<u>Evidence-based Synthesis Program</u>

QUERI

Massage for Pain: An Evidence Map

September 2016

Prepared for: Department of Veterans Affairs Veterans Health Administration Quality Enhancement Research Initiative Health Services Research & Development Service Washington, DC 20420

Prepared by: Evidence-based Synthesis Program (ESP) Center West Los Angeles VA Medical Center Los Angeles, CA Paul G. Shekelle, MD, PhD, Director

Investigators:

Principal Investigator: Isomi Miake-Lye, PhDc

Co-Investigators:

Jason Lee, MD, MPH Tana Lugar, PhD, MPH Stephanie Taylor, PhD, MPH Paul Shekelle, MD, PhD

Research Associates: Roberta Shanman, MLS Jessica Beroes, BS



PREFACE

The VA Evidence-based Synthesis Program (ESP) was established in 2007 to provide timely and accurate syntheses of targeted healthcare topics of particular importance to clinicians, managers, and policymakers as they work to improve the health and healthcare of Veterans. QUERI provides funding for 4 ESP Centers, and each Center has an active University affiliation. Center Directors are recognized leaders in the field of evidence synthesis with close ties to the AHRQ Evidence-based Practice Centers. The ESP is governed by a Steering Committee comprised of participants from VHA Policy, Program, and Operations Offices, VISN leadership, field-based investigators, and others as designated appropriate by QUERI/HSR&D.

The ESP Centers generate evidence syntheses on important clinical practice topics. 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 ESP disseminates these reports throughout VA and in the published literature; some evidence syntheses have informed the clinical guidelines of large professional organizations.

The ESP Coordinating Center (ESP CC), located in Portland, Oregon, was created in 2009 to expand the capacity of QUERI/HSR&D and is charged with oversight of national ESP program operations, program development and evaluation, and dissemination efforts. The ESP CC establishes standard operating procedures for the production of evidence synthesis reports; facilitates a national topic nomination, prioritization, and selection process; manages the research portfolio of each Center; facilitates editorial review processes; ensures methodological consistency and quality of products; produces "rapid response evidence briefs" at the request of VHA senior leadership; collaborates with HSR&D Center for Information Dissemination and Education Resources (CIDER) to develop a national dissemination strategy for all ESP products; and interfaces with stakeholders to effectively engage the program.

Comments on this evidence report are welcome and can be sent to Nicole Floyd, ESP CC Program Manager, at <u>Nicole.Floyd@va.gov</u>.

Recommended citation: Miake-Lye IM, Lee JF, Luger T, Taylor S, Shanman R, Beroes JM, Shekelle PG. Massage for Pain: An Evidence Map. VA ESP Project #05-226; 2016

This report is based on research conducted by the Evidence-based Synthesis Program (ESP) Center located at the **West Los Angeles VA Medical Center, Los Angeles, CA**, funded by the Department of Veterans Affairs, Veterans Health Administration, Office of Research and Development, Quality Enhancement Research Initiative. The findings and conclusions in this document are those of the author(s) who are responsible for its contents; the findings and conclusions 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.



ABSTRACT

INTRODUCTION

Given the widespread use of various massage therapies for pain, we conducted an evidence mapping process to determine the distribution of evidence available for various pain indications as well as different forms of massage therapy, identify gaps in evidence, and inform future research priorities. This mapping project provides a visual overview of the distribution of evidence for massage therapy for indications of pain, as well as an accompanying narrative that will help stakeholders interpret the state of evidence to inform policy and clinical decisionmaking.

METHODS

We searched PubMed, Embase, and Cochrane for systematic reviews reporting pain outcomes for massage therapy. Abstracted data included: number of studies included in the review that report massage as the intervention and pain as an outcome; total number of studies included in the review; descriptions of the massage style, provider, co-interventions, duration, and comparators; pain type; main findings relevant to massage for pain; and whether the systematic review focused solely on massage as the intervention or included a variety of interventions, of which massage was one. Quality of each systematic review was assessed using the Assessing the Methodological Quality of Systematic Reviews (AMSTAR) criteria. We used a bubble plot to visually depict the number of included articles, pain indication, effect of massage for pain, and strength of findings for each included systematic review.

RESULTS

We identified 31 systematic reviews, of which 21 were considered high-quality. Systematic reviews varied in the amount of detail they collected in describing the massage therapy. Some common massage types included Swedish massage, myofascial therapies, Shiatsu, Chinese traditional massage, Thai massage, slow stroke massage, and more general descriptions of massage. The most common type of pain included in systematic reviews was neck pain (n=6). Findings from high-quality systematic reviews describe potential benefits of massage for pain indications including labor, shoulder, neck, back, cancer, fibromyalgia, and temporomandibular disorder. However, no findings were rated as moderate- or high-strength.

DISCUSSION

More research is needed to establish confidence in the effect of massage for pain. Primary studies often do not provide adequate details of the massage therapy provided, especially in the descriptions of provider type. Few primary studies of large samples with rigorous methods have been conducted, as noted by many of the systematic review authors included in this evidence map.