

ESP

VA Evidence Synthesis Program

Synthesizing evidence for VA leadership to improve the health and health care of Veterans

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What is the ESP?

Nimble

We adapt traditional methods, timelines, and formats to meet our partners' specific needs.

Rigorous

Rigor, transparency, and minimization of bias underlie all our products.

Relevant

Emphasis on Veteran population helps ensure our reviews are relevant to VA decision-makers' needs.

The VA **Evidence Synthesis Program (ESP)**, established in 2007, helps VA fulfill its vision of functioning as a continuously learning health care system. We provide timely, targeted, independent syntheses of the medical literature for the VHA to translate into evidence-based clinical practice, policy, and research.

What is the ESP?

- ESP reports are used to help:
 - Develop clinical policies informed by evidence
 - Implement effective services and support VA clinical practice guidelines and performance measures
 - Set the direction for future research to address gaps in clinical knowledge
- Four ESP Centers across the US
 - Directors are VA clinicians and recognized leaders in the field of evidence synthesis, and have close ties to the AHRQ Evidence-based Practice Center Program
- ESP Coordinating Center in Portland
 - Manages national program operations, ensures methodological consistency and quality of products, and interfaces with stakeholders
 - Produces rapid products to inform more urgent policy and program decisions
- 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 ESP accepts [topic nominations](#) throughout the year, and nominations are considered every 4 months.

ESP locations

Coordinating Center
Portland, OR

ESP Center
Minneapolis, MN

ESP Center
Providence, RI

HSR&D/QUERI, VACO
Washington, DC

ESP Center
Los Angeles, CA

ESP Center
Durham, NC

OUR PARTNER

Juli Olson, DC, DACM, FAIHM
National Lead, Acupuncture
Integrative Health Coordinating Center
Central Iowa VAMC, Pain Clinic, Acupuncture

Disclosures

- This presentation was prepared by the Evidence Synthesis Program Coordinating Center located at the VA Greater Los Angeles Health Care System, directed by Paul Shekelle, MD, PhD, Director, Evidence-based Synthesis Program Center and funded by the Department of Veterans Affairs, Veterans Health Administration, Health Services Research and Development.
- 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 presentation 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.

Acknowledgments

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. The authors gratefully acknowledge the following individuals for their contributions to this project:

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, FAIHM
National Lead, Acupuncture
Integrative Health Coordinating Center
Central Iowa VAMC, Pain Clinic, Acupuncture

ESP

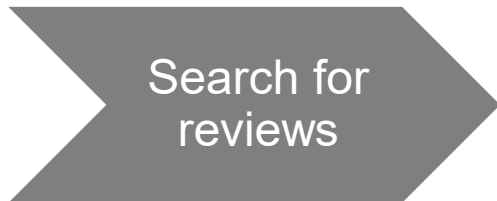
VA Evidence Synthesis Program

Evidence Map of
Acupuncture as Treatment for Adult Health Conditions
Update from 2013–2021

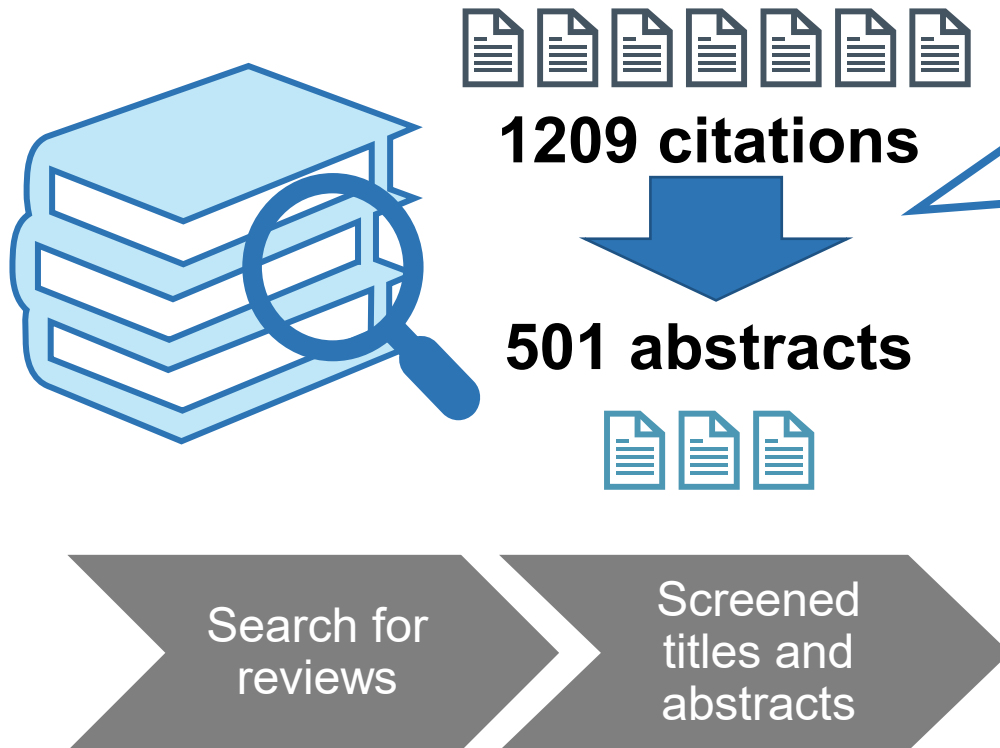
April 2022

Full-length report available on [ESP website](#).

Our Process



Our Process



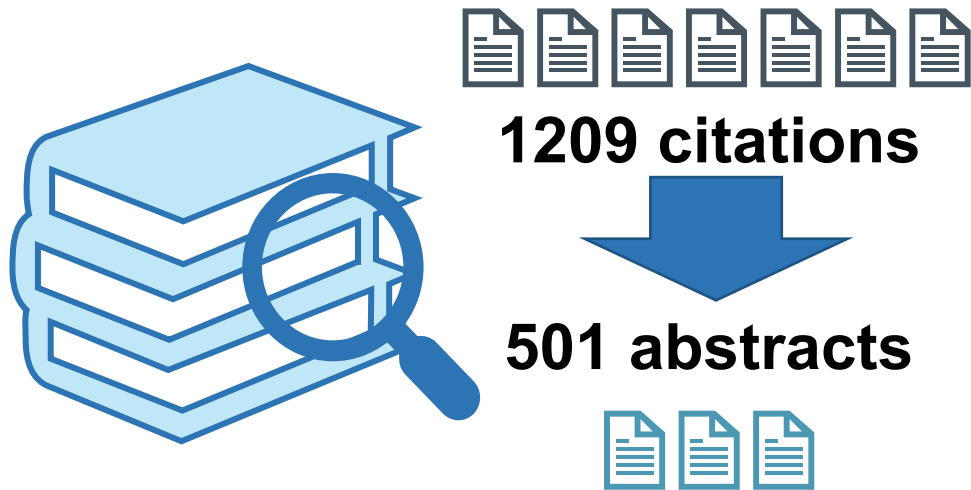
Eligible literature:

Systematic reviews that reported **health outcomes** in **adults** with conditions treated by **Acupuncture, Electro-acupuncture, Battlefield Acupuncture, and/or National Acupuncture Detoxification Association (NADA) protocol** compared to **sham/placebo, usual care, other therapies, and/or no treatment**

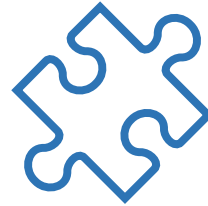
We did not include

laser acupuncture, moxibustion alone, needling, and traditional Chinese medicine (TCM) without mention of acupuncture and fire acupuncture

Our Process



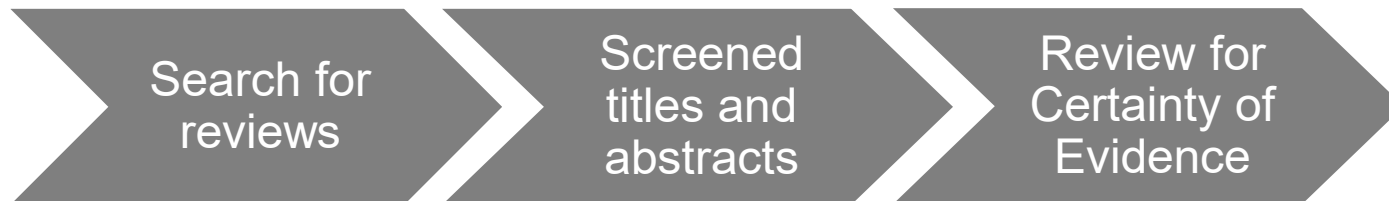
370 Full
Texts



How confident are we that the true effect lies close to that of the estimate of the effect?

Certainty of Evidence
(GRADE Working Group)

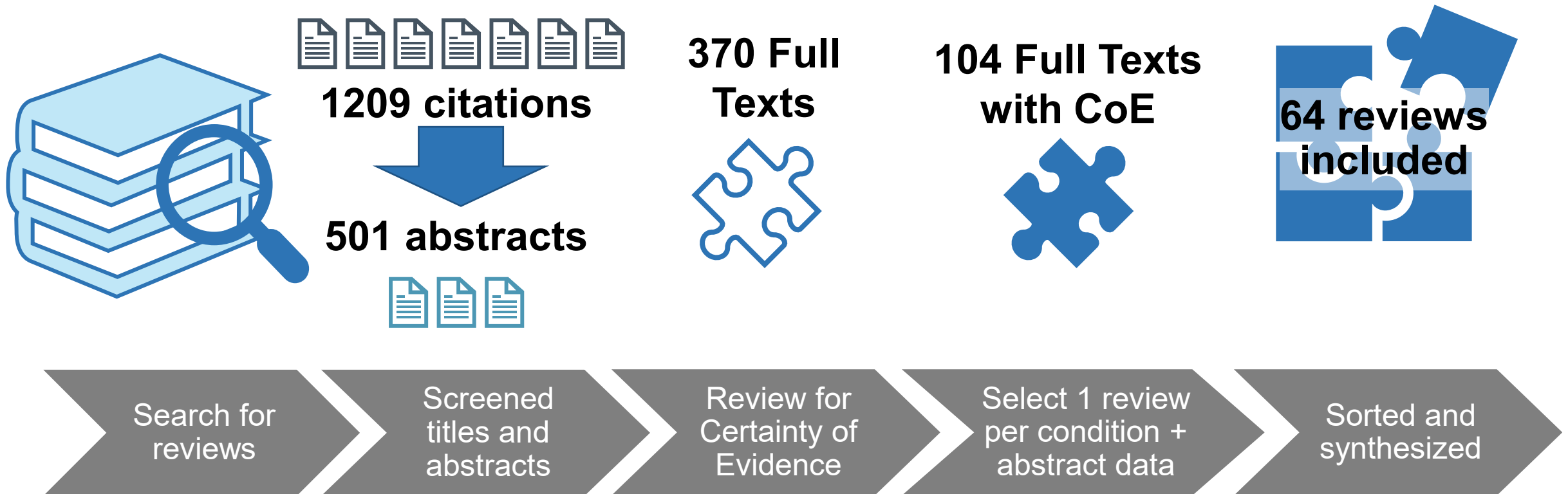
- High
- Moderate
- Low
- Very low



Our Process



Our Process



Comparison with Previous Review

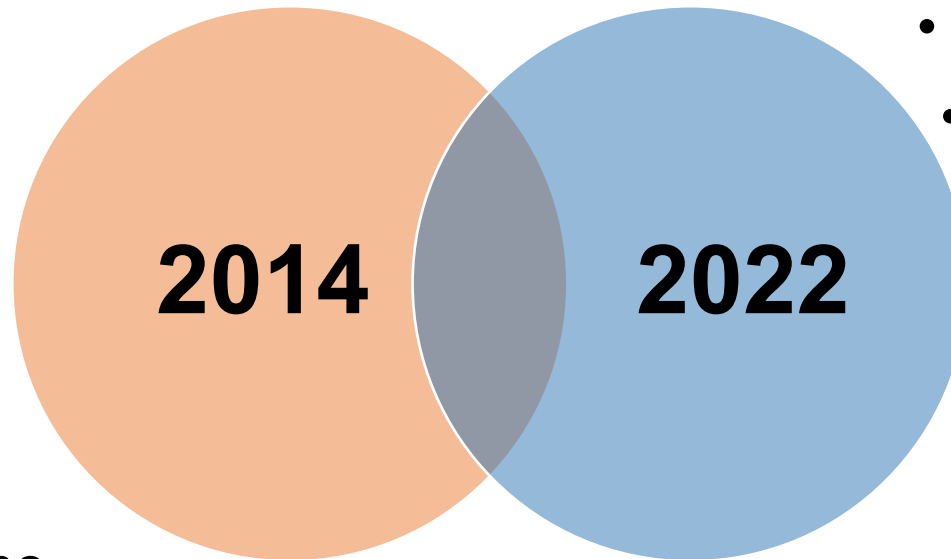
Only in 2014 map

Not identified in 2022

- Nausea

Identified but without certainty of evidence

- Blood pressure
- Plantar heel pain
- Restless leg syndrome

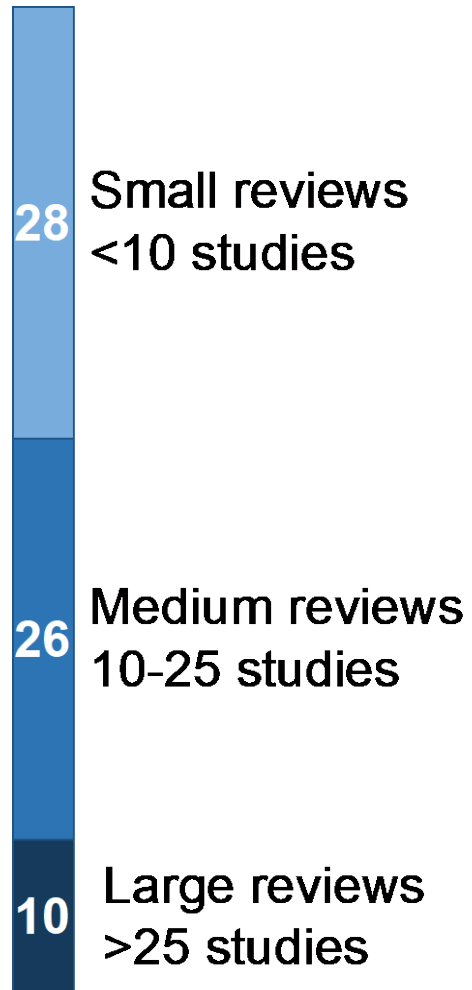


Only in 2022 map

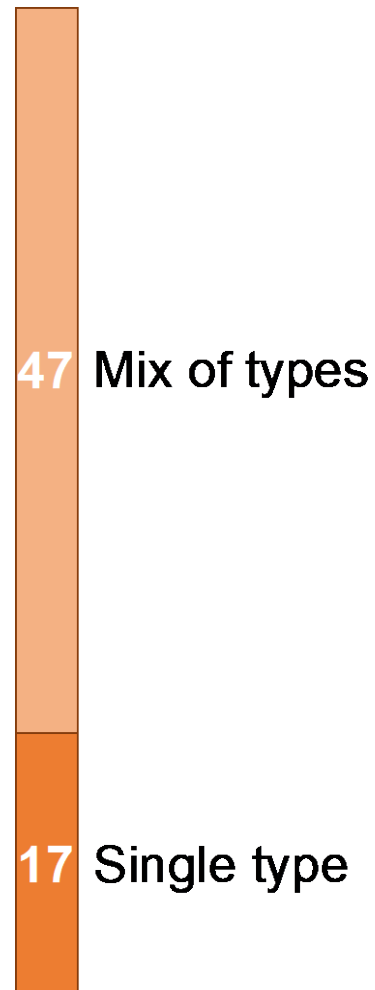
- Diabetic Peripheral Neuropathy
- Irritable Bowel Disorder
- Peripheral Neuropathy
 - Lateral Elbow Pain
 - Angina
 - Dyspepsia
 - Herpes Zoster
- Post-herpetic Neuralgia
- Primary Trigeminal Neuralgia

Review Characteristics

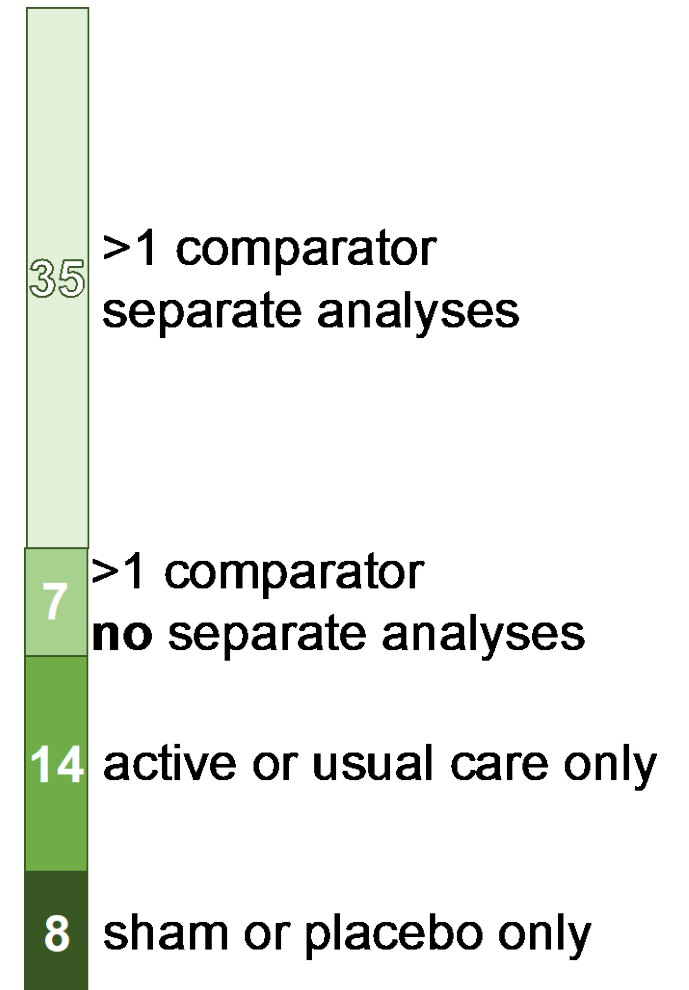
Size of review



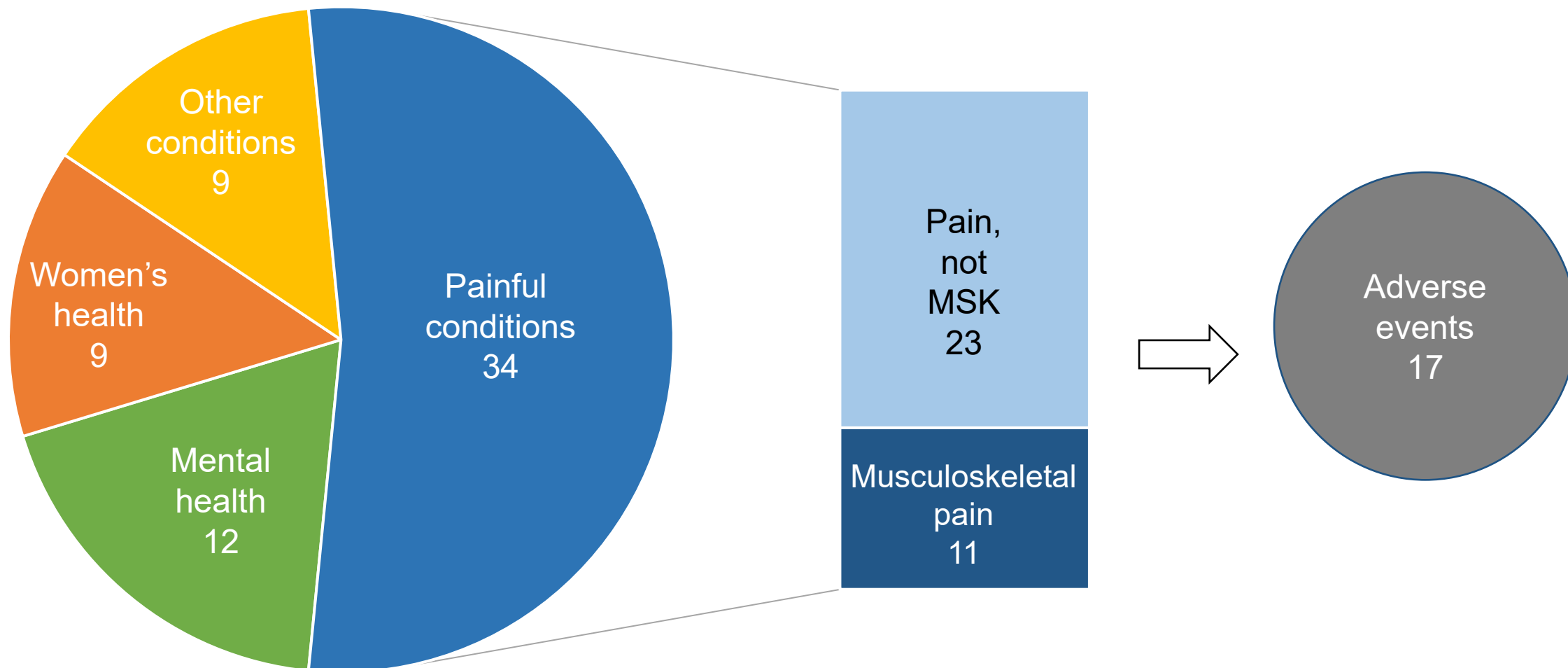
Acupuncture included



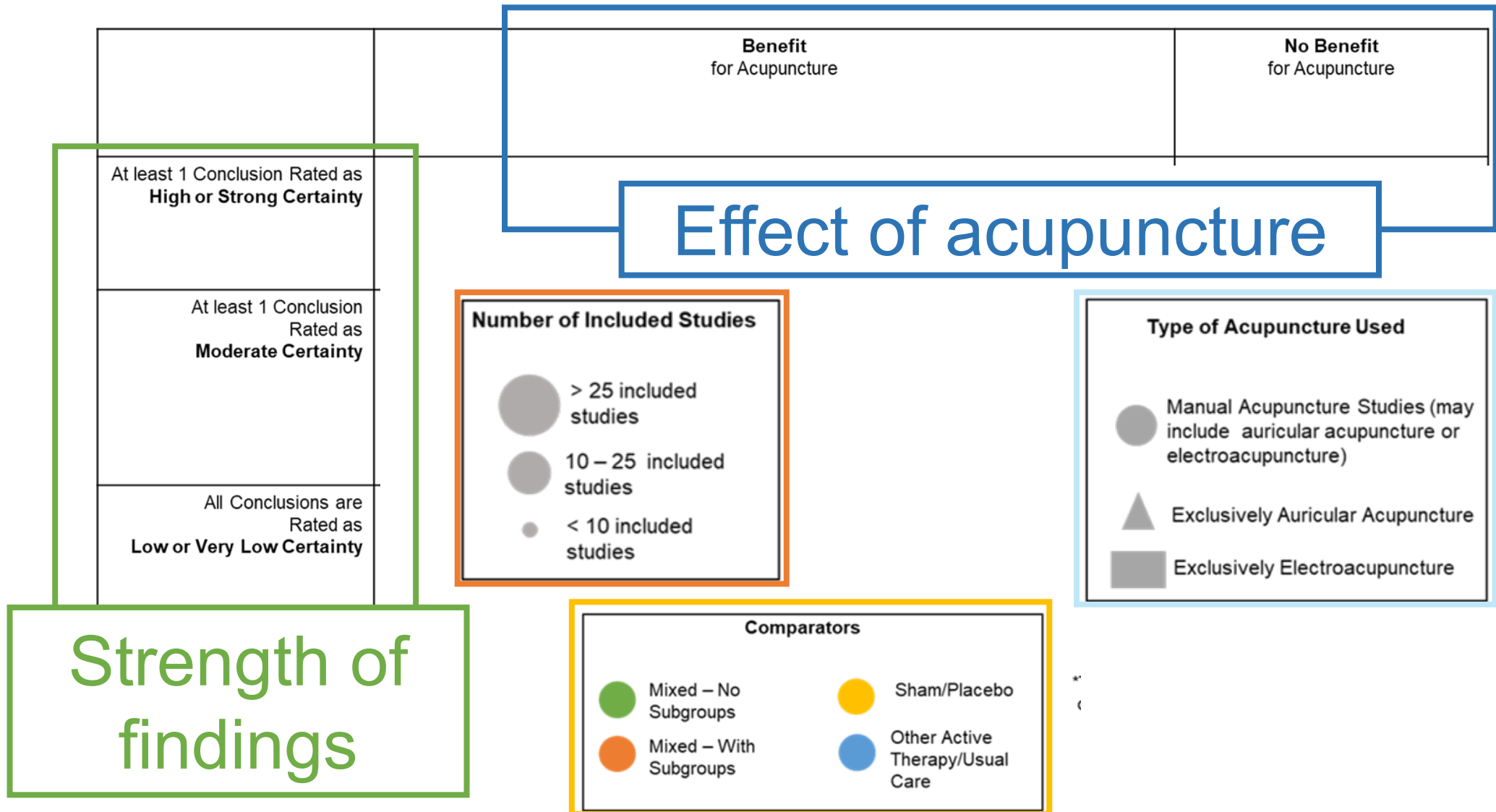
Comparators included



Conditions Represented in Maps



Information Represented in Evidence Maps



Pain, not MSK (n=23)

	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

Musculoskeletal pain (n=11)

	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"> ● Hip pain ● Immediate pain relief in musculoskeletal pain conditions ● Chronic musculoskeletal pain ● Temporomandibular joint dysfunction* 	<ul style="list-style-type: none"> ● Knee 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

Mental Health (n=12)

	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 ● Opioid use disorder ● Insomnia in elderly ● Depression 	<ul style="list-style-type: none"> ● Depression in pregnancy ● Tobacco use disorder
All Conclusions are Rated as Low or Very Low Certainty	<ul style="list-style-type: none"> ● Major Depressive Disorder ● Primary Insomnia ● Post-Traumatic Stress Disorder 	<ul style="list-style-type: none"> ● Post-stroke depression ● Schizophrenia

▲ Primary insomnia

Women's Health (n=9)

	Benefit for Acupuncture	No Benefit for Acupuncture
<p>At least 1 Conclusion Rated as High or Strong Certainty</p>		<ul style="list-style-type: none"> ● Assistive reproductive therapy
<p>At least 1 Conclusion Rated as Moderate Certainty</p>	<ul style="list-style-type: none"> ● Pregnancy - low back and pelvic pain 	
<p>All Conclusions are Rated as Low or Very Low Certainty</p>	<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

Other Conditions (n=9)

	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

Adverse Events (n=17)

	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		<ul style="list-style-type: none"> Migraine 		
Moderate Certainty of Evidence		<ul style="list-style-type: none"> Knee pain 	<ul style="list-style-type: none"> Depression* 	<ul style="list-style-type: none"> Anovulatory fertility*
Low or Very Low Certainty of Evidence	<ul style="list-style-type: none"> Kidney stone Primary insomnia Post-stroke depression Primary insomnia Dysmenorrhea Schizophrenia 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* 	<ul style="list-style-type: none"> Carpel tunnel syndrome*

Main Takeaways

- More mapped conclusions for painful conditions than for all other conditions combined
- Small number of reviews with at least 1 conclusion rated as high certainty of evidence (n=3)
- ~75% of reviews with moderate certainty of evidence compared acupuncture to sham or control acupuncture, or no treatment
- Majority of reviews reported conclusions rated as low or very low certainty of evidence
- Acupuncture is at least safe or safer than usual care

Discussion and Future Directions

Discussion

Modest # of reviews with at least moderate certainty of evidence

Acupuncture vs. sham /
Acupuncture vs. control
acupuncture

Future Directions

Critical research need is for better evidence to increase certainty of evidence for acupuncture

Priority should be studies comparing acupuncture to other recommended/accepted/active therapies for the condition

Limitations

...of synthesis approach

- May not have identified all the potentially eligible evidence
- Did not independently evaluate the source evidence

... of current acupuncture evidence base

- The variation (and controversy) with which sham acupuncture is designed

Questions?

If you have questions, feel free to contact:

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- Janet Clark



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