncture reduces headache frequency over usual care and sham.

Author, Year	Condition	Sub-Condition	Moderate Certainty of Evidence Conclusion
Linde, 2016 ³¹	Headache	Migraine	<p>Compared with no acupuncture, acupuncture was associated with a moderate reduction of headache frequency over no acupuncture after treatment.</p> <p>Comparison with sham, both after treatment and at follow-up, acupuncture was associated with a small but statistically significant frequency reduction over sham.</p> <p>Compared with prophylactic drug treatment, acupuncture reduced migraine frequency significantly more than drug prophylaxis after treatment.</p>
Cui, 2021 ⁶⁸	Herpes Zoster	None	Compared with active treatment, acupuncture was associated with reduction on the overall incidence of post-herpetic neuralgia
Wang, 2020 ⁶⁹	Inflammatory Bowel Disease	None	Acupuncture may be more effective in treating ulcerative colitis compared to conventional medicine (metronidazole combined with sulfasalazine).
Kwon, 2020 ⁴⁹	Insomnia	Insomnia in Elderly	Using Pittsburgh Sleep Quality Index score, acupuncture and acupuncture combined with relaxation were both more effective in improving sleep quality compared to relaxation alone, but acupuncture was less effective compared to acupuncture combined with relaxation.
Guo, 2020 ⁷⁰	Irritable Bowel Syndrome	None	Compared with loperamide, acupuncture showed more effectiveness in weekly defecation. Compared to dicetel, acupuncture produced more significant effect related to the total symptom score and IBS Symptom Severity Scale.
Xiang, 2017 ⁴¹	Mixed Not Specified Pain	Immediate Pain Relief in Musculoskeletal Pain Conditions	Acupuncture was associated with a greater immediate pain relief effect compared to sham acupuncture.
Manheimer, 2018 ⁴²	Osteoarthritis	Hip pain	Acupuncture probably has little or no effect in reducing pain or improving function relative to sham acupuncture in people with hip osteoarthritis.
Skelly, 2020 ²⁰	Osteoarthritis	Knee pain	<p>There were no differences between acupuncture versus control interventions (sham acupuncture, waitlist, or usual care) on function in the intermediate term.</p> <p>There were no clinically meaningful differences between acupuncture versus control interventions (sham acupuncture, waitlist, or usual care) on pain in the intermediate term.</p>

Author, Year	Condition	Sub-Condition	Moderate Certainty of Evidence Conclusion
Zhou, 2020 ⁷¹	Other Specific	Improvement of Cognitive Impairment After Stroke	Acupuncture was effective in improving PSCI (post-stroke cognitive impairment).
Franco, 2019 ⁹	Pelvic Pain	Chronic Prostatitis/ Chronic Pelvic pain syndrome	Acupuncture probably reduced prostatitis symptoms (compared to sham). Acupuncture may have reduced prostatitis symptoms compared with medical treatment
Pei, 2019 ³⁴	Post-herpetic Neuralgia	None	Acupuncture was more effective in reducing post-herpetic neuralgia pain intensity compared to control.
Tedesco, 2017 ³⁷	Post-operative Pain	None	Acupuncture significantly increases time to first request for analgesia compared to sham or no treatment.
Yin, 2020 ³⁶	Post-operative Pain	None	Acupuncture did not show significant differences in the reduction in pain or incidence of postoperative nausea and vomiting, but was more effective in reducing time to first defecation or first flatus compared to conventional medicine. Acupuncture in combination with conventional medicine did not show significant differences in the incidence of postoperative nausea and vomiting, but was more effective in reducing time to first defecation.
Liddle, 2015 ⁶³	Pregnancy	Low Back and Pelvic Pain	There was evidence from single studies that acupuncture significantly improves evening pelvic pain better than stabilizing exercise or usual prenatal care.
Chen, 2018 ⁵³	Substance Use Disorder	Opioid Use Disorder	There was no significant difference in number of positive urine samples for opioids, sleep quality, or sleep time between acupuncture and sham acupuncture. There was no difference between acupuncture and medication related to craving for opioid, anxiety, and retention of treatment.
White, 2014 ⁵⁴	Substance Use Disorder	Tobacco Use Disorder	Compared to sham, acupuncture resulted in greater short-term smoking cessation.
Yuan, 2016 ²¹	Temporomandibular Pain	None	Real acupuncture showed a favorable effect on pain relief compared to sham.

Adverse Events

In addition to maps of effectiveness outcomes, we also created a map for adverse events. Most of the 63 included reviews assessed adverse events, with 16 reviews explicitly grading evidence for adverse events. Figure 3 presents these 16 reviews mapped by certainty of evidence conclusions about adverse events,^{8, 17, 19, 20, 31, 32, 35, 37, 45, 48, 50, 52, 56, 58, 62} of which 3 reviews appeared twice showing different certainty of evidence conclusions for different comparators.^{17, 20, 47}

Much like our approach for maps described above, only reviews with certainty of evidence conclusions specifically for adverse events were included in this map. The certainty of evidence conclusions were reviewed separately from conclusions for effectiveness outcomes such that it is possible to find a low or very low certainty of evidence conclusion for benefit of acupuncture and a high certainty of evidence conclusion for more adverse outcomes in the acupuncture group.⁵⁸

This map shows 3 categories depicted in rows: whether the certainty of evidence conclusion of the review for adverse events was low or very low, moderate, or high. As for columns, we listed whether there were fewer adverse events in the acupuncture group, no difference between groups, insufficient evidence to determine difference between groups, or more adverse events in the acupuncture group. A review could be mapped more than once for adverse events if different comparators had different certainty of evidence conclusions for adverse events. As we did for the effectiveness maps, we mapped each conclusion by name of condition or sub-condition. The legend for this map is the same, with colors denoting comparators, shapes denoting types of acupuncture, and size of bubble used to indicate the number of original research studies about acupuncture included in the review.

In the 16 mapped reviews that had included certainty of evidence conclusions about adverse events, a majority of the reviews reported either fewer adverse events in the acupuncture group (low or very low certainty of evidence) or no difference between groups (very low to high certainty of evidence). Only 2 reviews reported more adverse events in the acupuncture group. The first review about anovulatory infertility concluded that “true acupuncture probably worsens adverse events compared to sham acupuncture” (moderate certainty of evidence).⁵⁸ The second review about electro-acupuncture for carpal tunnel syndrome concluded there were more adverse events in the electro-acupuncture group (very low certainty of evidence).¹⁷ See Table 5 for additional details about included reviews with certainty of evidence conclusions for adverse events.

As part of our search, we also identified 3 reviews that were solely about adverse events, and not necessarily restricted to adult health conditions.⁷³⁻⁷⁵ One review was an overview of existing systematic review (*ie*, a review of reviews) and included 17 existing reviews.⁷³ About half of these were based on case reports. The authors were unable to calculate incidence rates, though they did conclude that serious complications were “rare.” A second review was restricted to adverse events of auricular therapy, which included more kinds of therapy than just acupuncture (such as auricular bloodletting therapy).⁷⁴ The third systematic review collected 33 years’ worth of case reports of adverse events in China.⁷⁵ 182 cases were found, including 30 cases of pneumothorax, 37 cases of central nervous system injury, 22 cases of organ injury, 17 cases of infection, 10 cases of hemorrhage, 7 cases of broken needles, *etc*.

Although an incidence rate cannot be calculated from these estimates because there is no denominator, we can hazard an upper bound estimate if we assume that in any year no more than 1% of the Chinese population received acupuncture. Over 33 years, then, even if the number of case reports in this review is an underestimate of the true number by a factor of 10, or even a factor of 100, the incidence rate of serious adverse events is likely exceedingly small (potentially less than 1 in 100,000 patients).

Figure 3. Adverse Events

	Fewer Adverse Events in Acupuncture Group	No Difference Between Groups	Insufficient Evidence to Determine Difference	More Adverse Events in Acupuncture Group
High or Strong Certainty of Evidence		● Migraine		
Moderate Certainty of Evidence		● Knee pain	● Depression*	● Anovulatory fertility*
Low or Very Low Certainty of Evidence	<ul style="list-style-type: none"> ● Kidney stone ● Schizophrenia ● Primary insomnia ● Dysmenorrhea ● Post-stroke depression 	<ul style="list-style-type: none"> ● Chronic low back pain ● Carpal tunnel syndrome* 	<ul style="list-style-type: none"> ● Premenstrual syndrome ● Peripheral neuropathy 	<ul style="list-style-type: none"> ● Post-caesarean pain ● Anovulatory infertility* ● Major depressive disorder ● Tension headache ● Depression*

Number of Included Studies

- > 25 included studies
- 10 – 25 included studies
- < 10 included studies

Type of Acupuncture Used

- Manual Acupuncture Studies (may include auricular acupuncture or electroacupuncture)
- Electroacupuncture Only

Comparators

- Mixed – No Subgroups
- Mixed – With Subgroups
- Sham/Placebo
- Other Active Therapy/Usual Care

*This review included distinct conclusions about separate conditions and/or comparators, and so it appears in this map more than once.



Table 5. Certainty of Evidence Conclusions for Adverse Events in Reviews Included in Evidence Map**High Certainty of Evidence for Adverse Events**

Author, Year	Condition	Sub-condition	Certainty of Evidence Conclusion
Linde, 2016 ³¹	Headache	Migraine	There is no difference in the number of participants experiencing serious adverse events between acupuncture and sham acupuncture.

Moderate Certainty of Evidence for Adverse Events

Author, Year	Condition	Sub-condition	Certainty of Evidence Conclusion
Smith, 2018 ⁴⁷	Depression	None	It is unclear whether there are differences in the risk of adverse events between persons receiving acupuncture or sham acupuncture.
Lim, 2019 ⁵⁸	Fertility	Anovulatory infertility	True acupuncture probably worsens adverse events compared with sham acupuncture.
Skelly, 2020 ²⁰	Osteoarthritis	Knee pain	There was no difference in the risk of serious adverse events between any form of acupuncture and the control group.

Low or Very Low Certainty of Evidence for Adverse Events

Author, Year	Condition	Sub-condition	Certainty of Evidence Conclusion
Skelly, 2020 ²⁰	Back pain	Chronic low back pain	Serious adverse events were rare with acupuncture and control.
Choi, 2018 ¹⁷	Carpal tunnel syndrome	None	Acupuncture was associated with fewer or no serious adverse events compared to active or sham groups.
Choi, 2018 ¹⁷	Carpal tunnel syndrome	None	Electro-acupuncture was associated with more adverse events when compared with night splints.
Liu, 2021 ⁴⁵	Depression	Post-stroke depression	Acupuncture was associated with fewer adverse events than antidepressants, but there was no significant difference in the occurrence of adverse events between the combination of acupuncture and conventional treatments versus conventional treatments.
Smith, 2018 ⁴⁷	Depression	None	The risk of adverse events with acupuncture is unclear, as most trials did not report adverse events adequately.
Sorbero, 2016 ⁴⁸	Depression	Major Depressive Disorder	Insufficient data to determine if there are differences between groups for adverse events.
Smith, 2016 ⁵⁶	Dysmenorrhea	None	Adverse events were less common in the acupuncture group compared to NSAID.
Lim, 2019 ⁵⁸	Fertility	Anovulatory infertility	Insufficient data to determine if there are differences between acupuncture and usual care or active treatment for adverse events.

Author, Year	Condition	Sub-condition	Certainty of Evidence Conclusion
Linde, 2016 ³²	Headache	Tension-type Headache	There is no evidence to conclude that adverse events differ between patients receiving acupuncture or sham acupuncture.
Cao, 2019 ⁵⁰	Insomnia	Primary Insomnia	Fewer adverse events from acupuncture than Western medications.
Chou, 2020 ¹⁹	Other acute pain	Kidney Stone	For kidney stone pain, acupuncture vs NSAID or acetaminophen, there were few adverse events in 1 trial.
Ju, 2017 ³³	Peripheral neuropathy	None	No clear differences were observed between acupuncture and sham or active groups.
Zimpel, 2020 ³⁵	Post-operative pain	Post-Caesarean pain	It is uncertain whether acupuncture (vs no treatment) or acupuncture plus analgesia (vs analgesia) has any effect on the risk of adverse effects.
Armour, 2018 ⁶²	Premenstrual syndrome	None	There was insufficient evidence to determine whether there was a difference between acupuncture and sham or no treatment in the rates of adverse events.
Shen, 2014 ⁵²	Schizophrenia	None	Acupuncture compared with standard antipsychotic treatment alone; adverse effects were less for the acupuncture group.

DISCUSSION

There is a vast literature of original randomized trials and systematic reviews of randomized trials of acupuncture as a treatment for dozens of health conditions. Despite this, the number of conditions for which authors of systematic reviews have concluded that there is at least moderate certainty of evidence regarding health outcome effects of acupuncture is modest, and most of these involve comparisons of acupuncture to sham or control acupuncture, and then mostly for painful conditions. Evidence that acupuncture causes adverse health effects is rare, and reviews that compared acupuncture to usual care and included conclusions about adverse effects all concluded that acupuncture was at least as safe or safer than usual care.

LIMITATIONS

There are 3 main limitations to this evidence map. The first, common to all systematic reviews, is that we may have not identified all the potentially eligible evidence. If a systematic review was published in a journal not indexed in any of the 4 databases we searched, and we did not identify it as part of our search of references of included publications, then we would have missed it. Nevertheless, our search strategy did identify 370 systematic reviews, so we did not suffer from any lack of potential reviews to evaluate. An extension to this limitation is the included systematic reviews may themselves have missed some original research studies eligible for their review. The total number of studies included, across all the reviews that entered into our map, is more than 900 original research studies. As with reviews, therefore, the map does not suffer from a lack of original research studies.

The second limitation of evidence maps is that we did not independently evaluate the source evidence; in other words, we took the conclusions of the authors of the systematic review “at face value.” That is the nature of an evidence map. Particular to this application of the mapping process, we did not map all the eligible reviews; for health conditions that had more than one eligible review, we only mapped the one we deemed most informative. This necessarily requires judgment, and others could disagree with that judgment. We list in the appendix all the reviews that were excluded from the map for this “overlap” reason, and interested readers can review them and select for themselves the one they judge most informative. As in all evidence-based products, and particularly in one such as this covering a large and complex evidence base, it is possible there are errors of data extraction and compilation. We used dual review to minimize the chance of such errors, but if we are notified of errors we will correct them.

Lastly, a limitation to assessing the effect of acupuncture is the variation (and controversy) with which sham acupuncture is designed. Some studies defined sham as standard needling technique at non-active points, some included shallow needling in both active and non-active points, and more contemporarily, non-penetrating needles used at both active and non-active points. One of the major controversies around the use of sham as an inert comparator is that the unintended physiologic effects beyond placebo have not been considered,⁷⁶ thus, the exact mechanism by which acupuncture is effective is unclear when compared to “sham” acupuncture. The uncertainty around what is considered “sham” acupuncture and the lack of clear understanding of the exact mechanism by which acupuncture is effective compared to sham acupuncture calls into question how we should assess conclusions from studies employing “sham” as a comparator. This uncertainty also renders conclusions about the effect of acupuncture compared to sham

more challenging to interpret than, for example, the comparison of a pharmaceutical intervention to placebo, in which case the placebo is confidently assumed to be inert.

FUTURE RESEARCH

The vast majority of the conclusions of the eligible systematic reviews were classified as low or very low certainty of evidence, indicating that the most critical research need is for better evidence to increase certainty of evidence for acupuncture. Studies comparing acupuncture to placebo or sham are probably not the priority; rather the priority should be studies comparing acupuncture to other recommended/accepted/active therapies for the condition. In such studies, the type and schedule of acupuncture treatment needs careful documentation so findings can be applied in other settings. Studies comparing acupuncture to other recommended therapies should also have a sufficiently long follow-up time period to allow any nonspecific effects (*eg*, of getting something “new”) to dissipate. For example, for studies of chronic painful conditions, this time period has been proposed to be at least 6 months.

For health conditions of priority to the VA that currently do not have at least moderate-certainty evidence supporting use of acupuncture, new studies that address limitations of existing research are needed. More rigorous evidence on acupuncture is likely the best way to expand access to acupuncture among Veterans most likely to benefit from it. The need for more rigorous research also applies to the acupuncture community at large. We note that in the 9 years covered by this update, we identified 370 new systematic reviews of acupuncture. This compares to about 370 new RCTs of acupuncture published in the same time period and included in the systematic reviews in our map. Thus, researchers interested in acupuncture are producing about as many systematic reviews (that generally conclude the certainty of evidence is low or very low) as new RCTs needed to raise the certainty of evidence. This seems to be a mismatch between resources and need. The field of acupuncture would be best advanced with resources devoted to producing more high-quality RCTs and producing fewer new systematic reviews.

CONCLUSIONS

There are many systematic reviews of acupuncture for more than 4 dozen adult health conditions. The number of conclusions about the effectiveness of acupuncture that were judged to have at least moderate certainty of evidence is small relative to the large number of existing RCTs and reviews. Most of these studies compare acupuncture to sham or control acupuncture for painful conditions or pain outcomes. There is no evidence that acupuncture is less safe than usual care for these conditions.

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76. Kim TH, Lee MS, Birch S, Alraek T. Plausible Mechanism of Sham Acupuncture Based on Biomarkers: A Systematic Review of Randomized Controlled Trials. *Front Neurosci*. 2022;16:834112. doi:10.3389/fnins.2022.834112

APPENDIX A. SEARCH STRATEGIES

PubMed

1 March 2013-present; English
Search Run: 22 April 2021

Acupuncture
AND
systematic[sb]
AND
("2013/03/01"[PDat] : "3000/12/31"[PDat])

Results: 1165

CDSR

2013-present; English
Search Run: 22 April 2021

acupuncture:ti,ab,kw

Results: 85

DARE (via CRD)

Publication Year 2013 – 2021 (However – ends at 2014 when DARE ceased production)

Any Field: acupuncture
AND
Title: systematic review

Results: 74 – 5 identified non-English = 69

AMED (via Dialog)

1 March 2013 – 22 April 2021; English

ti(acupuncture) AND ("systematic review")
OR
ab(acupuncture) AND ("systematic review")

Results: 148

APPENDIX B. EXCLUDED REVIEWS MEETING ELIGIBILITY CRITERIA NOT INCLUDED IN EVIDENCE MAP

1. Amaral, L.K.B., et al., Efficacy of conservative therapy in older people with nonspecific low back pain: A systematic review with meta-analysis and GRADE recommendations. *Arch Gerontol Geriatr*, 2020. 90: p. 104177.
2. Asher, G.N., et al., Comparative Benefits and Harms of Complementary and Alternative Medicine Therapies for Initial Treatment of Major Depressive Disorder: Systematic Review and Meta-Analysis. *J Altern Complement Med*, 2017. 23(12): p. 907-919.
3. Bisson, J.I., et al., Non-pharmacological and non-psychological approaches to the treatment of PTSD: results of a systematic review and meta-analyses. *Eur J Psychotraumatol*, 2020. 11(1): p. 1795361.
4. Cheong, Y.C., et al., Acupuncture and assisted reproductive technology. *Cochrane Database Syst Rev*, 2013(7): p. Cd006920.
5. Close, C., et al., A systematic review investigating the effectiveness of Complementary and Alternative Medicine (CAM) for the management of low back and/or pelvic pain (LBPP) in pregnancy. *J Adv Nurs*, 2014. 70(8): p. 1702-16.
6. Dai, L., et al., Acupuncture and Derived Therapies for Pain in Palliative Cancer Management: Systematic Review and Meta-Analysis Based on Single-Arm and Controlled Trials. *J Palliat Med*, 2021.
7. Deare, J.C., et al., Acupuncture for treating fibromyalgia. *Cochrane Database Syst Rev*, 2013. 2013(5): p. Cd007070.
8. Gao, R., et al., Acupuncture and clomiphene citrate for anovulatory infertility: a systematic review and meta-analysis. *Acupunct Med*, 2020. 38(1): p. 25-36.
9. Gutke, A., et al., Treatments for pregnancy-related lumbopelvic pain: a systematic review of physiotherapy modalities. *Acta Obstet Gynecol Scand*, 2015. 94(11): p. 1156-67.
10. He, Y., 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): p. 271-278.
11. Hou, S., et al., Treatment of Chemotherapy-Induced Peripheral Neuropathy: Systematic Review and Recommendations. *Pain Physician*, 2018. 21(6): p. 571-592.
12. Huang, J.F., et al., Can Acupuncture Improve Chronic Spinal Pain? A Systematic Review and Meta-Analysis. *Global Spine J*, 2020: p. 2192568220962440.
13. Jo, J., Y.J. Lee, and H. Lee, Acupuncture for polycystic ovarian syndrome: A systematic review and meta-analysis. *Medicine (Baltimore)*, 2017. 96(23): p. e7066.
14. Kizhakkeveetil, A., K. Rose, and G.E. Kadar, Integrative therapies for low back pain that include complementary and alternative medicine care: a systematic review. *Glob Adv Health Med*, 2014. 3(5): p. 49-64.
15. Kolber, M.R., et al., PEER systematic review of randomized controlled trials: Management of chronic low back pain in primary care. *Can Fam Physician*, 2021. 67(1): p. e20-e30.
16. Lan, L., et al., Acupuncture for functional dyspepsia. *Cochrane Database Syst Rev*, 2014(10): p. Cd008487.
17. Li, C., et al., The response-time relationship and covariate effects of acupuncture for chronic pain: A systematic review and model-based longitudinal meta-analysis. *Eur J Pain*, 2020. 24(9): p. 1653-1665.

18. Metcalf, O., et al., Efficacy of Fifteen Emerging Interventions for the Treatment of Posttraumatic Stress Disorder: A Systematic Review. *J Trauma Stress*, 2016. 29(1): p. 88-92.
19. Mu, J., et al., Acupuncture for chronic nonspecific low back pain. *Cochrane Database Syst Rev*, 2020. 12: p. Cd013814.
20. Mulla, S.M., et al., Management of Central Poststroke Pain: Systematic Review of Randomized Controlled Trials. *Stroke*, 2015. 46(10): p. 2853-60.
21. Nascimento, P., et al., Effectiveness of interventions for non-specific low back pain in older adults. A systematic review and meta-analysis. *Physiotherapy*, 2019. 105(2): p. 147-162.
22. Seo, S.Y., et al., Effectiveness of Acupuncture and Electroacupuncture for Chronic Neck Pain: A Systematic Review and Meta-Analysis. *Am J Chin Med*, 2017. 45(8): p. 1573-1595.
23. Smith, C.A., et al., Acupuncture or acupressure for pain management during labour. *Cochrane Database Syst Rev*, 2020. 2(2): p. Cd009232.
24. Tang, H., et al., Acupuncture for Lateral Epicondylitis: A Systematic Review. *Evid Based Complement Alternat Med*, 2015. 2015: p. 861849.
25. Trinh, K., et al., Acupuncture for neck disorders. *Cochrane Database Syst Rev*, 2016(5): p. Cd004870.
26. Wahbeh, H., et al., Complementary and Alternative Medicine for Posttraumatic Stress Disorder Symptoms: A Systematic Review. *J Evid Based Complementary Altern Med*, 2014. 19(3): p. 161-175.
27. Wu, J., D. Chen, and N. Liu, Effectiveness of acupuncture in polycystic ovary syndrome: A systematic review and meta-analysis of randomized controlled trials. *Medicine (Baltimore)*, 2020. 99(22): p. e20441.
28. Xiang, Y., et al., Evidence of efficacy of acupuncture in the management of low back pain: a systematic review and meta-analysis of randomised placebo- or sham-controlled trials. *Acupunct Med*, 2020. 38(1): p. 15-24.
29. Xie, Z.Y., et al., The effects of acupuncture on pregnancy outcomes of in vitro fertilization: a systematic review and meta-analysis. *BMC Complement Altern Med*, 2019. 19(1): p. 131.
30. Yu, C., et al., Effectiveness of acupuncture for angina pectoris: a systematic review of randomized controlled trials. *BMC Complement Altern Med*, 2015. 15: p. 90.
31. Yuan, Q.L., et al., Traditional Chinese medicine for neck pain and low back pain: a systematic review and meta-analysis. *PLoS One*, 2015. 10(2): p. e0117146.
32. Zhong, Y., et al., Acupuncture in improving endometrial receptivity: a systematic review and meta-analysis. *BMC Complement Altern Med*, 2019. 19(1): p. 61.
33. Zhou, Y., et al., Effectiveness of Acupuncture for Lateral Epicondylitis: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Pain Res Manag*, 2020. 2020: p. 8506591.

APPENDIX C. EXCLUDED PUBLICATIONS

Not Reviewed in Detail in Favor of a Better SR on Same Topic, $N = 33$

1. Amaral, L.K.B., et al., Efficacy of conservative therapy in older people with nonspecific low back pain: A systematic review with meta-analysis and GRADE recommendations. *Arch Gerontol Geriatr*, 2020. 90: p. 104177.
2. Asher, G.N., et al., Comparative Benefits and Harms of Complementary and Alternative Medicine Therapies for Initial Treatment of Major Depressive Disorder: Systematic Review and Meta-Analysis. *J Altern Complement Med*, 2017. 23(12): p. 907-919.
3. Bisson, J.I., et al., Non-pharmacological and non-psychological approaches to the treatment of PTSD: results of a systematic review and meta-analyses. *Eur J Psychotraumatol*, 2020. 11(1): p. 1795361.
4. Cheong, Y.C., et al., Acupuncture and assisted reproductive technology. *Cochrane Database Syst Rev*, 2013(7): p. Cd006920.
5. Close, C., et al., A systematic review investigating the effectiveness of Complementary and Alternative Medicine (CAM) for the management of low back and/or pelvic pain (LBPP) in pregnancy. *J Adv Nurs*, 2014. 70(8): p. 1702-16.
6. Dai, L., et al., Acupuncture and Derived Therapies for Pain in Palliative Cancer Management: Systematic Review and Meta-Analysis Based on Single-Arm and Controlled Trials. *J Palliat Med*, 2021.
7. Deare, J.C., et al., Acupuncture for treating fibromyalgia. *Cochrane Database Syst Rev*, 2013. 2013(5): p. Cd007070.
8. Gao, R., et al., Acupuncture and clomiphene citrate for anovulatory infertility: a systematic review and meta-analysis. *Acupunct Med*, 2020. 38(1): p. 25-36.
9. Gutke, A., et al., Treatments for pregnancy-related lumbopelvic pain: a systematic review of physiotherapy modalities. *Acta Obstet Gynecol Scand*, 2015. 94(11): p. 1156-67.
10. He, Y., 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): p. 271-278.
11. Hou, S., et al., Treatment of Chemotherapy-Induced Peripheral Neuropathy: Systematic Review and Recommendations. *Pain Physician*, 2018. 21(6): p. 571-592.
12. Huang, J.F., et al., Can Acupuncture Improve Chronic Spinal Pain? A Systematic Review and Meta-Analysis. *Global Spine J*, 2020: p. 2192568220962440.
13. Jo, J., Y.J. Lee, and H. Lee, Acupuncture for polycystic ovarian syndrome: A systematic review and meta-analysis. *Medicine (Baltimore)*, 2017. 96(23): p. e7066.
14. Kizhakkeveetil, A., K. Rose, and G.E. Kadar, Integrative therapies for low back pain that include complementary and alternative medicine care: a systematic review. *Glob Adv Health Med*, 2014. 3(5): p. 49-64.
15. Kolber, M.R., et al., PEER systematic review of randomized controlled trials: Management of chronic low back pain in primary care. *Can Fam Physician*, 2021. 67(1): p. e20-e30.
16. Lan, L., et al., Acupuncture for functional dyspepsia. *Cochrane Database Syst Rev*, 2014(10): p. Cd008487.
17. Li, C., et al., The response-time relationship and covariate effects of acupuncture for chronic pain: A systematic review and model-based longitudinal meta-analysis. *Eur J Pain*, 2020. 24(9): p. 1653-1665.

18. Metcalf, O., et al., Efficacy of Fifteen Emerging Interventions for the Treatment of Posttraumatic Stress Disorder: A Systematic Review. *J Trauma Stress*, 2016. 29(1): p. 88-92.
19. Mu, J., et al., Acupuncture for chronic nonspecific low back pain. *Cochrane Database Syst Rev*, 2020. 12: p. Cd013814.
20. Mulla, S.M., et al., Management of Central Poststroke Pain: Systematic Review of Randomized Controlled Trials. *Stroke*, 2015. 46(10): p. 2853-60.
21. Nascimento, P., et al., Effectiveness of interventions for non-specific low back pain in older adults. A systematic review and meta-analysis. *Physiotherapy*, 2019. 105(2): p. 147-162.
22. Seo, S.Y., et al., Effectiveness of Acupuncture and Electroacupuncture for Chronic Neck Pain: A Systematic Review and Meta-Analysis. *Am J Chin Med*, 2017. 45(8): p. 1573-1595.
23. Smith, C.A., et al., Acupuncture or acupressure for pain management during labour. *Cochrane Database Syst Rev*, 2020. 2(2): p. Cd009232.
24. Tang, H., et al., Acupuncture for Lateral Epicondylitis: A Systematic Review. *Evid Based Complement Alternat Med*, 2015. 2015: p. 861849.
25. Trinh, K., et al., Acupuncture for neck disorders. *Cochrane Database Syst Rev*, 2016(5): p. Cd004870.
26. Wahbeh, H., et al., Complementary and Alternative Medicine for Posttraumatic Stress Disorder Symptoms: A Systematic Review. *J Evid Based Complementary Altern Med*, 2014. 19(3): p. 161-175.
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28. Xiang, Y., et al., Evidence of efficacy of acupuncture in the management of low back pain: a systematic review and meta-analysis of randomised placebo- or sham-controlled trials. *Acupunct Med*, 2020. 38(1): p. 15-24.
29. Xie, Z.Y., et al., The effects of acupuncture on pregnancy outcomes of in vitro fertilization: a systematic review and meta-analysis. *BMC Complement Altern Med*, 2019. 19(1): p. 131.
30. Yu, C., et al., Effectiveness of acupuncture for angina pectoris: a systematic review of randomized controlled trials. *BMC Complement Altern Med*, 2015. 15: p. 90.
31. Yuan, Q.L., et al., Traditional Chinese medicine for neck pain and low back pain: a systematic review and meta-analysis. *PLoS One*, 2015. 10(2): p. e0117146.
32. Zhong, Y., et al., Acupuncture in improving endometrial receptivity: a systematic review and meta-analysis. *BMC Complement Altern Med*, 2019. 19(1): p. 61.
33. Zhou, Y., et al., Effectiveness of Acupuncture for Lateral Epicondylitis: A Systematic Review and Meta-Analysis of Randomized Controlled Trials. *Pain Res Manag*, 2020. 2020: p. 8506591.

Duplicate, N = 3

1. Franco, J.V., et al., *Non-pharmacological interventions for treating chronic prostatitis/chronic pelvic pain syndrome*. *Cochrane Database Syst Rev*, 2018. 5(5): p. Cd012551.
2. Pennick, V. and S.D. Liddle, *Interventions for preventing and treating pelvic and back pain in pregnancy*. *Cochrane Database Syst Rev*, 2013(8): p. Cd001139.
3. Zimpel, S.A., et al., *Complementary and alternative therapies for post-caesarean pain*. *Cochrane Database of Systematic Reviews*, 2020(9).

Review of Reviews, $N = 2$

1. Huang, J., et al., *Acupuncture for the Treatment of Alzheimer's Disease: An Overview of Systematic Reviews*. *Front Aging Neurosci*, 2020. **12**: p. 574023.
2. Wang, L.Y., et al., *Overview of Meta-Analyses of Five Non-pharmacological Interventions for Alzheimer's Disease*. *Front Aging Neurosci*, 2020. **12**: p. 594432.

No Outcome of Interest, $N = 1$

1. Wong, V., et al., *Acupuncture for acute management and rehabilitation of traumatic brain injury*. *Cochrane Database Syst Rev*, 2013(3): p. Cd007700.

Not an Intervention of Interest, $N = 1$

1. Lan, Y., et al., *Auricular acupuncture with seed or pellet attachments for primary insomnia: a systematic review and meta-analysis*. *BMC Complement Altern Med*, 2015. **15**: p. 103.

Comparison, $N = 1$

1. Mo, Z., et al., *Comparisons of the Effectiveness and Safety of Tuina, Acupuncture, Traction, and Chinese Herbs for Lumbar Disc Herniation: A Systematic Review and Network Meta-Analysis*. *Evid Based Complement Alternat Med*, 2019. **2019**: p. 6821310.

APPENDIX D. CONDITIONS AND SUB-CONDITIONS OF INCLUDED SYSTEMATIC REVIEWS

Condition	Sub-Condition	Map
Angina ⁶⁴	None	Other
Ankle Sprain/Pain ³⁹	None	Musculoskeletal Pain
Anxiety	Pre-operative Anxiety ⁴⁴	Mental Health
Back Pain	Chronic Low Back Pain ²⁰	Musculoskeletal Pain
Back Pain	Low Back Pain - Herniated Disc ⁴⁰	Musculoskeletal Pain
Back Pain	Chronic Low Back Pain (Radicular Back Pain) ¹⁰	Musculoskeletal Pain
Back Pain	Acute Low Back Pain ¹⁰	Musculoskeletal Pain
Cancer-related Pain	Hormone Therapy-related Side Effects in Breast Cancer Patients ²²	Musculoskeletal Pain
Cancer-related Pain	Chemotherapy-induced Peripheral Neuropathy ²³	Pain
Cancer-related Pain	Health-related Quality of Life in Cancer Patients ⁶⁵	Other
Cancer-related Pain	Pain Management in Cancer ²⁴	Pain
Carpal Tunnel Syndrome ¹⁷	None	Pain
Chronic Fatigue Syndrome ⁶⁶	None	Other
Chronic Fatigue Syndrome ¹¹	None	Other
Chronic Musculoskeletal Pain ¹⁶	None	Musculoskeletal Pain
Depression	Post-stroke Depression ⁴⁵	Mental Health
Depression	Depression in Pregnancy ⁴⁶	Mental Health
Depression ⁴⁷	None	Mental Health
Depression	Major Depressive Disorder ⁴⁸	Mental Health
Diabetic Peripheral Neuropathy ²⁵	None	Pain
Dysmenorrhea ⁵⁶	None	Women's Health
Dyspepsia	Functional Dyspepsia ⁶⁷	Other
Fertility	Assistive Reproductive Therapy ⁵⁷	Women's Health
Fertility	Anovulatory Infertility ⁵⁸	Women's Health
Fertility	Oocyte Retrieval ⁵⁹	Women's Health
Fertility	Polycystic Ovary Syndrome / Ovarian Hyperstimulation ⁶⁰	Women's Health
Fibromyalgia	Pain, Fatigue, Sleep Quality ²⁶	Pain
Fibromyalgia	None	Pain
Headache	Migraine, Active Therapy ²⁸	Pain
Headache	Occipital Neuralgia ²⁹	Pain
Headache	Migraine Headache Without Aura ³⁰	Pain

Condition	Sub-Condition	Map
Headache	Migraine, Mixed Comparators ³¹	Pain
Headache	Tension-type Headache ³²	Pain
Herpes Zoster ⁶⁸	None	Other
Inflammatory Bowel Disease ⁶⁹	None	Other
Irritable Bowel Syndrome ⁷⁰	None	Other
Insomnia	Insomnia in Elderly ⁴⁹	Mental Health
Insomnia	Primary Insomnia ⁵⁰	Mental Health
Lateral Elbow Pain ¹⁴	None	Musculoskeletal Pain
Menopause ⁶¹	None	Women's Health
Mixed Pain - Not Specified	Painful Conditions in Emergency Department ¹³	Other
Mixed Pain - Not Specified	Immediate Pain Relief in Musculoskeletal Pain Conditions ⁴¹	Musculoskeletal Pain
Mixed Pain - Not Specified	Post-stroke Shoulder-hand Syndrome ¹²	Musculoskeletal Pain
Neck Pain	Chronic Neck Pain ²⁰	Musculoskeletal Pain
Osteoarthritis	Knee Pain ²⁰	Musculoskeletal Pain
Osteoarthritis	Hip Pain ⁴²	Musculoskeletal Pain
Other Acute Pain	Post-operative Pain ¹⁹	Pain
Other Acute Pain	Dental Pain ¹⁹	Pain
Other Acute Pain	Kidney Stone ¹⁹	Pain
Other Chronic Pain - Various	Chronic Non-cancer Pain ¹⁸	Pain
Other Specific Pain	Acupuncture for Improving Cognitive Impairment After Stroke ⁷¹	Other
Peripheral Neuropathy ³³	None	Pain
Premenstrual Syndrome ⁶²	None	Women's Health
Post-herpetic Neuralgia ³⁴	None	Pain
Post-operative Pain	Post-caesarean Pain ³⁵	Women's Health
Post-operative Pain	Post-operative Pain, Active Therapy ³⁶	Pain
Post-operative Pain	Post-operative Pain, Mixed Comparators ³⁷	Pain
Pregnancy	Low Back and Pelvic Pain ⁶³	Women's Health
Primary Ovarian Insufficiency	Resumption of Menses ⁵⁵	Women's Health
Primary Trigeminal Neuralgia ³⁸	None	Pain
Prostatitis - Chronic Pelvic Pain	Chronic Prostatitis/Chronic Pelvic Pain Syndrome ⁹	Pain

Condition	Sub-Condition	Map
Posttraumatic Stress Syndrome ⁵¹	None	Mental Health
Schizophrenia ⁵²	None	Mental Health
Shoulder Pain	Frozen Shoulder ⁴³	Musculoskeletal Pain
Shoulder Pain	None ²¹	Musculoskeletal Pain
Substance Use Disorder	Opioid Use Disorder ⁵³	Mental Health
Substance Use Disorder	Tobacco Use Disorder ⁵⁴	Mental Health
Temporomandibular Pain ²¹	None	Musculoskeletal Pain
Tinnitus ¹⁵	None	Other

APPENDIX E. CONCLUSIONS FROM SYSTEMATIC REVIEWS INCLUDED IN THE EVIDENCE MAP

Angina

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Yang, 2019 ⁶⁴	None	Compared with sham acupuncture, acupuncture may be associated with improving average pain intensity, 6-Min Walk Test, anxiety symptoms, and depression symptoms.	Very Low to Moderate	17

Ankle Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Kim, 2014 ³⁹	None	We are unable to conclude whether acupuncture is more effective than other standard methods for the treatment of ankle sprains in adults because of the very low quality of the available evidence. Because the adverse effects of acupuncture treatment were not described in most of the studies, we are also unable to draw any conclusions about the safety of acupuncture.	Very Low	19

Anxiety

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Tong, 2021 ⁴⁴	Pre-Operative Anxiety	Acupuncture therapy, compared with sham therapy, significantly reduced the STAI-S score for patients with preoperative anxiety.	Very Low to Moderate	5

Back Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Chou, 2017 ¹⁰	Chronic Low Back Pain (Radicular Back Pain)	Acupuncture vs sham acupuncture: moderate magnitude of effect for pain; no effect for function Acupuncture vs no acupuncture: moderate magnitude of effect for pain; moderate for function	Low	9
Chou, 2017 ¹⁰	Acute Low Back Pain	Acupuncture vs sham small magnitude of effect for pain; no effect for function	Low	9
Skelly, 2020 ²⁰	Chronic Low Back Pain	Acupuncture was associated with a small improvement in short-term function compared with sham acupuncture or usual care; there was no difference between acupuncture and controls in intermediate-term or long-term function. Acupuncture was associated with small improvements in short-term and long-term pain compared with sham acupuncture, usual care, an attention control, or a placebo intervention, but there was no difference in intermediate-term pain.	Low	8
Tang, 2018 ⁴⁰	Low Back Pain - Herniated Disc	Acupuncture was better than traction and diclofenac sodium at improvements in VAS pain.	Very Low	30

Cancer-related Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Hu, 2016 ²⁴	Pain Management in Cancer	Acupuncture plus drug therapy is more effective than conventional drug therapy alone, but acupuncture alone is not more effective than conventional drug therapy. Acupuncture is not more effective than sham acupuncture.	Very Low	20
Hwang, 2020 ²³	Chemotherapy-induced Peripheral Neuropathy	Acupuncture was more effective than pharmacological treatment.	Low	5
Lin, 2019 ⁶⁵	Health-related Quality of Life in Cancer Patients	Acupuncture has no effect on health-related quality of life.	Low	4

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Yuanqing, 2020 ²²	Hormone Therapy-Related Side Effects in Breast Cancer Patients	Acupuncture is a moderately appropriate alternative therapy for hormone therapy-related side effects in breast cancer patients.	Low	20

Carpal Tunnel Syndrome

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Choi, 2018 ¹⁷	None	No clear difference in acupuncture vs sham- short term follow-up: 8 weeks / 3 months No clear difference in clinical improvement between acupuncture vs oral corticosteroid-short term follow-up: 4 weeks / 13 months Better clinical improvement with acupuncture vs corticosteroids in long-term follow-up: 7 months / 13 months No clear difference in rates of improvement in acupuncture vs vitamin B12 - short term follow-up No clear difference in rates of improvement in electro-acupuncture vs night splints - short term follow-up There was more clinical improvement in acupuncture vs ibuprofen-short term follow-up: 4 weeks	Very Low to Low Very Low Very Low Very Low Very Low Very Low	10

Chronic Fatigue Syndrome

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Wang, 2014 ¹¹	None	There were significant better effects in acupuncture group compared with sham as measured by the Chalder’s Fatigue Scale (physical) score.	Low to Moderate	7
Zhang, 2019 ⁶⁶	None	In summary, acupuncture appears more effective than sham acupuncture and Chinese herbal medicine for the treatment of CFS.	Very Low to Low	13

Chronic Musculoskeletal Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Vickers, 2018 ¹⁶	None	Acupuncture is effective for the treatment of chronic pain compared with sham and control, with treatment effects persisting over time.	Moderate	39

Depression

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Liu, 2021 ⁴⁵	Post-stroke Depression	Acupuncture combined with conventional treatment could significantly reduce post-stroke depression. Acupuncture was safer than anti-depressants.	Very Low to Low	17
Smith, 2018 ⁴⁷	None	The reduction in severity of depression was less when acupuncture was compared with control acupuncture than when acupuncture was compared with no treatment control. The reduction in severity of depression with acupuncture given alone or in conjunction with medication versus medication alone is uncertain. The effect of acupuncture compared with psychological therapy is unclear. Acupuncture did however have a positive effect on physical quality of life at the end of treatment when compared with sham acupuncture.	Very Low to Low	64
Smith, 2019 ⁴⁶	Depression in Pregnancy	Acupuncture compared to control may reduce antenatal depression.	Moderate	2
Sorbero, 2016 ⁴⁸	Major Depressive Disorder	Acupuncture may be superior to waitlist; limited evidence suggests a higher rate of responders with adjunctive acupuncture plus anti-depressants compared with anti-depressants alone.	Low	18

Dysmenorrhea

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Smith, 2016 ⁵⁶	None	There is insufficient evidence to demonstrate whether acupuncture is effective in treating primary dysmenorrhea, and for most comparisons no data were available on adverse events.	Very Low to Low	32

Fertility

Author, Year	Sub condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Coyle, 2021 ⁵⁷	Assistive Reproductive Therapy	When compared with sham acupuncture, acupuncture performed at the time of embryo transfer does not result in better outcomes for live birth rate or for miscarriage rate.	High	6
Jo, 2017 ⁶⁰	Polycystic Ovary Syndrome / Ovarian Hyperstimulation	Acupuncture may increase the clinical pregnancy rate and ongoing pregnancy rate and decrease the risk of Ovarian Hyperstimulation Syndrome in women with Polycystic Ovarian Syndrome undergoing in vitro fertilization or intracytoplasmic sperm injection.	Low	4
Kwan, 2018 ⁵⁹	Oocyte Retrieval	Compared to conscious sedation alone, more effective pain relief during oocyte retrieval was reported when conscious sedation was combined with electro-acupuncture. No significant increase in pregnancy rate.	Low	7
Lim, 2019 ⁵⁸	Anovulatory Infertility	There was no evidence of any clinically relevant differences in live birth rate, multiple pregnancy rate, ovulation rate, clinical pregnancy rate, and miscarriage rate in sham vs acupuncture. We were uncertain whether acupuncture improved ovulation rate compared to active treatment.	Low Very Low	8

Fibromyalgia

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Kim, 2019 ²⁶	Pain, Fatigue, Sleep Quality	Verum acupuncture is more effective than sham acupuncture for pain relief, improving sleep quality, and improving general status in fibromyalgia syndrome posttreatment.	Moderate to High	10
Zhang, 2019 ²⁷	None	Compared with sham, real acupuncture was more effective in reducing pain and improving quality of life after treatment in the short term. At follow-up in the long term, the effect of acupuncture was also superior to that of sham acupuncture.	Low to Moderate Low	12

Functional Dyspepsia

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Pang, 2016 ⁶⁷	None	Acupuncture therapy has a similar effect for functional dyspepsia in comparison with sham acupuncture. Acupuncture therapy is superior to medication (prokinetic agents) in improving the symptoms and quality of life of functional dyspepsia patients.	Low Low	16

Headache

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Giovanardi, 2020 ²⁸	Migraine	Acupuncture is mildly more effective and much safer than medication for the prophylaxis of migraine.	Moderate	9
Linde, 2016 ³²	Tension-type Headache	Acupuncture reduces headache frequency over usual care and sham.	Moderate	12
Linde, 2016 ³¹	Migraine	Compared with no acupuncture, acupuncture was associated with a moderate reduction of headache frequency over no acupuncture after treatment. Comparison with sham, both after treatment and at follow-up, acupuncture was associated with a small but statistically significant frequency reduction over sham. Compared with prophylactic drug treatment, acupuncture reduced migraine frequency significantly more than drug prophylaxis after treatment.	Moderate Moderate Moderate	22
Xu, 2018 ³⁰	Migraine Headache without Aura	Acupuncture had a significant advantage over medication in reducing frequency of migraine, pain score, and effective rate. Acupuncture also had a significant advantage over sham acupuncture in reducing frequency of migraine and pain score.	Very Low to Low	14
Yun, 2020 ²⁹	Occipital Neuralgia	Acupuncture was more effective than medication at reducing VAS pain. Acupuncture was more effective than medication on the total effective rate.	Very Low Low	11

Herpes Zoster

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Cui, 2021 ⁶⁸	None	When compared with antiviral therapy, acupuncture was associated with a significant reduction in pain, a significant reduction in incrustation time, and a significant reduction in decrustation time. Compared with active treatment, acupuncture was associated with reduction on the overall incidence of post-herpetic neuralgia	Low Moderate	21

Inflammatory Bowel Disease

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Wang, 2020 ⁶⁹	None	Acupuncture may be more effective in treating ulcerative colitis compared to conventional medicine (metronidazole combined with sulfasalazine).	Low to Moderate	13

Insomnia

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Cao, 2019 ⁵⁰	Primary Insomnia	Acupuncture might result in improvement compared to no treatment on Pittsburgh Sleep Quality Index scores and appears safe.	Very Low to Low	73
Kwon, 2020 ⁴⁹	Insomnia in Elderly	Using Pittsburgh Sleep Quality Index score, acupuncture and acupuncture combined with relaxation were both more effective in improving sleep quality compared to relaxation alone.	Very Low to Moderate	13

Irritable Bowel Syndrome

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Guo, 2020 ⁷⁰	None	Compared with loperamide, acupuncture showed more effectiveness in weekly defecation. Compared to dicetel, acupuncture produced more significant effect related to the total symptom score and IBS Symptom Severity Scale.	Low to Moderate	31

Lateral Elbow Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Navarro-Santana, 2020 ¹⁴	None	Evidence suggests positive effects of acupuncture, but not electro-acupuncture, for pain, related disability, and strength, in lateral epicondylalgia of musculoskeletal origin, in the short term.	Very Low to Low	14

Menopause

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Dodin, 2013 ⁶¹	None	When acupuncture was compared with sham acupuncture, there was no evidence of any difference in their effect on hot flushes. When acupuncture was compared with no treatment, there appeared to be a benefit from acupuncture, but acupuncture appeared to be less effective than HT.	Very Low to Low	16

Mixed Not Specified Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Chia, 2018 ¹³	Painful Conditions in Emergency Department	Acupuncture was superior with sham acupuncture, more effective than intravenous morphine, comparable to conventional Emergency Department treatment, and superior to standard Emergency Department care alone when used on an adjuvant basis.	Low	6
Liu, 2019 ¹²	Post-stroke Shoulder-Hand Syndrome	Acupuncture therapy seems effective for motor function, pain relief, and activities of daily living in stroke patients with mild Shoulder-hand Syndrome, when it is used in combination with rehabilitation.	Low	38
Xiang, 2017 ⁴¹	Immediate Pain Relief in Musculoskeletal Pain Conditions	Acupuncture was associated with a greater immediate pain relief effect compared with sham acupuncture. Acupuncture was associated with greater immediate pain relief effect when compared to analgesic injections.	Moderate Low	13

Neck Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Skelly, 2020 ²⁰	Chronic Neck Pain	Acupuncture was associated with small improvements in short-term and intermediate-term function versus sham acupuncture, a placebo (sham laser), or usual care.	Low	11
		There were no differences in pain in trials comparing acupuncture with sham acupuncture or placebo interventions in the short term.	Low	
		There was insufficient evidence to draw conclusions regarding short-term function or pain for acupuncture versus NSAIDs.	Low	
		No serious adverse events were reported in 6 trials reporting harms.	Low	

Osteoarthritis

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Manheimer, 2018 ⁴²	Hip Pain	Acupuncture probably has little or no effect in reducing pain or improving function relative to sham acupuncture in people with hip osteoarthritis.	Moderate	6
Skelly, 2020 ²⁰	Knee Pain	There were no differences between acupuncture versus control interventions (sham acupuncture, waitlist, or usual care) on function in the intermediate term	Low	9
		There were no clinically meaningful differences between acupuncture versus control interventions (sham acupuncture, waitlist, or usual care) on pain in the intermediate term.	Moderate	

Other Acute Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Chou, 2020 ¹⁹	Post-operative Pain	There is inconsistent evidence on acupuncture's effect on pain intensity when compared with sham. Acupuncture may be associated with decrease analgesic use after 1 day compared to usual care.	Very Low	2
Chou, 2020 ¹⁹	Dental Surgical Pain	There is insufficient evidence of acupuncture's effect on post-operative pain compared with sham acupuncture.	Very Low	1
Chou, 2020 ¹⁹	Kidney Stone	Acupuncture was not effective in reducing pain intensity vs medication for kidney stone.	Low	1

Other Chronic Pain - Various

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Eccleston, 2017 ¹⁸	Chronic Non-cancer Pain	There is no evidence for the efficacy or safety of electro-acupuncture for reducing prescribed opioid use in chronic pain.	Very Low	1

Other Specific

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Zhou, 2020 ⁷¹	Improvement of Cognitive Impairment After Stroke	Acupuncture was effective in improving PSCI (post-stroke cognitive impairment) compared to no treatment or sham.	Moderate	37

Pelvic Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Franco, 2019 ⁹	Chronic Prostatitis/ Chronic Pelvic Pain Syndrome	Acupuncture probably reduced prostatitis symptoms (compared with sham). Acupuncture may have reduced prostatitis symptoms compared with medical treatment	Moderate Moderate	6

Peripheral Neuropathy

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Ju, 2017 ³³	None	There is insufficient evidence to support or refute the use of acupuncture for neuropathic pain in general or for any specific neuropathic pain condition when compared with sham acupuncture or other active therapies.	Very Low to Low	6

Peripheral Neuropathy (Diabetic)

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Amato, 2019 ²⁵	None	Evidence for acupuncture was insufficient for diabetic peripheral neuropathy.	Very Low	1

Post-herpetic Neuralgia

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Pei, 2019 ³⁴	None	Acupuncture was more effective in reducing post-herpetic neuralgia pain intensity compared to control.	Low to Moderate	4

Post-operative Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Tedesco, 2017 ³⁷	None	Acupuncture reduced or delayed opioid consumption compared with sham or no treatment.	Low to Moderate	4
Yin, 2020 ³⁶	None	Compared to active treatment, acupuncture may improve the overall symptoms of Postcholecystectomy syndrome (PCS).	Low to Moderate	14
Zimpel, 2020 ³⁵	Post-caesarean Pain	We are very uncertain if acupuncture (versus no treatment) or acupuncture plus analgesia (versus placebo plus analgesia) has any effect on pain because the quality of evidence is very low. Acupuncture plus analgesia (versus analgesia) may reduce pain at 12 hours and 24 hours.	Very Low	4

Posttraumatic Stress Disorder

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Grant, 2018 ⁵¹	None	Needle acupuncture reduces PTSD and depressive symptoms at follow-up compared to passive controls, treatment-as-usual, and active interventions. No significant differences were observed between acupuncture and comparators for other outcomes.	Very Low to Low	7

Pregnancy

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Liddle, 2015 ⁶³	Low Back and Pelvic Pain	There was evidence from single studies that acupuncture significantly improves evening pelvic pain better than stabilizing exercise or usual prenatal care. There is evidence suggesting that acupuncture is better than physiotherapy at relieving evening low back and pelvic pain and related functional disability, and improves pain, but not women's ability to carry out daily activities, when started at 26- rather than 20-weeks' gestation.	Moderate Low	4

Premenstrual Syndrome

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Armour, 2018 ⁶²	None	Acupuncture may reduce overall mood and physical PMS symptoms when compared with sham. There was not enough evidence to determine the safety of acupuncture.	Low	4

Primary Ovarian Insufficiency

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Jo, 2015 ⁵⁵	Resumption of Menses	Acupuncture was better than comparison treatments in the resumption of menses. There are insufficient data to reach conclusions about the effect of acupuncture on symptoms.	Low Very Low	6

Primary Trigeminal Neuralgia

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Hu, 2019 ³⁸	None	Acupuncture might have some positive effects for primary trigeminal neuralgia.	Very Low to Low	33

Schizophrenia

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Shen, 2014 ⁵²	None	Limited evidence suggests that acupuncture may have some antipsychotic effects as measured on global and mental state with few adverse effects.	Very Low to Low	30

Shoulder Pain

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Yuan, 2016 ²¹	None	Acupuncture is superior to sham acupuncture in relief of pain.	High	5
Ben-Arie, 2020 ⁴³	Frozen Shoulder	Acupuncture could be safe and effective for pain reduction, restoring shoulder function, and restoring flexion ROM for frozen shoulder patients in the short term and midterm.	Very Low	13

Substance Use Disorder

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Chen, 2018 ⁵³	Opioid Use Disorder	Acupuncture may be effective for alleviating some symptoms compared with sham and no treatment. There was insufficient evidence to suggest better effect of acupuncture compared with medication.	Very Low to Low Moderate	9
White, 2014 ⁵⁴	Tobacco Use Disorder	Compared with sham, acupuncture resulted in greater short-term smoking cessation.	Moderate	19

Temporomandibular Joint Dysfunction

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Yuan, 2016 ²¹	None	Real acupuncture showed a favorable effect on pain relief compared with sham.	Moderate	13

Tinnitus

Author, Year	Sub-condition	Conclusion	Certainty of Evidence	Total Number of Studies Included for Acupuncture
Savage, 2014 ¹⁵	None	Unclear if acupuncture is effective in people with tinnitus.	Low	1

APPENDIX F. PEER REVIEW DISPOSITION

Comment #	Reviewer #	Comment	Author Response
<i>Are the objectives, scope, and methods for this review clearly described?</i>			
1	1	Yes	Thank you.
2	3	Yes	Thank you.
3	4	Yes	Thank you.
4	5	Yes	Thank you.
<i>Is there any indication of bias in our synthesis of the evidence?</i>			
5	1	No	Thank you.
6	3	No	Thank you.
7	4	No	Thank you.
8	5	No	Thank you.
<i>Are there any published or unpublished studies that we may have overlooked?</i>			
9	1	Yes - These two meta-analyses by the Acupuncture Trialists Collaboration (over 20,000 individual patients) have been very influential in many of the guidelines that have been established for acupuncture and pain--but I do not see them included. I understand that especially the updated version may not have met your criteria for inclusion because it did not include a systematic review per se. But I wonder if there is some way to add a mention of this work to the discussion given its importance in the evolution of the field. One of the important things about this work is that they had enough individual patients to analyze separately the studies that compared to sham and those that compared to usual care--demonstrating much larger difference in effects when no sham comparison was included. Since sham acupuncture has an effect generally larger than most placebo controls, the use of this methodology in the past may have contributed to an underestimate of the true effect of real acupuncture, which is what is relevant to clinicians and patients. You mention in the conclusion that more studies are needed comparing	This is a really excellent point. The original Vickers review was included in the prior version of this evidence map. But the updated Vickers review was not included in this map because the updated Vickers review did not assess certainty of evidence, which was a criterion for inclusion. But, since the Vickers review was an individual patient data meta-analysis, which is an inherently stronger type of review than a conventional review, we were essentially penalizing it for being good. Fortunately, in the Vickers review they also presented the results of their data as a conventional meta-analysis, and thus we were able to apply the GRADE criteria to come up with a certainty of evidence rating for their conclusion – and thus we are able to get it onto the map.

Comment #	Reviewer #	Comment	Author Response
		<p>to conditions other than sham--but you do not really address the impact that sham as the dominant comparison in the past may have had on the ultimate conclusions of the systematic reviewers.</p> <p>Vickers AJ, Cronin AM, Maschino AC, et al. Acupuncture for Chronic Pain: Individual Patient Data Meta-analysis. Arch Intern Med. 2012;172(19):1444–1453. doi:10.1001/archinternmed.2012.3654</p> <p>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.</p> <p>If you'd like I could write you few lines on this to include in the Discussion--and could cite the Vickers work there perhaps :)</p>	
10	3	No	
11	4	No	
12	5	No	
<i>Additional suggestions or comments can be provided below.</i>			
13	1	See above	Thank you for your comment!
14	3	Page 6- paragraph "Purpose" Would be appreciated if there was an added sentence designating that this publication is not intended to reflect established policy recommendations for clinical practice more explicitly.	Thank you for your comment. This is addressed in existing text on page 2: "The findings and conclusions in this document are those of the author(s) who are responsible for its contents and do not necessarily represent the views of the Department of Veterans Affairs or the United States government. Therefore, no statement in this article should be construed as an official position of the Department of Veterans Affairs."
15	3	Page 6- line 20-21 "Acupuncture is a technique that is part of a larger system of care originating in China and other Asian countries dating back to the 12th century." the sentence is not very clear. The historicity of the origins of traditional Chinese medicine definitely take	We worked with the reviewer to revise this part of the introduction.

Comment #	Reviewer #	Comment	Author Response
		it back farther than the 12th century, the origin of acupuncture on the other hand as originating exclusively during the Song Dynasty is also very contested.	
16	3	Page 8 paragraph "Data Sources and Searches" - Although this is later clarified in appendix a, line 5-6 appear to state that only studies from 2012 and early 2013 were included. Appendix A clarifies by stating that studies were included through 2021.	This has been corrected.
17	3	Including multiple comparators in the study instead of insisting on only "sham vs acupuncture" was very appreciated in order to capture a more robust date set.	This has been corrected
18	3	Page 9 paragraph "Synthesis" - perhaps an explanation as to why a different convention was chosen for the bubble plot in this publication versus the previous publication evidence map from 2014 would be helpful to understand the intentions of the authors. Why do the plots look so different? To the untrained reader who might try to compare the studies there would be difficulty with reconciling this? An explanation of the rationale for this choice would be appreciated.	We have added a sentence to explain why this is, basically to provide more and better information than was available for the older report.
19	3	Page 14 - line 20 and onward - the choice of "high certainty" is difficult to see as different than "high rate of effectiveness". This choice seems to impact the appearance of the bubble plots and the few "high certainty" studies seem to appear as if there are few conditions for which there is "high rate of effectiveness". This is clear to the academic, but difficult to glean for the casual reader in my opinion.	An important feature of GRADE is that the certainty of evidence is separated from the size of the effect of the intervention. Thus, bodies of evidence can report estimates of large effect but low certainty and conversely, evidence of low effect but high certainty. We have added this to the report. A review concluding "high rate of effectiveness" but with Low certainty of evidence should be considered as a conclusion for which the authors felt the true effect might be substantially different than that reported.
20	3	Page 27 - paragraph "Future Research" was very thoughtful and inclusive and will likely result in much fruitful direction for researchers in this field, this	Thank you for your comment!

Comment #	Reviewer #	Comment	Author Response
		paragraph is an excellent contribution to the academic community.	
21	4	None	
22	5	Page 3: line 27. Requestor is from VA Central Iowa, but this request really came through Juli Olson's role in the Integrative Health Coordinating Center under the Office of Patient Centered Care & Cultural Transformation.	This has been corrected.
23	5	Page 6, line 11: Could this be updated to reflect the request came from the IHCC?	This has been corrected.
24	5	Page 10, line 6: A little confusing here because auricular acupuncture is manual. It might be better to classify between auricular and comprehensive or full-body acupuncture. Electro-acupuncture can also be done to the ear. So maybe: "For type of acupuncture, triangle denotes studies that used exclusively auricular acupuncture and circle denotes all other types of comprehensive or full body acupuncture (manual/standard, electro-acupuncture)." This also may have included auricular acupuncture in some of the studies, but I don't know if that is the case.	We have made the change to clarify the definition for the type of acupuncture in text.
25	5	Page 16, Figure 2: Suggest changing the title of bubble "Hormone therapy - Related SE in Br Ca" to "Related SE in Br Ca associated with hormone therapy" because the table reads "Benefit for acupuncture...Hormone therapy" acupuncture is not effective for hormone therapy, it is effective for the SE. Then it would read "Benefit for acupuncture...Related SE in Br Ca..."	This has been corrected.
26	5	Page 16, Figure 2: "dental surgical pain" is post-operative? There is a tradition of doing dental surgery with acupuncture over other anesthesia so reader might think of that. Perhaps "Post-Op Dental Pain"	This has been corrected.
27	5	Page 22, line 30: Consider hyphenating Posttreatment (post-treatment).	This has been corrected.

Comment #	Reviewer #	Comment	Author Response
28	5	Page 27, line 51: This is a very helpful statement, thank you: "Studies comparing acupuncture to placebo or sham are probably not the priority, rather the priority should be studies comparing acupuncture to other recommended/accepted/active therapies for the condition."	Thank you for your comment!
29	5	Page 28: This is a helpful comment about the state of the literature: "This seems to be a mismatch between resources and need. The field of acupuncture would be best moved forward with resources devoted to producing more high quality RCTs and producing fewer new systematic reviews."	Thank you for your comment!
30	5	Question about depression and the Smith review. Table 4 on page 22 lists the results from the study about risks rather than symptomatic improvement for depression: "It is unclear whether there are differences in the risk of adverse events between persons receiving acupuncture or sham acupuncture" But the study concludes: "We found low-quality evidence suggesting that acupuncture (manual and electro-) may moderately reduce the severity of depression by end of treatment (SMD -0.66, 95% CI -1.06 to -0.25, five trials, 488 participants)." Depression ended up in the evidence map as no benefit or harm from acupuncture. I am confused here.	Because the effectiveness conclusions from that review were rated as Low certainty of evidence and the adverse events conclusion was Moderate certainty of evidence, the Low certainty conclusion never made it to the evidence map because the columns are mutually exclusive. We have solved this problem by splitting out all conclusions about adverse events into their own map, thus leaving the main maps to be only about effectiveness outcomes, and now that review does enter as one where all conclusions were rated as Low or Very Low.
31	5	In the evidence maps did anything end up in the "No benefit or harm" category due to harm? I appreciated the review assessing risk and harm for acupuncture, but maybe it would be helpful to spell out that there is no study that was put in that category to do the findings of harm. Could that category even be updated to "no benefit" since none showed harm?	We have now split out the adverse events/harms into their own map, and the main maps are now just "benefit" vs. "no benefit".