



# Oregon

Tina Kotek, Governor

**Oregon Medical Board**  
1500 SW 1st Ave. Ste 620  
Portland, OR 97201-5847  
**Voice (971) 673-2700**  
**FAX (971) 673-2670**  
**[www.oregon.gov/OMB](http://www.oregon.gov/OMB)**

## Public Materials

### **ACUPUNCTURE ADVISORY COMMITTEE DECEMBER 5, 2025 VIDEOCONFERENCE MEETING AGENDA NOON**

The mission of the Oregon Medical Board is to protect the health, safety, and wellbeing of Oregon citizens by regulating the practice of medicine in a manner that promotes access to quality care.

#### **Committee Members:**

Diane Behall, LAc, DAOM, Chair  
Dilip Babu, MD  
Carli Gaines LAC, RN  
Lisa Tongel, LAc  
Paul Yutan, MD  
Jill Shaw, DO, Board Liaison

#### **Staff:**

Nicole Krishnaswami, JD, Executive Director  
Elizabeth Ross, JD, Legislative & Policy Analyst  
Jordana Gaumond, MD, Medical Director  
Netia N. Miles, Licensing Manager  
Shayne J. Nylund, Committee Coordinator

## PUBLIC SESSION

1	Call Meeting to Order – Introductions/Attendance	Behall
---	--	--------

2	Executive Session Announcement	Behall
---	--------------------------------	--------

## APPLICANT REVIEW

## EXECUTIVE SESSION

3	Entity ID: 1075976	Entity ID: 1075976	Tongel
---	--------------------	--------------------	--------

4	Entity ID: 1016469	Entity ID: 1016469	Gaines
---	--------------------	--------------------	--------

## PUBLIC SESSION

## APPLICANT REVIEW

5	Lee, Michelle ChengMae	Entity ID: 1075589	Behall
---	------------------------	--------------------	--------

6	Committee Recommendations Regarding Applicant Reviews	Behall
---	---	--------

## OREGON ADMINISTRATIVE RULES (OAR)

7	Chapter 847, Division 070, 008, and 010	<b>FINAL REVIEW</b>	Gaines
---	---	-------------------------	--------

**The rulemaking implements SB 874(2025) adding a definition for “Traditional Eastern medicine” to provide cohesion and clarify the OMB’s authority to regulate acupuncturists. The bill replaced the term “Oriental medicine” with “Traditional Eastern medicine” throughout ORS chapter 677. The bill also clarifies the definition of "acupuncture" and updates the Oregon Association of Acupuncturists name. SB 874 did not change the scope of practice for acupuncturists in Oregon.**

**Additionally, the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) is changing their name to the National Certification Board for Acupuncture and**

Herbal Medicine (NCBAHM) in January 2026. The rule amendment also makes this update. Their exam titles, including Foundations of Oriental Medicine, will remain the same.

No public comments received for this rulemaking.

8	Five-Needle Protocol	FINAL REVIEW	Babu
<p>The Oregon Legislature passed House Bill 2143 (2025) and Governor Kotek signed the bill into law. This legislation allows individuals with specific training and registration to provide five-needle protocol (5NP) treatments beginning March 1, 2026, without additional licensure.</p> <p>The law directs the Oregon Medical Board to establish rules for training qualifications and safety standards. The OMB's role is to implement the law that has already been enacted. The rulemaking establishes the qualifications for registration of 5NP technicians and creates sanitation and best practice standards for 5NP treatments.</p> <p>In August and September 2025, the OMB convened a Workgroup of acupuncturists, physicians, and community members to provide recommendations on the draft rules. The Board's Acupuncture Advisory Committee reviewed during a special meeting held September 12, 2025. The Oregon Medical Board reviewed on October 2, 2025. Meeting minutes along with public comments received during this process are available on the 5NP website, <a href="http://omb.oregon.gov/5NP">omb.oregon.gov/5NP</a>.</p> <p>During the Workgroup and Acupuncture Advisory Committee meetings, there were discussions and comments provided related to requiring supervision of 5NP technicians, ranging from direct supervision to indirect supervision, and ranging from supervision by a physician or acupuncturist to supervision by other licensed health care providers. Workgroup and Committee members who supported a supervision requirement expressed patient safety concerns related to 5NP Technicians working in isolation. Workgroup and Committee members who opposed adding a supervision requirement highlighted the intent of HB 2143 to allow low-barrier access to 5NP treatments and the lack of evidence supporting public safety concerns. OMB Staff noted that under ORS 183.400 an agency can only write rules pursuant to constitutional authority or statutory authority granted through enabling legislation. Agencies cannot exceed the authority granted by the legislature. The absence of statutory language does not create implied authority for agencies to write rules in that area. HB 2143 does not impose supervision requirements or authorize the OMB to write rules requiring supervision. Also, in response to discussion during the prior Committee meeting regarding how other states regulate 5NP treatment, OMB staff compiled an overview of state 5NP regulations and accountability frameworks provided with these materials.</p>			

**Additionally, HB 2143 authorizes the OMB to establish registration and renewal fees 5NP technicians. The rulemaking sets fees at \$100 for initial registration and \$50 annually (\$100 biennially) for renewal. The Board determined and provided the fee amounts during the legislative process based on estimated costs to implement HB 2143. The Board will apply its existing Criminal Records Check Fee to 5NP technicians during the initial application process and as needed for renewals or investigations, as permitted under HB 2143.**

**The OMB held a public hearing to accept oral comments on November 18, 2025, and accepted written comments through November 24, 2025, see Hearing Officer Report.**

9	Public Comments	Behall
10	Acupuncture Apprenticeship Programs	Tongel
11	Inserting Needles Through Clothing	Behall
12	Number of Acupuncture Students That Can be Supervised in a Clinical Setting	Gaines
13	Using Manual Therapy Techniques for Masseter and Pterygoid Muscles, Intra-Oral, for TMJ Dysfunction and Pain	Yutan
14	Unlicensed Personnel Assisting with Cupping and Electric Moxa	Behall
15	Using Therapeutic Ultrasound, Specifically for Clogged Breast Ducts with Breastfeeding	Babu
16	Using Extracorporeal Shockwave Therapy (ESWT)	Tongel
17	Investigative Update from Walter Frazier, Investigations Manager	Behall



18	Approved Clinical Supervisors	Behall
----	-------------------------------	--------

19	Review of Board-Approved Minutes from June 6, 2025, and September 12, 2025	Yutan
----	--	-------

20	Future Committee and Board Meeting Dates	Behall
----	--	--------

**ADJOURN**

## OREGON ADMINISTRATIVE RULES

### CHAPTER 847, DIVISION 070, 008, and 010 – OREGON MEDICAL BOARD

#### Final Review – January 2026

The rulemaking implements [SB 874\(2025\)](#) adding a definition for “Traditional Eastern medicine” to provide cohesion and clarify the OMB’s authority to regulate acupuncturists. The bill replaced the term “Oriental medicine” with “Traditional Eastern medicine” throughout ORS chapter 677. The bill also clarifies the definition of "acupuncture" and updates the Oregon Association of Acupuncturists name. SB 874 did not change the scope of practice for acupuncturists in Oregon.

Additionally, the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) is changing their name to the National Certification Board for Acupuncture and Herbal Medicine (NCBAHM) in January 2026. The rule amendment also makes this update. Their exam titles, including Foundations of Oriental Medicine, will remain the same.

No public comments received for this rulemaking.

#### 847-070-0005

##### Definitions

As used in the rules regulating the practice of acupuncture:

(1)(a) "Acupuncture" **has the meaning given in ORS 677.757:** ~~means an Oriental health care practice used to promote health and to treat neurological, organic or functional disorders by the stimulation of specific points on the surface of the body by the insertion of needles.~~

~~"Acupuncture" includes the treatment method of moxibustion, as well as the use of electrical, thermal, mechanical or magnetic devices, with or without needles, to stimulate acupuncture points and acupuncture meridians and to induce acupuncture anesthesia or analgesia.~~

**(a) Traditional Eastern medicine used to promote health and treat neurological, organic or functional disorders through the insertion of needles into specific points on the body at varying depths, including insertion into the skin, subcutaneous tissue, muscle layers and fascia, and into or near joint spaces based on anatomical location and the practitioner’s clinical assessment. The type of needle inserted, and the depth, angle and technique of insertion, are informed by specialized training in acupuncture theory, biomedical anatomy and diagnostic evaluation to safely stimulate biological and physiological responses and support the body’s healing process.**

**(b) The treatment method of moxibustion and the use of electrical, thermal, mechanical or magnetic devices, with or without needles, to stimulate acupuncture points and acupuncture meridians and to induce acupuncture anesthesia or analgesia.**

(bc) The ~~practice of acupuncture also includes the~~ following modalities, as authorized by the Oregon Medical Board:

(A) Traditional **Eastern medicine** and ~~modern Oriental Medical and~~ acupuncture techniques of diagnosis and evaluation;

(B) ~~Oriental massage~~ **Traditional Eastern medicine manual therapy**, exercise and related therapeutic methods; and

(C) The use of **Traditional Eastern medicine** ~~Oriental~~ pharmacopoeia, vitamins, minerals and dietary advice.

(2) "Board" means the Oregon Medical Board for the State of Oregon.

(3) "Clinical training" means supervised clinical training which consists of diagnosis and actual patient treatment which includes insertion of acupuncture needles.

(4) "Committee" means the Acupuncture Advisory Committee.

(5) "Licensed Acupuncturist" means an individual authorized by the Board to practice acupuncture pursuant to ORS Chapter 677.

(6)(a) "**Traditional Eastern medicine manual therapy** ~~Oriental massage~~" means methods of manual therapy, including manual mobilization, manual traction, compression, rubbing, kneading and percussion, with or without manual implements, for indications including limited range of motion, muscle spasm, pain, scar tissue, contracted tissue and soft tissue swelling, edema and inflammation, as described in instructional programs and materials of **Traditional Eastern medicine** ~~Oriental~~ or Asian health care.

(b)(A) **Traditional Eastern medicine manual therapy** ~~Oriental massage~~ as practiced in Oregon does not include high-velocity, short-amplitude, manipulative thrusting procedures to the articulations of the spine or extremities.

(B) **Traditional Eastern medicine manual therapy** ~~Oriental massage~~ as practiced in Oregon does not include internal pelvic massage (intravaginal, intra-anal, or intra-rectal) or genital massage.

(7) "Physician" means an individual licensed to practice medicine as a medical doctor or doctor of osteopathic medicine pursuant to ORS Chapter 677.

**(8) "Traditional Eastern medicine" has the meaning given in ORS 677.010, as acupuncture and traditional Chinese medicine, regulated by ORS chapter 677 if the medicine is practiced within the context of a person's license to practice acupuncture issued under ORS 677.757 to 677.770.**

Statutory/Other Authority: ORS 677.265 & 677.759

Statutes/Other Implemented: ORS 677.265, 677.757, 677.759 & 677.780

## 847-070-0016

### Qualifications

(1) An applicant for licensure as an acupuncturist must have:

(a) Graduated from an acupuncture program that satisfies the standards of the Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM), or its successor organization, or an equivalent accreditation body that are in effect at the time of the applicant's graduation. An acupuncture program may be established as having satisfied those standards by demonstration of one of the following:

(A) Accreditation, or candidacy for accreditation by ACAHM at the time of graduation from the acupuncture program; or

(B) Approval by a foreign government's Ministry of Education, or Ministry of Health, or equivalent foreign government agency at the time of graduation from the acupuncture program. Each applicant must submit their documents to a foreign credential equivalency service, which is approved by the National Certification ~~Commission Board~~ for Acupuncture and ~~Oriental Herbal~~ Medicine (~~NCCAOM~~**NCBAHM**) for the purpose of establishing equivalency to the ACAHM accreditation standard. Acupuncture programs that wish to be considered equivalent to an ACAHM accredited program must also meet the curricular requirements of ACAHM in effect at the time of graduation.

(b) Current certification in acupuncture by the **NCBAHM**~~NCCAOM~~. An applicant will be deemed certified by the **NCBAHM**~~NCCAOM~~ in Acupuncture if the applicant has passed the **NCBAHM**~~NCCAOM~~ Acupuncture Certification Examinations or has been certified through the **NCBAHM**~~NCCAOM~~ Credentials Documentation Examination.

(A) The applicant must pass three (3) **NCBAHM**~~NCCAOM~~ Certification exam components: Biomedicine, Foundations of Oriental Medicine, and Acupuncture with Point Location.

(B) The applicant has no more than four attempts to pass each component of the **NCBAHM**~~NCCAOM~~ Certification Exam listed in subsection (A) of this section. If the applicant does not pass each component of the **NCBAHM**~~NCCAOM~~ Certification Exam within four attempts, the applicant is not eligible for licensure.

(C) An applicant who has passed each component of the **NCBAHM**~~NCCAOM~~ Certification Exam but not within the four attempts required by this rule may request a waiver of this requirement if the applicant passed each component of the exam within five attempts and:

(i) Has obtained a Doctor of Acupuncture and Oriental Medicine degree; or

(ii) Experienced extenuating circumstances that do not indicate an inability to safely practice acupuncture as determined by the Board.

(2) An applicant who does not meet the criteria in OAR 847-070-0016(1) must have the following qualifications:

(a) Five years of licensed clinical acupuncture practice in the United States. This practice must include a minimum of 500 acupuncture patient visits per year. Documentation must include:

(A) Two affidavits from office partners, clinic supervisors, accountants, or others approved by the Board, who have personal knowledge of the years of practice and number of patient visits per year; and

(B) Notarized copies of samples of appointment books, patient charts and financial records, or other documentation as required by the Board; and

(b) Practice as a licensed acupuncturist in the U.S. during five of the last seven years prior to application for Oregon licensure. Licensed practice includes clinical practice, clinical supervision, teaching, research, and other work as approved by the Board within the field of acupuncture and **Traditional Eastern**~~oriental~~ medicine. Documentation of this practice will be required and is subject to Board approval; and

(c) Successful completion of the ACAHM western medicine requirements in effect at the time of graduation from the acupuncture program, unless the applicant graduated from a non-accredited acupuncture program prior to 1989; and

(d) Current certification in acupuncture by the **NCBAHM**~~NCCAOM~~. An applicant will be deemed certified in Acupuncture by the **NCBAHM**~~NCCAOM~~ if the applicant has passed the **NCBAHM**~~NCCAOM~~ Acupuncture Certification Examinations or has been certified through the **NCBAHM**~~NCCAOM~~ Credentials Documentation Examination.

(A) The applicant must pass three (3) **NCBAHM**~~NCCAOM~~ Certification exam components: Biomedicine, Foundations of Oriental Medicine, and Acupuncture with Point Location.

(B) The applicant has no more than four attempts to pass each component of the **NCBAHM**~~NCCAOM~~ Certification Exam listed in subsection (A) of this section. If the applicant does not pass each component of the **NCBAHM**~~NCCAOM~~ Certification Exam within four attempts, the applicant is not eligible for licensure.

(C) An applicant who has passed each component of the **NCBAHM**~~NCCAOM~~ Certification Exam but not within the four attempts required by this rule may request a waiver of this requirement if the applicant passed each component of the exam within five attempts and:

(i) Has obtained a Doctor of Acupuncture and Oriental Medicine degree; or

(ii) Experienced extenuating circumstances that do not indicate an inability to safely practice acupuncture as determined by the Board.

(3) An individual whose acupuncture training and diploma were obtained in a foreign country and who cannot document the requirements of subsections (1) or (2) of this rule because the required documentation is now unobtainable, may be considered eligible for licensure if it is established to the satisfaction of the Board that the applicant has equivalent skills and training and can document one year of training or supervised practice under a licensed acupuncturist in the United States.

(4) In addition to meeting the requirements in (1), (2) or (3) of this rule, all applicants for licensure must have the following qualifications:

(a) Licensure in good standing from the state or states of all prior and current health related licensure; and

(b) Have good moral character as those traits would relate to the applicant's ability properly engage in the practice of acupuncture; and

(c) Have the ability to communicate in the English language well enough to be understood by patients and physicians. This requirement is met if the applicant passes the **NCBAHM**~~NCCAOM~~ written acupuncture examination in English, or if in a foreign language, must also have passed an English language proficiency examination:

(A) A Test of English as a Foreign Language (TOEFL) score of 500 or more for the written TOEFL exam, 173 or more for the computer based TOEFL exam, or 65 or more for the internet based TOEFL exam;

(B) A Test of Spoken English (TSE) score of 200 or more prior to July 1995, and a score of 50 or more after July 1995; or

(C) A Occupational English Test score of at least 350 for speaking and at least 300 for reading, writing, and listening on any OET health-related profession.

(d) An applicant who is certified through the **NCBAHM**~~NCCAOM~~ Credentials Documentation Examination must also have passed an English proficiency examination described in subsection (c).

Statutory/Other Authority: ORS 677.265 & ORS 677.759

Statutes/Other Implemented: ORS 677.265, ORS 677.759 & ORS 677.780

## **847-070-0017**

### **Clinical Training**

(1) A clinical supervisor must meet the following requirements:

(a) Be an actively licensed Oregon acupuncturist who has practiced as an acupuncturist for a period of at least five years, and is in good standing with the Board; or

(b) Be an actively licensed Oregon physician who is in good standing with the Board, who has been practicing acupuncture for a period of at least five years, and has passed the examination for acupuncture; or

(c) Be an acupuncturist or physician licensed, registered, or certified by another jurisdiction, who is in good standing with such jurisdiction, who has been practicing acupuncture for a period of at least five years and has passed a qualifying examination for acupuncture, or been certified in acupuncture by the National Certification ~~Commission~~ **Board** for Acupuncture and ~~Oriental~~ **Herbal** Medicine (~~NCBAHM~~ **NCCAOM**) through its Credentials Documentation Examination. If a portion of those five or more years was prior to licensing, registration, or certification, then prior practice must be documented to the Board's satisfaction. The ~~NCBAHM~~ **NCCAOM** Certification Standards for Documentation will be used. All clinical supervisors under this section are subject to Board approval.

(2) Board approved clinical supervisors, acupuncturists or physicians may supervise no more than two acupuncture students in an informal private clinical setting.

(3) An “acupuncture student” is an individual:

(a) Enrolled in a school approved to offer credit for post-secondary clinical education in Oregon; or

(b) A practitioner licensed to practice acupuncture in another state or foreign country who is enrolled in clinical training provided by a clinical supervisor approved by the Oregon Medical Board.

(4) An acupuncture student must comply with OAR 847-070-0005 to 847-070-0055.

(5) An acupuncture student may not perform any act that constitutes the practice of medicine or the practice of acupuncture, except under direct supervision of a person approved by the Board as a clinical supervisor to provide clinical training as described in this rule.

Statutory/Other Authority: ORS 677.265

Statutes/Other Implemented: ORS 677.060(3)

## **847-070-0019**

### **Interview and Examination**

(1) In addition to all other requirements for licensure, the Board may require an applicant to appear for a personal interview regarding information received in the application process. Unless excused in advance, failure to appear before a Committee of the Board for a personal interview violates ORS 677.190(17) and may subject the applicant to disciplinary action.

(2) If there is reasonable cause to question the qualifications of an applicant, the Board in its discretion may require the applicant to do one or more of the following:

(a) Obtain certification or re-certification in Acupuncture or Oriental Medicine by the National Certification ~~Commission~~ **Board** for Acupuncture and ~~Oriental~~ **Herbal** Medicine (~~NCBAHM~~~~NCCAOM~~);

(b) Pass an evaluation which may be written, oral, practical, or any combination thereof;

(c) Provide documentation of current ~~NCBAHM~~~~NCCAOM~~ Acupuncture certification;

(d) Complete 15 hours of continuing education acceptable to the Board for every year the applicant has ceased practice prior to application for Oregon licensure. Continuing education that meets ~~NCBAHM~~~~NCCAOM~~'s recertification requirements would qualify as Board-approved continuing education;

(e) Complete a Board-approved mentorship tailored to the applicant's time out of practice under a Board-approved mentor who must individually supervise the applicant. The mentor must report the successful completion of the mentorship to the Board.

(3) An applicant must pass an open-book examination on the Medical Practice Act (ORS Chapter 677) and Oregon Administrative Rules (OAR chapter 847, division 70). If an applicant fails the examination three times, the applicant must attend an informal meeting with a Board member, the Executive Director, a Board investigator and/or the Medical Director of the Board to discuss the applicant's failure of the examination before being given a fourth and final attempt to pass the examination. If the applicant does not pass the examination on the fourth attempt, the applicant may be denied licensure.

Statutory/Other Authority: ORS 677.265 & 677.759

Statutes/Other Implemented: ORS 677.759

## **847-070-0022**

### **Documents to be Submitted for Licensure**

The documents submitted must be legible and no larger than 8 ½" x 11". All documents and photographs will be retained by the Board as a permanent part of the application file. If original documents are larger than 8 ½" x 11", the copies must be reduced to the correct size with all wording and signatures clearly shown. Official translations are required for documents issued in a foreign language. The following documents are required:

(1) Application: Completed formal application provided by the Board. Required dates must include month, day and year.

(2) Birth Certificate: A copy of birth certificate and a copy of Change of Name documentation, Marriage Certificate, or Divorce Decree if the applicant's name has been changed by court order, adoption, marriage, divorce, etc.

(3) Acupuncture School Diploma: A copy of a diploma showing graduation from an approved school of acupuncture for those applicants who qualify under OAR 847-070-0016(1).



(4) Photograph: A close-up, passport-quality photograph, front view, head and shoulders (not profile), with features distinct, taken within 90 days preceding the filing of the application.

(5) A letter from the Dean of the applicant's program of acupuncture for those applicants who qualify under OAR 847-070-0016(1).

(6) A letter from the National Certification ~~Commission~~ **Board** for Acupuncture and ~~Oriental Herbal~~ Medicine (~~NCBAHM~~ **NCCAOM**) verifying current certification in acupuncture by the ~~NCBAHM~~ **NCCAOM** for those applicants who qualify under OAR 847-070-0016(1) or (2).

(7) If requested by the Board, a letter verifying licensure in good standing from the state or states of all prior and current health-related licensure.

(8)(a) A letter from the Director or other official for practice and employment to include a statement regarding eligibility for rehire and specific beginning and ending dates of practice and employment, for the past five (5) years only.

(b) If the applicant has ceased practice for more than two (2) years, employment verifications will be required for the past ten (10) years or redacted patient logs from the past five (5) years.

(c) If such verification is unavailable or incomplete, and for acupuncturists who have been or are in solo practice, three reference letters from acupuncturists in the local treatment community who are familiar with the applicant's practice and who have known the applicant for more than six months.

Statutory/Other Authority: ORS 677.265 & 677.759

Statutes/Other Implemented: ORS 677.275 & 677.759

### **847-070-0033**

#### **Visiting Acupuncturist Requirements**

(1) The Oregon Medical Board may grant approval for a visiting acupuncturist to demonstrate acupuncture needling as part of a seminar, conference, or workshop sponsored by an Oregon school or an Oregon school's program of acupuncture or **Traditional Eastern** ~~oriental~~ medicine, or professional organization of acupuncture, or any seminar, conference, or workshop approved by the National Certification ~~Commission~~ **Board** for Acupuncture and ~~Oriental Herbal~~ Medicine (~~NCBAHM~~ **NCCAOM**) to provide continuing education training for a period up to ten days no more than three times a year. The visiting acupuncturist who requests additional time beyond the ten days, or submits more than three requests in a year, must apply for and obtain a license to practice in the state of Oregon. An Oregon licensed acupuncturist must be in attendance at the seminar, conference or workshop.

(2) Prior to being granted approval, the following information must be submitted to the Oregon Medical Board:

(a) A letter from the school or program of acupuncture or **Traditional Eastern** ~~oriental~~ medicine, or organization which will have an out-of-state acupuncturist demonstrate needling as part of a seminar, conference, or workshop with the following information:

(A) Dates of the seminar, conference, or workshop in which the visiting acupuncturist will be demonstrating acupuncture needling;

(B) Description of the seminar, conference or workshop;

(C) Name of the responsible Oregon acupuncturist, licensed under ORS 677, actively registered and in good standing with the Board, who will be in attendance and responsible for the conduct of the visiting acupuncturist at the seminar, conference or workshop.

(D) A curriculum vitae for the visiting acupuncturist; and

(b) If the visiting acupuncturist is licensed, certified or registered to practice as an acupuncturist in the state in which the acupuncturist is practicing, the visiting acupuncturist must provide documentation that their license, certificate, or registration is active and in good standing.

(3) The request for approval to practice in the state of Oregon as a visiting acupuncturist must be received at least two weeks prior to the beginning date of such practice.

Statutory/Other Authority: ORS 677.265

Statutes/Other Implemented: ORS 677.265(1) & (2)

#### **847-070-0037**

#### **Limited License, Pending Examination**

(1) An acupuncturist who meets all requirements for Oregon acupuncture licensure but has not yet passed the acupuncture certification examination given by the National Certification ~~Commission~~ **Board** on Acupuncture and ~~Oriental~~ **Herbal** Medicine (**NCBAHM** ~~NCCAOM~~) may be issued a Limited License, Pending Examination for the purpose of obtaining clinical training in Oregon under the supervision of a Board approved clinical supervisor if the following criteria are met:

(a) The application file is complete to the satisfaction of the Board with the exception of pending certification by the **NCBAHM** ~~NCCAOM~~;

(b) The applicant has not previously failed the **NCBAHM** ~~NCCAOM~~ examination;

(c) The clinical supervisor approved to supervise the applicant meets the qualifications in OAR 847-070-0017 and is on-site and available to supervise at all times when the applicant is training; and

(d) The applicant has submitted the appropriate form and fee prior to being issued a Limited License, Pending Examination.

(2) Any person obtaining clinical training under a Limited License, Pending Examination must identify themselves to patients as an acupuncture trainee and wear a name tag identifying themselves as a trainee.

(3) A Limited License, Pending Examination may be granted for a period of six months.

(4) Upon receipt of verification that the applicant has passed the acupuncture certification examination given by the **NCBAHM**~~NCCAOM~~, and if the applicant's application file is otherwise satisfactorily complete, the applicant shall be scheduled for approval of permanent licensure.

(5) The Limited License, Pending Examination will automatically expire if the applicant fails the acupuncture certification examination given by the **NCBAHM**~~NCCAOM~~.

Statutory/Other Authority: ORS 677.265

Statutes/Other Implemented: ORS 677.759

#### **847-070-0045**

#### **Inactive Registration and Re-Entry to Practice**

(1) Any acupuncturist licensed in this state who changes location to some other state or country shall be listed by the Board as inactive.

(2) If the acupuncturist wishes to resume active status, the acupuncturist must file an Affidavit of Reactivation and pay a processing fee, satisfactorily complete the reactivation process and be approved by the Board before beginning active practice in Oregon.

(3) The Board may deny active registration if it judges the conduct of the acupuncturist during the period of inactive registration to be such that the acupuncturist would have been denied a license if applying for an initial license.

(4) If an acupuncturist applicant has ceased practice for a period of 12 or more consecutive months immediately preceding the application for licensure or reactivation, the applicant may be required to do one or more of the following:

(a) Obtain certification or re-certification in Acupuncture or Oriental Medicine by the National Certification ~~Commission~~ **Board** for Acupuncture and ~~Oriental~~ **Herbal** Medicine (**NCBAHM**~~NCCAOM~~);

(b) Provide documentation of current **NCBAHM**~~NCCAOM~~ Acupuncture or Oriental Medicine certification;

(c) Complete 15 hours of continuing education acceptable to the Board for every year the applicant has ceased practice;

(d) Complete a Board-approved mentorship tailored to the applicant's time out of practice under a Board-approved mentor who must individually supervise the licensee. The mentor must report the successful completion of the mentorship to the Board; and

(e) Additional requirements as determined appropriate by the Board.

(5) The acupuncturist applicant who has ceased practice for a period of 24 or more consecutive months may be required to complete a re-entry plan to the satisfaction of the Board. The re-entry plan must be reviewed and approved through a Consent Agreement for Re-entry to Practice prior to the applicant beginning the re-entry plan. Depending on the amount of time out of practice, the re-entry plan may contain one or more of the requirements listed in section (4) of this rule and such additional requirements as determined appropriate by the Board.

Statutory/Other Authority: ORS 677.265 & ORS 677.759

Statutes/Other Implemented: ORS 677.759 & ORS 677.175

#### **847-070-0060**

#### **License Application Withdrawals and Denials**

(1) An applicant may withdraw an application for licensure prior to review by the Board's Administrative Affairs Committee or Acupuncture Advisory Committee. The Board will not report the withdrawal to the National Certification ~~Commission~~ **Board** for Acupuncture and ~~Oriental~~ **Herbal** Medicine (~~NCBAHM~~ **NCCAOM**). The applicant may submit a new application for licensure at any time.

(2) An applicant may withdraw an application for licensure up to 30 days after the Board has voted to deny the application on the basis that the applicant is not eligible for licensure for reason(s) other than the applicant's failure to demonstrate good moral character. The Board will not report the withdrawal to the ~~NCBAHM~~ **NCCAOM**. The applicant may submit a new application for licensure at any time.

(3) An applicant may request to withdraw an application for licensure after review by the Administrative Affairs Committee. If the Board grants the request, the withdrawal will be reported to the ~~NCBAHM~~ **NCCAOM**. The applicant may submit a new application for licensure no sooner than two years after the date of withdrawal.

(4) An applicant may request to withdraw an application for licensure after review by the Board's Investigative Committee. If the Board grants the request, the applicant may withdraw their application only through issuance of a Stipulated Order of suspended judgment of license denial. The suspension of judgment is based on the applicant's withdrawal of their application and agreement not to reapply for licensure for at least two years after issuance of the Stipulated Order. The order will be reported to the ~~NCBAHM~~ **NCCAOM** and the National Practitioner Databank.

(5) An applicant whose application has been denied may submit a new application for licensure as stated in the Board's Order, but no sooner than two years after the date of denial.

Statutory/Other Authority: ORS 677.265

Statutes/Other Implemented: ORS 677.265, ORS 677.100, ORS 677.190, ORS 677.220 & ORS 677.759

## **847-008-0070**

### **Continuing Medical Competency (Education)**

The Oregon Medical Board is committed to ensuring the continuing competence of its licensees for the protection, safety and well being of the public. All licensees must engage in a culture of continuous quality improvement and lifelong learning.

(1) Licensees renewing registration who had been registered with Active, Administrative Medicine Active, Locum Tenens, Military/Public Health Active, Telemedicine Active, Telemonitoring Active, or Teleradiology Active status for the previous registration period must demonstrate ongoing competency to practice medicine by:

(a) Ongoing participation in a program of recertification or maintenance of certification by an American Board of Medical Specialties (ABMS) board, the American Osteopathic Association's Bureau of Osteopathic Specialists (AOA-BOS), the American Board of Podiatric Medicine (ABPM), the American Board of Foot and Ankle Surgery (ABFAS), the National Commission on Certification of Physician Assistants (NCCPA), or the National Certification ~~Commission~~ **Board** for Acupuncture and ~~Oriental Herbal~~ Medicine (**NCAHAM**~~NCCAOM~~); or

(b) 60 hours of continuing medical education (CME) per two years relevant to the licensee's current medical practice, or 30 hours of CME if licensed during the second year of the biennium, as follows:

(A) American Medical Association (AMA) Category 1;

(B) American Osteopathic Association (AOA) Category 1-A or 2-A;

(C) American Podiatric Medical Association's (APMA) Council on Podiatric Medical Education approved sponsors of continuing education; or

(D) American Academy of Physician Associates (AAPA) Category 1 (pre-approved); or

(c) 30 hours of **NCAHAM**~~NCCAOM~~-approved courses per two years relevant to the licensee's current practice, or 15 hours if licensed during the second year of the biennium.

(2) Licensees renewing registration who had been registered with Emeritus status for the previous registration period must demonstrate ongoing competency by:

(a) Ongoing participation in re-certification by an ABMS board, the AOA-BOS, the ABPM, the ABFAS, the NCCPA, or the **NCAHAM**~~NCCAOM~~; or

(b) 15 hours of CME per year as follows:

(A) AMA Category 1 or 2;

(B) AOA Category 1-A, 1-B, 2-A or 2-B;

(C) APMA-approved continuing education; or

(D) AAPA Category 1 or 2; or

(c) 8 hours of **NCBAHM**~~NCCAOM~~-approved courses.

(3) Licensees who have lifetime certification without participation in a program of recertification or maintenance of certification with the ABMS, AOA-BOS, ABPM, ABFAS, or NCCPA must submit the required CME in section (1) (b) of this rule or section (2) (b) of this rule if renewing with Emeritus status.

(4) Licensees who have lifetime certification without participation in a program of recertification or maintenance of certification with the **NCBAHM**~~NCCAOM~~ must submit the required CME in section (1) (c) of this rule or section (2) (c) of this rule if renewing with Emeritus status.

(5) Licensees serving in the military may provide documentation of military training or experience that is substantially equivalent to the continuing education required by the Board to meet the requirements of this rule.

(6)(a) CME in cultural competency is considered relevant CME for the current practice of all licensees and may be used toward satisfying the required CME hours and the cultural competency continuing education hours required in OAR 847-008-0077.

(b) CME in suicide risk assessment, treatment and management is considered relevant CME for the current practice of all licensees and may be used toward satisfying the required CME hours.

(c) CME in the detection and early diagnosis of Alzheimer's disease and in the appropriate prescribing of antipsychotic drugs to treat patients with Alzheimer's disease is considered relevant CME for the current practice of all physician and physician associate licensees and may be used toward satisfying the required CME hours. Licensees practicing in primary care or geriatric care are encouraged to obtain the CME described here.

(7) Licensees who perform Level II office-based surgical procedures and who are not eligible or maintaining certification with an ABMS, AOA-BOS, ABPM, ABFAS, or NCCPA specialty board, must obtain 50 hours of CME each year. The CME hours must be relevant to the surgical procedures to be performed in the office-based facility and must be accredited as described in section (1)(b) of this rule. This requirement may not be satisfied with cultural competency CME or other CME that is only generally relevant to the licensee's practice.

(8) The Board may audit licensees for compliance with CME. Audited licensees have 60 days from the date of the audit to provide course certificates. Failure to comply or misrepresentation of compliance is grounds for disciplinary action.

(9) As the result of an audit, if licensee's CME is deficient or licensee does not provide adequate documentation, the licensee will be fined \$250 and must comply with CME requirements within 120 days from the date of the audit.

(a) If the licensee does not comply within 120 days of the date of the audit, the fine will increase to \$1000; and

(b) If the licensee does not comply within 180 days of the date of the audit, the licensee's license will be suspended for a minimum of 90 days.

(10) The following licensees are exempt from this rule:

(a) Licensees in residency training; and

(b) Volunteer Camp licensees.

Statutory/Other Authority: ORS 677.265, ORS 676.850 & ORS 676.860

Statutes/Other Implemented: ORS 677.265, ORS 677.512, ORS 677.759, ORS 677.837, ORS 676.850, ORS 676.860 & ORS 677.487

### **847-010-0073**

#### **Reporting Requirements**

(1) Board licensees and health care facilities must report to the Board as required by ORS 676.150, 677.092, 677.190, and 677.415. These reports include, but are not limited to, the following:

(a) A licensee must self-report to the Board:

(A) Any conviction of a misdemeanor or felony or any arrest for a felony crime to the Board within 10 days after the conviction or arrest;

(B) Any adverse action taken by another licensing jurisdiction or any peer review body, health care institution, professional or medical society or association, governmental agency, law enforcement agency or court for acts or conduct similar to acts or conduct that would constitute grounds for disciplinary action as described in ORS chapter 677;

(C) Any official action taken against the licensee within 10 business days of the official action; or

(D) A voluntary withdrawal from practice, voluntary resignation from the staff of a health care facility or voluntary limitation of the licensee's staff privileges at a health care facility if the

licensee's voluntary action occurs while the licensee is under investigation by the health care facility or its committee for any reason related to possible medical incompetence, unprofessional conduct or physical incapacity or impairment within 30 calendar days.

(b) A licensee who has reasonable cause to believe that another state licensed health care professional has engaged in prohibited or unprofessional conduct must report the conduct within 10 working days to the board responsible for the other professional unless disclosure is prohibited by state or federal laws relating to confidentiality or protection of health information.

(c) A licensee must report within 10 business days to the Board any information that appears to show that a licensee is or may be medically incompetent or is or may be guilty of unprofessional or dishonorable conduct or is or may be a licensee with a physical incapacity.

(d) A health care facility must report to the Board:

(A) Any official action taken against a licensee within 10 business days of the date of the official action; or

(B) A licensee's voluntary withdrawal from practice, voluntary resignation from the staff of a health care facility or voluntary limitation of the licensee's staff privileges at a health care facility if the licensee's voluntary action occurs while the licensee is under investigation by the health care facility or its committee for any reason related to possible medical incompetence, unprofessional conduct or physical incapacity or impairment within 30 calendar days.

(2) For purposes of the statutes, reporting to the Board means making a report to the Board's Investigation Unit or the Board's Executive Director or the Board's Medical Director. Making a report to the Board's Health Professionals' Services Program (HPSP) or HPSP's Medical Director does not satisfy the duty to report to the Board.

(3) For the purposes of ORS chapters 676 and 677, the terms medical incompetence, unprofessional conduct, and impaired licensee have the following meanings:

(a) Medical Incompetence: A licensee who is medically incompetent is one who is unable to practice medicine with reasonable skill or safety due to lack of knowledge, lack of ability, or impairment. Evidence of medical incompetence shall include:

(A) Gross or repeated acts of negligence involving patient care.

(B) Failure to achieve a passing score or satisfactory rating on a competency examination or program of evaluation when the examination or evaluation is ordered or directed by the Board or a health care facility.

(C) Failure to complete a course or program of remedial education when ordered or directed to do so by the Board or a health care facility, or a medical education or training program.



(b) Unprofessional conduct: Unprofessional conduct includes the behavior described in ORS 677.188(4), defined as conduct which is unbecoming to a person licensed by the Board or detrimental to the best interest of the public, and which includes:

(A)(i) Any conduct or practice contrary to recognized standards of ethics of the medical, podiatric, or acupuncture professions, or

(ii) Any conduct which does or might constitute a danger to the health or safety of a patient or the public, to include a violation of patient boundaries, or

(iii) Any conduct or practice which does or might adversely affect a provider's ability to safely and skillfully practice medicine, podiatry, or acupuncture; or

(iv) Practicing with a condition that is adversely affecting a provider's ability to safely and skillfully practice medicine, podiatry, or acupuncture.

(B) Willful performance of any surgical or medical treatment which is contrary to acceptable medical standards.

(C)(i) Willful and repeated ordering or performance of unnecessary laboratory tests or radiologic studies; or

(ii) Administration of unnecessary treatment; or

(iii) Employment of outmoded, unproved, or unscientific treatments, except as allowed in ORS 677.190 (1)(b); or

(iv) Failing to obtain consultations when failing to do so is not consistent with the standard of care; or

(v) Otherwise utilizing medical service for diagnosis or treatment which is or may be considered inappropriate or unnecessary.

(D) Fraud in the performance of, or the billing for, medical procedures.

(E) Repeated instances of disruptive behavior in the health care setting that could adversely affect the delivery of health care to patients.

(F) Sexual misconduct: Licensee sexual misconduct is behavior that exploits the licensee-patient relationship in a sexual way. The behavior is non-diagnostic and non-therapeutic, may be verbal, physical or other behavior, and may include expressions of thoughts and feelings or gestures that are sexual or that reasonably may be construed by a patient as sexual. Sexual misconduct includes but is not limited to:

(i) Sexual violation: Licensee-patient sex, whether or not initiated by the patient, and engaging in any conduct with a patient or the patient's immediate family that is sexual or may be reasonably interpreted as sexual, including but not limited to:

(I) Sexual intercourse;

(II) Genital to genital contact;

(III) Oral to genital contact;

(IV) Oral to anal contact;

(V) Genital to anal contact;

(VI) Kissing in a romantic or sexual manner;

(VII) Touching breasts, genitals, or any sexualized body part for any purpose other than appropriate examination or treatment, or where the patient has refused or has withdrawn consent;

(VIII) Encouraging the patient to masturbate in the presence of the licensee or masturbation by the licensee while the patient is present; or

(IX) Offering to provide practice-related services, such as medications, in exchange for sexual favors.

(ii) Sexual impropriety: Behavior, gestures, or expressions that are seductive, sexually suggestive, or sexually demeaning to a patient or the patient's immediate family, to include:

(I) Sexually exploitative behavior, to include taking, transmitting, viewing, or in any way using photos or any other image of a patient, their family or associates for the prurient interest of others.

(II) Intentional viewing in the health care setting of any sexually explicit conduct for prurient interests.

(III) Having any involvement with child pornography, which is defined as any visual depiction of a minor (a child younger than 18) engaged in sexually explicit conduct.

(IV) Sexually explicit communication in person, by mail, by telephone, or by other electronic means, including but not limited to text message, e-mail, video or social media.

(G) Conduct not otherwise allowed by Oregon law which is contrary to or inconsistent with recognized standards of ethics of the medical, podiatric, or acupuncture professions, specifically conduct that is contrary to or inconsistent with:

(i) Any principle, opinion, or provision of the American Medical Association's 2016 Code of Ethics.

(ii) Ethical standards established by a specialty board as defined in OAR 847-020-0100:

(I) In which the licensee is certified, and

(II) Which were in place at the time the conduct occurred.

(iii) Ethical standards established by the medical college or specialty society:

(I) In which the licensee practices or practiced at the time of the conduct, and

(II) Which were in effect as of April 7, 2022.

(iv) Any provision of the American Osteopathic Association's 2016 Code of Ethics.

(v) Any provision of the American Podiatric Medical Association's 2017 Code of Ethics.

(vi) Any provision of the 2008 (reaffirmed in 2013) American Association of Physician Assistants' Guidelines for Ethical Conduct for the Physician Assistant Profession.

(vii) Any provision of the Oregon Association of Acupuncturists' ~~and Oriental Medicine's~~ 2008 Code of Ethics.

(viii) Any provision of the National Certification ~~Commission~~ Board for Acupuncture and ~~Oriental~~ Herbal Medicine's 2023 Code of Ethics.

(H) Intentionally contacting the known complainant or allowing any person authorized to act on behalf of the licensee to contact the known complainant in regard to the complaint or investigation unless and until the licensee has requested a contested case hearing and the Board has authorized the taking of the complainant's deposition pursuant to ORS 183.425.

(I) In the practice of acupuncture, the failure to meet the standard of care of a reasonably prudent, careful, and skillful practitioner of acupuncture under the same circumstances, in the same or similar community. In the practice of acupuncture, errors of such repetition or magnitude that a willful disregard of practice standards or patient safety may be inferred.

(J) Discrimination in the practice of medicine, podiatry, or acupuncture resulting in differences in the quality of healthcare delivered that is not due to access-related factors or clinical needs, preferences, and appropriateness of intervention.

(c) Licensee Impairment: A licensee who is impaired is a licensee who is unable to practice medicine with reasonable skill or safety due to factors which include, but are not limited to:

(A) The use of alcohol, drugs, prescribed medication, or other substances while on or off duty which causes impairment when on duty, including taking call or supervising other healthcare professionals, regardless of practice setting.

(B) Mental or emotional illness.

(C) Physical deterioration or long term illness or injury which adversely affects cognition, motor, or perceptive skills.

(4) For the purposes of the reporting requirements of this rule and ORS 677.415, licensees shall be considered to be impaired if they refuse to undergo an evaluation for mental or physical competence or chemical impairment, or if they resign their privileges to avoid such an evaluation, when the evaluation is ordered or directed by a health care facility or by this Board.

(5) For the purposes of the reporting requirements of this rule and ORS 677.415, official action does not include administrative suspensions of seven or fewer calendar days for failure to maintain or complete records. Administrative suspensions described in this section must be reported as an official action when the suspensions occur more than three times in any 12-month period.

(6) A report made by a board licensee or the Oregon Medical Association or other health professional association, to include the Osteopathic Physicians and Surgeons of Oregon, Inc, or the Oregon Podiatric Medical Association to the Board under ORS 677.415 shall include the following information:

(a) The name, title, address and telephone number of the person making the report;

(b) The information that appears to show that a licensee is or may be medically incompetent, is or may be guilty of unprofessional or dishonorable conduct or is or may be a licensee with an impairment.

(7) A report made by a health care facility to the Board under ORS 677.415 (5) and (6) shall include:

(a) The name, title, address and telephone number of the health care facility making the report;

(b) The date of an official action taken against the licensee or the licensee's voluntary action withdrawing from practice, voluntary resignation or voluntary limitation of licensee staff privileges; and

(c) A description of the official action or the licensee's voluntary action, as appropriate to the report, including:

(A) The specific restriction, limitation, suspension, loss or denial of the licensee's medical staff privileges and the effective date or term of the restriction, limitation, suspension, loss or denial; or

(B) The fact that the licensee has voluntarily withdrawn from the practice of medicine or podiatry, voluntarily resigned from the staff of a health care facility or voluntarily limited the licensee's privileges at a health care facility and the effective date of the withdrawal, resignation or limitation.

(8) A report made under ORS 677.415 Section 2 may not include any information that is privileged peer review data, see ORS 41.675.

(9) All required reports shall be made in writing.

(10) Any person who reports or provides information in good faith as required by the statutes is immune from civil liability for making the report.

Statutory/Other Authority: ORS 677.265 & 677.417

Statutes/Other Implemented: ORS 676.150, 677.092, 677.190, 677.205, 677.265 & 677.415

## Enrolled Senate Bill 874

Printed pursuant to Senate Interim Rule 213.28 by order of the President of the Senate in conformance with pre-session filing rules, indicating neither advocacy nor opposition on the part of the President (at the request of Governor Tina Kotek for Oregon Medical Board)

CHAPTER .....

### AN ACT

Relating to Oriental medicine; amending ORS 677.010, 677.275, 677.757, 677.759, 677.761 and 677.780.

#### Be It Enacted by the People of the State of Oregon:

##### SECTION 1. ORS 677.010 is amended to read:

677.010. As used in this chapter, subject to the exemptions in ORS 677.060 and unless the context requires otherwise:

(1) "Approved internship" means the first year of post-graduate training served in a hospital that is approved by the **Oregon Medical Board** or by the Accreditation Council [of] **for Graduate Medical Education or its successor organization**, the American Osteopathic Association **or its successor organization** or the Royal College of Physicians and Surgeons of Canada **or its successor organization**.

(2) "Approved school of medicine" means a school offering a full-time resident program of study in medicine or osteopathic medicine leading to a degree of Doctor of Medicine or Doctor of Osteopathic Medicine, such program having been fully accredited or conditionally approved by the Liaison Committee on Medical Education, or its successor agency, or the American Osteopathic Association, or its successor agency, or having been otherwise determined by the board to meet the association standards as specifically incorporated into board rules.

[3] "*Board*" means the *Oregon Medical Board*.]

[4] (3) "Diagnose" means to examine another person in any manner to determine the source or nature of a disease or other physical or mental condition, or to hold oneself out or represent that a person is so examining another person. It is not necessary that the examination be made in the presence of such other person; [it] **the examination** may be made on information supplied either directly or indirectly by such other person.

[5] (4) "Dispense" means the preparation and delivery of a prescription drug, pursuant to a lawful order of a practitioner, in a suitable container appropriately labeled for subsequent administration to or use by a patient or other individual entitled to receive the prescription drug.

[6] (5) "Dispensing physician" means a physician or podiatric physician and surgeon who purchases prescription drugs for the purpose of dispensing them to patients or other individuals entitled to receive the prescription drug and who dispenses them accordingly.

[7] (6) "Drug" means all medicines and preparations for internal or external use of humans, intended to be used for the cure, mitigation or prevention of diseases or abnormalities of humans, which are recognized in any published United States Pharmacopoeia or National Formulary, or otherwise established as a drug.

[(8)] (7) “Fellow” means an individual who has not qualified under ORS 677.100 (1) and (2) and who is pursuing some special line of study as part of a supervised program of a school of medicine, a hospital approved for internship or residency training, or an institution for medical research or education that provides for a period of study under the supervision of a responsible member of that hospital or institution, such school, hospital or institution having been approved by the board.

[(9)] (8) “Intern” means an individual who has entered into a hospital or hospitals for the first year of post-graduate training.

[(10)] (9) “License” means permission to practice, whether by license, registration or certification.

[(11)] (10) “Licensee” means an individual holding a valid license issued by the board.

[(12)] (11) “Physical incapacity” means a condition that renders an individual licensed under this chapter unable to practice under that license with professional skill and safety by reason of physical illness or physical deterioration that adversely affects cognition, motor or perceptive skill.

[(13)] (12) “Physician” means a person who holds a degree of Doctor of Medicine or Doctor of Osteopathic Medicine, or a person who holds a degree of Doctor of Podiatric Medicine if the context in which the term “physician” is used does not authorize or require the person to practice outside the scope of a license issued under ORS 677.805 to 677.840.

[(14)] (13) “Podiatric physician and surgeon” means a physician licensed under ORS 677.805 to 677.840 to practice podiatry.

[(15)(a)] (14)(a) “Podiatry” means:

(A) The diagnosis or the medical, physical or surgical treatment of ailments of the human foot, ankle and tendons directly attached to and governing the function of the foot and ankle, and treatment involving the use of a general or spinal anesthetic if that treatment is performed in a hospital licensed under ORS 441.025 or in an ambulatory surgical center licensed by the Oregon Health Authority and is under the supervision of or in collaboration with a podiatric physician and surgeon;

(B) Assisting in the performance of surgery, as provided in ORS 677.814; and

(C) The treatment of skin, skin-related structures and subcutaneous masses, and wounds involving skin, skin-related structures and subcutaneous masses, on the human leg no further proximal than the tibial tubercle.

(b) “Podiatry” does not include administering general or spinal anesthetics or the amputation of the entire foot.

[(16)] (15) “Prescribe” means to direct, order or designate the use of or manner of using by spoken or written words or other means.

[(17)] (16) “Resident” means an individual who, after the first year of post-graduate training, in order to qualify for some particular specialty in the field of medicine, pursues a special line of study as part of a supervised program of a hospital approved by the board.

**(17) “Traditional Eastern medicine” means the practice of medicine, specifically acupuncture and traditional Chinese medicine, regulated by this chapter if the medicine is practiced within the context of a person’s license to practice acupuncture issued under ORS 677.757 to 677.770.**

**SECTION 2.** ORS 677.275 is amended to read:

677.275. Each administrative law judge conducting hearings on behalf of the **Oregon Medical Board** is vested with the full authority of the board to schedule and conduct hearings on behalf and in the name of the board on all matters referred by the board, including issuance of licenses, proceedings for placing licensees on probation and for suspension and revocation of licenses, and shall cause to be prepared and furnished to the board, for decision thereon by the board, the complete written transcript of the record of the hearing. This transcript shall contain all evidence introduced at the hearing and all pleas, motions and objections, and all rulings of the administrative law judge. Each administrative law judge may administer oaths and issue summonses, notices and subpoenas, but may not place any licensee on probation or issue, refuse, suspend or revoke a license.

**SECTION 3.** ORS 677.757 is amended to read:

677.757. As used in ORS 677.757 to 677.770:

[(1)(a) “Acupuncture” means an Oriental health care practice used to promote health and to treat neurological, organic or functional disorders by the stimulation of specific points on the surface of the body by the insertion of needles. “Acupuncture” includes the treatment method of moxibustion, as well as the use of electrical, thermal, mechanical or magnetic devices, with or without needles, to stimulate acupuncture points and acupuncture meridians and to induce acupuncture anesthesia or analgesia.]

[(b) The practice of acupuncture also includes the following modalities as authorized by the Oregon Medical Board:]

[(A) Traditional and modern techniques of diagnosis and evaluation;]

[(B) Oriental massage, exercise and related therapeutic methods; and]

[(C) The use of Oriental pharmacopoeia, vitamins, minerals and dietary advice.]

(1) “Acupuncture” means:

(a) Traditional Eastern medicine used to promote health and treat neurological, organic or functional disorders through the insertion of needles into specific points on the body at varying depths, including insertion into the skin, subcutaneous tissue, muscle layers and fascia, and into or near joint spaces based on anatomical location and the practitioner’s clinical assessment. The type of needle inserted, and the depth, angle and technique of insertion, are informed by specialized training in acupuncture theory, biomedical anatomy and diagnostic evaluation to safely stimulate biological and physiological responses and support the body’s healing process.

(b) The treatment method of moxibustion and the use of electrical, thermal, mechanical or magnetic devices, with or without needles, to stimulate acupuncture points and acupuncture meridians and to induce acupuncture anesthesia or analgesia.

(c) The following modalities, as authorized by the Oregon Medical Board:

(A) Traditional Eastern medicine and acupuncture techniques of diagnosis and evaluation;

(B) Traditional Eastern medicine manual therapy, exercise and related therapeutic methods; and

(C) The use of Traditional Eastern medicine pharmacopoeia, vitamins, minerals and dietary advice.

(2) [“Oriental pharmacopoeia”] “Traditional Eastern medicine pharmacopoeia” means a list of herbs described in [traditional Oriental] Traditional Eastern medicine texts commonly used in accredited schools of [Oriental] Traditional Eastern medicine if the texts are approved by the Oregon Medical Board.

**SECTION 4.** ORS 677.759 is amended to read:

677.759. (1) [No person shall] **A person may not** practice acupuncture without first obtaining a license to practice medicine and surgery or a license to practice acupuncture from the Oregon Medical Board except as provided in subsection (2) of this section.

(2) Notwithstanding subsection (1) of this section, the board may issue a license to practice acupuncture to an individual licensed to practice acupuncture in another state or territory of the United States if the individual is licensed to practice medicine and surgery or acupuncture in the other state or territory. The board [shall] **may** not issue such a license unless the requirements of the other state or territory are similar to the requirements of this state.

(3) The board shall examine the qualifications of an applicant and determine who shall be authorized to practice acupuncture.

(4) Using the term “acupuncture,” “acupuncturist,” [“Oriental medicine”] “**Traditional Eastern medicine**” or any other term, title, name or abbreviation indicating that an individual is qualified or licensed to practice acupuncture is prima facie evidence of practicing acupuncture.

(5) In addition to the powers and duties of the board described in this chapter, the board shall adopt rules consistent with ORS 677.757 to 677.770 governing the issuance of a license to practice acupuncture.

**SECTION 5.** ORS 677.761 is amended to read:

677.761. Nothing in ORS 677.757 to 677.770 is intended to:



(1) Prevent, limit or interfere with an individual licensed or certified by the Oregon Medical Board from practicing health care other than acupuncture within the scope of the license or certification of the individual.

(2) Limit any other licensed or certified health care practitioner from practicing acupressure or other therapy within the scope of the license or certification of the individual.

(3) Limit the activities of any person who engages in the business of providing [*Oriental massage*] **Traditional Eastern medicine manual therapy**, exercise and related therapeutic methods or who provides substances listed in [*an Oriental*] **Traditional Eastern medicine** pharmacopoeia, or vitamins or minerals or dietary advice, so long as the activities of the person are not otherwise prohibited by law.

(4) Limit the ability of practitioners from outside Oregon to demonstrate the practice of acupuncture as part of a recognized and limited duration educational program, lecture or event within this state under rules adopted by the board.

**SECTION 6.** ORS 677.780 is amended to read:

677.780. (1) There is established an Acupuncture Advisory Committee consisting of six members appointed by the Oregon Medical Board. Of the committee members appointed by the board:

(a) One shall be a person who is a current member of the board.

(b) Two shall be physicians licensed under ORS chapter 677.

(c) Three shall be acupuncturists licensed under ORS [677.759] **677.757 to 677.770**. In appointing the three acupuncturists, the board may receive nominations from the [*Oregon Association of Acupuncture and Oriental Medicine*] **Oregon Association of Acupuncturists, or its successor organization**, and other professional acupuncture organizations.

(2) The term of office of each committee member is three years, but a committee member serves at the pleasure of the board. A committee member may not serve more than two consecutive terms. A committee member serves until a successor is appointed and qualified. If there is a vacancy for any cause, the board shall make an appointment to become immediately effective for the unexpired term.

(3) A committee member is entitled to compensation and expenses as provided for board members in ORS 677.235.

(4) A majority of the members of the committee constitutes a quorum for the transaction of business.

---



# NCCAOM Name Change to NCBAHM

## Frequently Asked Questions (FAQ)

We are pleased to share with you the following Frequently Asked Questions (FAQ) to help clarify and support our plan for a name change from the **National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM)** to the **National Certification Board for Acupuncture and Herbal Medicine (NCBAHM)**. We recognize that such a transition raises questions, and we are committed to providing clarity, transparency, and support throughout this process. This FAQ was developed to address the most common inquiries we’ve received and to offer guidance on what name change means for our Diplomates, candidates, Providers and the broader acupuncture and herbal medicine community.

### Table of Contents

NCCAOM Name Change to NCBAHM.....	1
1. What is the new name of the organization and when will the name change go into effect? .....	2
Rationale for Name Change.....	2
2. Why was the name changed? .....	2
3. Does this change affect the organization’s mission and does the name affect the NCCAOM’s work as a credentialing organization?.....	2
4. Why is the NCCAOM using the term “Herbal Medicine” as opposed to Chinese medicine to replace Oriental medicine in its new name?.....	2
Feedback from Stakeholders.....	3
5. Was the public consulted before making this decision?.....	3
6. What were the main concerns from those who opposed the change?.....	3
Regulatory Impact of Name Change.....	3
7. How will NCBAHM address potential regulatory issue.....	3
How will the Name Change Affect Diplomates? .....	4
8. Does this affect certification or credentialing for current Diplomates? .....	4
9. Will the credential “Diplomate of Oriental Medicine” change? .....	4
10. Will I receive a new certificate when the name change goes into effect?.....	4
Name Change Impacting Profession.....	4
11. What does this change mean for the profession as a whole? .....	4
12. Who can I contact for more information or support during the transition? .....	5



## 1. What is the new name of the organization and when will the name change go into effect?

The National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) will be the National Certification Board for Acupuncture and Herbal Medicine (NCBAHM) effective January 2026. Until then, the NCCAOM will continue to use its current name, logo, digital badges and credentials. The NCCAOM will unveil its new logo and digital badges in January 2026. Until then, all Diplomates can continue to use the current digital badge. The future Professional Designations for active Diplomates to use starting in 2026:

John Smith, Dipl. Ac. (NCBAHM)<sup>TM</sup>

John Smith, Dipl. C.H. (NCBAHM)<sup>TM</sup>

John Smith, Dipl. ABT (NCBAHM)<sup>TM</sup>

John Smith, Dipl. A.H.M. (NCBAHM)<sup>TM</sup>

---

## Rationale for Name Change

### 2. Why was the name changed?

The name change marks an important step in the continued evolution of our organization and the profession we serve. It reflects our commitment to more accurately represent the full scope of practice, while embracing inclusive, modern, and culturally respectful language. In addition, we are recognizing the name change of our national standards organization, Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM) and Council of Colleges for Acupuncture and Herbal Medicine (CCAHM).

### 3. Does this change affect the organization's mission and does the name affect the NCCAOM's work as a credentialing organization?

No. Our mission remains unchanged: to assure the safety and well-being of the public and to advance and advocate for the professional practice of NCCAOM Board-Certified Acupuncturists<sup>TM</sup> through national standards focused on competence and credentialing. NCCAOM will continue its work to fulfill its mission through its national certification programs, exam development and professional development activity programs.

### 4. Why is the NCCAOM using the term "Herbal Medicine" as opposed to Chinese medicine to replace Oriental medicine in its new name?

The NCCAOM will continue to certify practitioners specifically in Chinese herbal medicine as part of our mission, which has been the case since our inception. The updated name is intended to accurately represent the current certifications we offer —



which include acupuncture, Chinese herbal medicine, and related modalities — while aligning with national and international recognition standards for the profession.

While we recognize and respect the many rich traditions of herbal medicine practiced worldwide, NCCAOM certification is focused on the competencies and standards related to Chinese herbal medicine. Much of TCM is also used in other herbal medicine traditions (ie, Japanese/Kanoo & Korean traditions for example). The name change is meant to convey the depth and breadth of our existing credentials more clearly, not to imply certification in other traditions. In addition, the new name is in sync with recent name changes by national leadership organizations in AHM.

## Feedback from Stakeholders

### 5. Was the public consulted before making this decision?

Yes. In May 2025, we invited public comments and received extensive feedback from Diplomates and stakeholders. The **majority supported the change**, highlighting its relevance, accuracy, and cultural sensitivity.

### 6. What were the main concerns from those who opposed the change?

Some stakeholders expressed concerns about potential regulatory and legislative impacts, such as the need to update state or federal language that references the former name. Please see Question 8.

## Regulatory Impact of Name Change

### 7. How will NCBAHM address potential regulatory issue

We are actively working with **state associations and regulatory bodies** to support the transition. Our team is committed to helping stakeholders update language in laws and regulations to reflect the new organizational name. We understand the complexities and challenges involved with updating state legislation to reflect the new name, and we are well aware that this work will need to be done gradually, carefully and strategically. We are fully prepared to work with each state to address these changes gradually. Our approach will be collaborative and tailored to each state's circumstances, ensuring that we move forward in a way that protects the profession and minimizes vulnerability.

The intent behind the name change is to strengthen recognition of the full scope of the profession nationally and internationally, and we are committed to supporting states throughout the transition process.



## How will the Name Change Affect Diplomates?

### 8. Does this affect certification or credentialing for current Diplomates?

No. Your certification remains valid and unchanged. While the organization's name has been updated, all current exams, policies and processes continue under the same accredited national standards.

### 9. Will the credential "Diplomate of Oriental Medicine" change?

The NCCAOM is planning to change "Diplomate of Oriental Medicine (OM)" to "Diplomate of Acupuncture and Herbal Medicine" in 2026. We will provide **guidance to Diplomates** of OM on how to reference their board certification appropriately during this transition. We will also be updating the "Diplomate of Oriental Medicine" designation. Until then, Diplomates of OM will continue to use this credential until the announcement in 2026.

### 10. Will I receive a new certificate when the name change goes into effect?

We anticipate beginning the rollout of the new branding — including Diplomate digital badges and certificates — in January 2026. At that time, certificates with the updated name and logo will be issued to **newly certified Diplomates and to those completing their recertification process. Diplomates recertified prior to 2026 will use their wall certificates and ID cards until their next recertification process, at which point they will receive their updated credentials with the new NCCAOM name and logo.** Digital badges will be uploaded to **all certified Diplomates** by the end of the first quarter in 2026.

## Name Change Impacting Profession

### 11. What does this change mean for the profession as a whole?

This name change is a significant step in helping acupuncture and herbal medicine gain greater **visibility, integration, and respect** in mainstream U.S. healthcare. The name better represents the **full scope of practice** and helps unify our field nationally and internationally. The NCCAOM has been working actively with the American Society of Acupuncturists on advocating and promoting acupuncturists with federal and state policy makers.

The name change is just one part of a broader, long-term strategy to strengthen the identity of our profession, support licensure, and protect the public. Much of our work is focused on initiatives that directly benefit practitioners and patients, including:



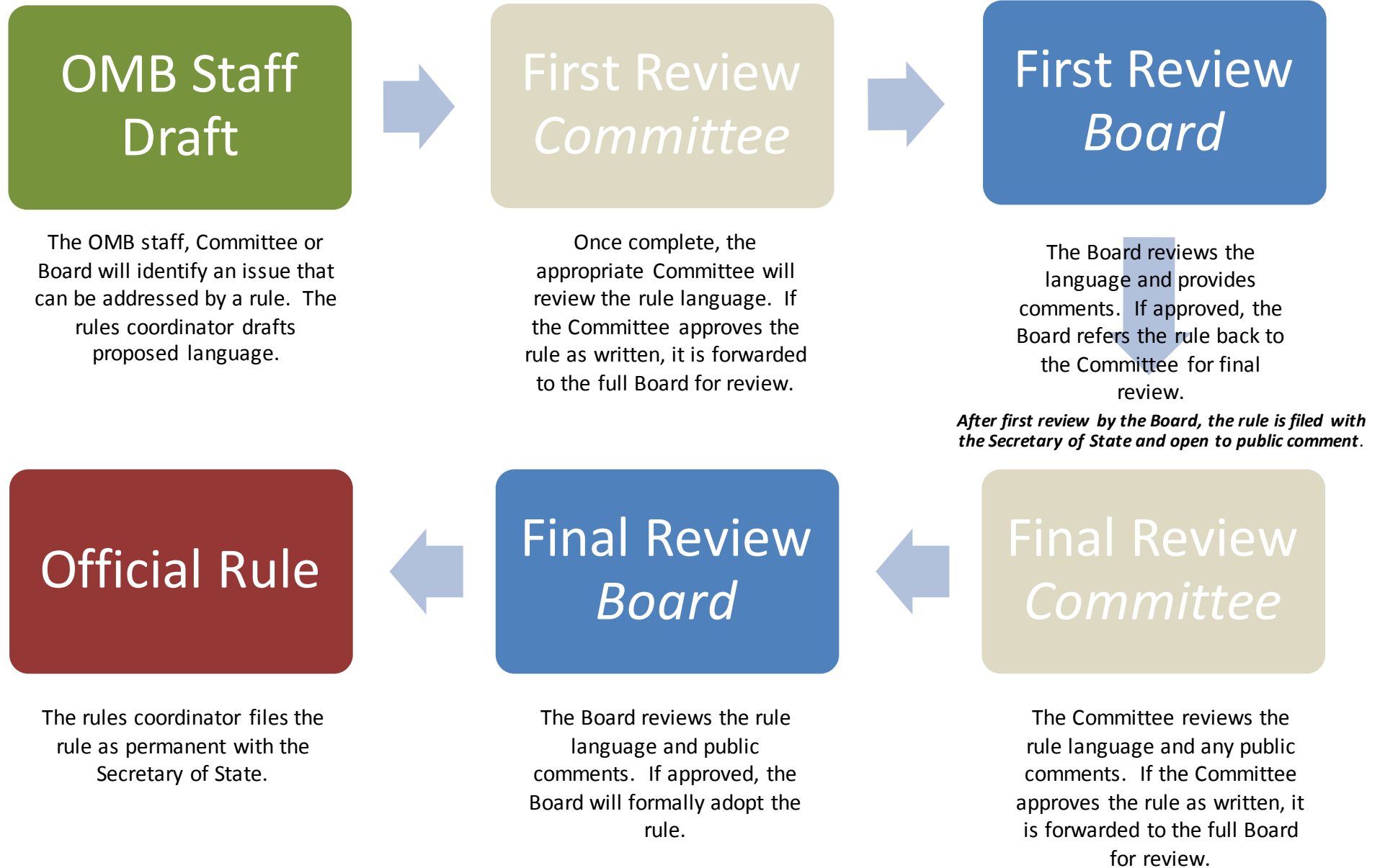
- Collaborating with state and national associations to expand scope of practice and access to services.
- Advocating for Medicare recognition for licensed acupuncturists.
- Partnering with organizations and agencies, such as the Department of Veterans Affairs, to bring acupuncture care to veterans.
- Supporting research, education, and public outreach to increase awareness of the profession's benefits.

---

## 12. Who can I contact for more information or support during the transition?

Please reach out to NCCAOM via email [publicrelations@thenccaom.org](mailto:publicrelations@thenccaom.org) for any questions or assistance related to the name change.

## Rule Process



**Note: If the Board or Committee makes significant changes to the rule at any point in the process, it will be sent back to the Committee as a first review.**

## **OREGON ADMINISTRATIVE RULES**

### **CHAPTER 847, DIVISION 071 and 005 – OREGON MEDICAL BOARD**

#### **Final Review – January 2026**

The Oregon Legislature passed House Bill 2143 (2025) and Governor Kotek signed the bill into law. This legislation allows individuals with specific training and registration to provide five-needle protocol (5NP) treatments beginning March 1, 2026, without additional licensure.

The law directs the Oregon Medical Board to establish rules for training qualifications and safety standards. The OMB's role is to implement the law that has already been enacted. The rulemaking establishes the qualifications for registration of 5NP technicians and creates sanitation and best practice standards for 5NP treatments.

In August and September 2025, the OMB convened a Workgroup of acupuncturists, physicians, and community members to provide recommendations on the draft rules. The Board's Acupuncture Advisory Committee reviewed during a special meeting held September 12, 2025. The Oregon Medical Board reviewed on October 2, 2025. Meeting minutes along with public comments received during this process are available on the 5NP website, [omb.oregon.gov/5NP](http://omb.oregon.gov/5NP).

During the Workgroup and Acupuncture Advisory Committee meetings, there were discussions and comments provided related to requiring supervision of 5NP technicians, ranging from direct supervision to indirect supervision, and ranging from supervision by a physician or acupuncturist to supervision by other licensed health care providers. Workgroup and Committee members who supported a supervision requirement expressed patient safety concerns related to 5NP Technicians working in isolation. Workgroup and Committee members who opposed adding a supervision requirement highlighted the intent of HB 2143 to allow low-barrier access to 5NP treatments and the lack of evidence supporting public safety concerns. OMB Staff noted that under ORS 183.400 an agency can only write rules pursuant to constitutional authority or statutory authority granted through enabling legislation. Agencies cannot exceed the authority granted by the legislature. The absence of statutory language does not create implied authority for agencies to write rules in that area. HB 2143 does not impose supervision requirements or authorize the OMB to write rules requiring supervision. Also, in response to discussion during the prior Committee meeting regarding how other states regulate 5NP treatment, OMB staff compiled an overview of state 5NP regulations and accountability frameworks provided below.

Additionally, HB 2143 authorizes the OMB to establish registration and renewal fees for 5NP technicians. The rulemaking sets fees at \$100 for initial registration and \$50 annually (\$100 biennially) for renewal. The Board determined and provided the fee amounts during the legislative process based on estimated costs to implement HB 2143. The Board will apply its existing Criminal Records Check Fee to 5NP technicians during the initial application process and as needed for renewals or investigations, as permitted under HB 2143.

The OMB held a public hearing to accept oral comments on November 18, 2025, and accepted written comments through November 24, 2025, see Hearing Officer Report provided below.



[The following language is new. For readability, it is not bolded/underlined.]

## **Division 71: Five-Needle Protocol**

### **847-071-0000**

#### **Purpose Statement**

Five-needle protocol (5NP) represents a unique fusion of ancient Eastern healing practices with modern healing and social justice movements. In Oregon, 5NP is a standardized, supportive treatment for individuals experiencing substance use disorders, mental health conditions, and trauma. The five points are the shen men, sympathetic, liver, kidney and lung points on the human outer ear. The Oregon Medical Board is responsible for establishing training and registration requirements and regulating the practice of 5NP technicians in order to expand access to safe, standardized, low-barrier treatment in a manner that protects individuals in Oregon accessing 5NP treatments.

### **847-071-0005**

#### **Definitions**

As used in division 71 rules regulating five-needle protocol:

(1) “Acupuncture” has the meaning given in ORS 677.757.

(2) “Board” means the Oregon Medical Board.

(3) “Five-needle protocol” or “5NP” has the meaning given in Oregon Laws 2025, chapter 296, section 2, the standardized five-needle treatment protocol in which five points on the human outer ear are stimulated with sterile, single-use disposable needles, ear seeds or ear beads for the purpose of achieving temporary relief from the symptoms of substance use disorder, mental health conditions or trauma. The five points are the shen men, sympathetic, liver, kidney and lung points.

(4) “5NP technician” means an individual registered by the Oregon Medical Board to provide five-needle protocol treatments in Oregon.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265

Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143)

### **847-071-0007**

#### **Five-Needle Protocol Registration Required**

(1) Except as provided in sections (2) and (3) of this rule, no person may provide five-needle protocol (5NP) treatment without first obtaining a registration from the Oregon Medical Board.

(2) An acupuncturist licensed under ORS 677.757 to 677.770 may provide 5NP treatment without additional 5NP registration.

(3) A physician licensed to practice medicine as a medical doctor or doctor of osteopathic medicine pursuant to ORS Chapter 677 may provide 5NP treatment without additional 5NP registration.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265

Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143)

#### **847-071-0020**

##### **Qualifications**

(1) An applicant for registration as a five-needle protocol (5NP) technician must:

(a) Be at least 18 years of age;

(b) Have successfully completed a training program as described in OAR 847-071-0025. If the program was completed more than ten years before the date of application the applicant must demonstrate current competency through relevant courses or 5NP treatments; and

(c) Have good moral character as those traits would relate to the applicant's ability to provide 5NP treatments. Substance use disorder in remission, mental health conditions, or other lived experiences alone are not a reflection of current moral character.

(2) Criminal history is not an automatic disqualification for registration. The Board evaluates each applicant's background and experience and will consider additional information provided by the applicant.

(3) No applicant is entitled to registration who:

(a) Has had a registration, license, or certificate in a health-related field revoked or suspended unless the registration, license, or certificate has been restored or reinstated and the applicant is in good standing in the state which previously revoked the registration, license, or certificate;

(b) Has been refused a registration, license, or certificate in a health-related field on any grounds other than failure of a licensure examination; or

(c) Has been guilty of conduct similar to that which would be prohibited by or to which ORS 677.190 would apply.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265

Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143)

## **847-071-0025**

### **Five-Needle Protocol Training**

(1) Before training five-needle protocol (5NP) technicians in Oregon, a 5NP trainer must:

(a) Request board approval by providing required documentation demonstrating qualifications under this section, and

(b) Meet one of the following requirements:

(A) Be an actively licensed Oregon acupuncturist or a physician licensed under ORS 677.100 to 677.133 who is in good standing with the Oregon Medical Board and has been practicing auricular acupuncture for a period of at least two years; or

(B) Hold active 5NP technician registration issued by the Oregon Medical Board for a minimum of two years and co-teach a minimum of two 5NP training programs described in section (2) of the rule. The 5NP trainer that co-taught must provide the Oregon Medical Board a letter of recommendation and evaluation of the individual seeking approval as a 5NP trainer; or

(C) Be an active National Acupuncture Detoxification Association (NADA) Registered Trainer or People's Organization of Community Acupuncture (POCA) Auricular Acu-Technician (AAT) Trainer.

(2) The 5NP training program must include at least 30 hours of didactic and 40 ears needed during supervised clinical training, mechanisms to monitor a participant's engagement, and contain the following elements:

(a) Sanitation and hygiene techniques,

(b) Infection control precaution procedures,

(c) Consent documentation and the individual's rights,

(d) Ear needling and point location,

(e) Plans to address potential risks, side effects, and complications,

(f) Collaboration with other 5NP technicians, health care providers, and community resources,

(g) Trauma informed care,

(h) Origins of 5NP,

(i) Maintaining professional boundaries, and

(j) Reporting requirements.

(3) Training programs completed prior to the first adoption of this rule may be substantially similar to the requirements described in section (2) of this rule.

(4) A “5NP student” is an individual enrolled in a 5NP training program described in section (2) of this rule. This chapter does not prohibit a 5NP student from providing 5NP treatments rendered in the course of the training program.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265

Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143)

#### **847-071-0030**

##### **Application**

(1) An application for registration as a five-needle protocol (5NP) technician may be accessed on the Board’s website.

(2) When applying for registration, the applicant must submit to the Board:

(a) A complete application provided by the Board,

(b) Registration and criminal records check fees as outlined in OAR 847-005-0005,

(c) National fingerprint-based background check as provided in OAR 847-008-0068, and

(d) The following documentation:

(A) Legal Name and Age: A copy of a birth certificate, state issued identification card, or other documentation as approved by the Board,

(B) Five-Needle Protocol Training: A copy of a certificate showing completion of a training program as described in OAR 847-071-0025 and if applicable documentation to demonstrate current competency as described in OAR 847-071-0020(1)(b),

(C) Photograph: A close-up, passport-quality photograph, front view, head and shoulders (not profile), with features distinct, taken within 90 days preceding the filing of the application, and

(D) Verification of other Health-Related Registration, License, or Certificate: If requested by the Board, verification from all states or territories in which the applicant currently or previously held a health-related license, registration, or certification to practice and evidence that the applicant is in good standing and not subject to any disciplinary action or pending investigations in that state or territory.

(3) An applicant may submit additional information on their background and experience for consideration.

(4) Every applicant must complete an application and document evidence of qualifications listed in OAR 847-071-0020 to the satisfaction of the Board before an applicant may be considered eligible for registration.

(5) The Board may query the National Practitioner Data Bank (NPDB) system during the application process.

(6) Omissions or providing false, misleading, incomplete, or deceptive statements or information on any Board application is grounds for denial of registration or disciplinary action by the Board.

(7) An application submitted with fees to the Board that is not complete within 90 days from application submission will expire.

(8) 5NP fees are not refundable and may not be credited toward other Board fees.

(9) An applicant whose application has been expired, withdrawn, or denied must submit a new application, documentation, and fees. While a new application and documentation is required, the Board may still consider information provided in previous applications.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265

Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143)

**847-071-0035**

**Registration**

(1) Upon Board approval of an application, the Board will issue a registration and post the five-needle protocol (5NP) technician's name, registration, and other applicable information on the Board's website.

(2) A 5NP technician must hold an active registration to provide 5NP treatments.

(3) Registration expires December 31 of odd-numbered years and may be renewed biennially by:

(a) Submitting a Board-required renewal application;

(b) Paying the registration fee outlined in OAR 847-005-0005;

(c) Completing at least one hour of courses per registration period related to 5NP treatment or pain management; and

(d) Completing at least one hour per year of cultural competency courses or experiences that apply linguistic skills, use cultural information for therapeutic relationships, or elicit understanding and apply cultural and ethnic data in the process of clinical care, as provided in OAR 950-040-0020 or approved by the Oregon Health Authority under ORS 413.450.

(4) Upon failure to renew under section (3) of this rule, the registration will lapse.

(a) A 5NP technician may not provide treatments under a lapsed registration.

(b) Lapse of a registration is not discipline.

(c) A lapsed registration must be renewed within 90 days, or the registration will expire.

(5) A 5NP technician must keep a current mailing address on file with the Board.

(6) A 5NP technician who voluntarily chooses to not provide 5NP treatments in Oregon must be listed as expired.

(7) A 5NP technician with an expired registration must reapply by submitting a new application, documentation, and fees as outlined in OAR 847-005-0005.

(8) Failure to comply with laws and rules related to 5NP technicians may result in loss of registration.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265, ORS 676.850

Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143), ORS 676.850, ORS 413.450

## **847-071-0040**

### **Five-Needle Protocol Regulations**

(1) Five-needle protocol (5NP) treatment must be practiced in accordance with Board rules and Oregon Laws 2025, chapter 296, section 2, including only:

(a) To provide temporary relief from the symptoms of substance use disorder, mental health conditions, or trauma; and

(b) Utilizing five ear points: shen men, sympathetic, liver, kidney, and lung points.

(2) A 5NP technician may not use the title “acupuncturist” or advertise or hold themselves out as being an acupuncturist or otherwise indicate they are authorized to practice acupuncture as defined in ORS 677.757.

(3) A 5NP technician must obtain written consent from the individual or the individual’s representative prior to providing treatment by:

(a) Clearly explaining the 5NP treatment, including needle placement, duration, and expected sensations;

(b) Discussing potential risks and realistic treatment outcomes;

(c) Respecting the individual’s right to decline treatment or withdraw consent at any time; and

(d) Having the individual self-identify the reason(s) for the 5NP treatment and date of treatment.

(4) Written consent for a 5NP treatment must be retained for at least three years from date of treatment and provided to the individual or the individual’s representative upon their request.

(5) For the individual and 5NP technician safety, a 5NP technician must:

(a) Use only sterile, single-use disposable needles, ear seeds, or ear beads;

- (b) Adhere to sanitation and hygiene protocols;
  - (c) Meet community standards of care; and
  - (d) Establish clear procedures for handling complications or adverse reactions.
- (6) A 5NP technician must set and maintain professional boundaries with all individuals receiving 5NP treatments and protect the individuals' privacy and dignity.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265,  
Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143), ORS 192.556

#### **847-071-0050**

##### **Disciplinary Proceedings**

(1) The Board may suspend or revoke the registration of a five-needle protocol (5NP) technician if the Board finds that the technician:

- (a) Represented themselves or allowed another person to represent them as a physician, acupuncturist, or other health care provider, unless the 5NP technician holds the appropriate license.
- (b) Performed any act other than 5NP which constitutes the practice of acupuncture in violation of ORS 677.759 or Oregon Laws 2025, chapter 296.
- (c) Engaged in conduct constituting gross or repeated negligence in providing 5NP treatments.
- (d) Is incompetent to provide 5NP treatments.
- (e) Violated any of the provisions of ORS 677.190 or OAR 847-071-0040.

(2) Any Board investigation or disciplinary proceeding must be held in accordance with ORS Chapter 183, ORS 676.150 to 676.180, and ORS 677.184 to 677.228.

Statutory/Other Authority: OL 2025, chapter 296, section 2 (HB 2143), ORS 677.265  
Statutes/Other Implemented: OL 2025, chapter 296, section 2 (HB 2143)



[HB 2143 \(2025\)](#) authorizes the Oregon Medical Board to establish registration and renewal fees for five-needle protocol (5NP) technicians. The rulemaking sets fees at \$100 for initial registration and \$50 annually (\$100 biennially) for renewal starting March 1, 2026. The Board determined and provided the fee amounts during the legislative process based on estimated costs to implement HB 2143.

Additionally, the Board will apply its existing Criminal Records Check Fee to 5NP technicians during the initial application process and as needed for renewals or investigations, as permitted under HB 2143.

## **847-005-0005**

### **Licensure Fees**

(1) Doctor of Medicine (MD) and Doctor of Osteopathic Medicine (DO) Licensing Fees:

(a) Initial License Application — \$375.

(b) Registration: Active, Administrative Medicine, Inactive, Locum Tenens, Military/Public Health, Telemedicine, Telemonitoring and Teleradiology — \$314/year. Per ORS 677.290(3), fee includes \$10/year for the Oregon Health and Science University Library.

(c) Registration: Emeritus — \$50/year.

(d) Limited License, SPEX/COMVEX, Visiting Professor, Fellow, Medical Faculty, Postgraduate Application and Registration — \$185.

(2) Acupuncture Licensing Fees:

(a) Initial License Application — \$245.

(b) Registration: Active, Inactive, Locum Tenens and Military/Public Health — \$201/year.

(c) Registration: Emeritus — \$50/year.

(d) Limited License, Visiting Professor, Pending Examination Application and Registration — \$75.

(3) Physician Associate Licensing Fees:

(a) Initial License Application — \$245.

(b) Registration: Active, Inactive, Locum Tenens, Military/Public Health, and Telemedicine — \$239/year.

(c) Registration: Emeritus — \$50/year.

(d) Limited License, Pending Examination Application and Registration — \$75.

(4) Doctor of Podiatric Medicine Licensing Fees:

(a) Initial Application — \$340.

(b) Registration: Active, Administrative Medicine, Inactive, Locum Tenens, Military/Public Health, Telemedicine and Telemonitoring — \$304/year.

(c) Registration: Emeritus — \$50/year.

(d) Limited License, Postgraduate Application and Registration — \$185.

(5) Other Application or Licensing Fees:

(a) Reactivation Application Fee — \$50.

(b) Electronic Prescription Drug Monitoring Program — \$35/year. Per ORS 431A.850-431A.895, fee is assessed to licensees authorized to prescribe or dispense controlled substances in Oregon for the purpose of creating and maintaining the Prescription Drug Monitoring Program administered by the Oregon Health Authority.

(c) Workforce Data Fee — \$2/year. Per ORS 676.410, fee is assessed for the purpose of creating and maintaining a healthcare workforce data base administered by the Oregon Health Authority.

(d) Criminal Records Check Fee — \$52. Per ORS 181A.195(9)(e), fee is the actual cost of acquiring and furnishing criminal offender information.

(e) Health Professionals' Services Program Fee — \$25/year. Fee is assessed to sustain the Health Professionals' Services Program.

(6) Delinquent Registration Renewals:

(a) Delinquent MD/DO Registration Renewal — \$195.

(b) Delinquent Acupuncture Registration Renewal — \$80.

(c) Delinquent Physician Associate Registration Renewal — \$80.

(d) Delinquent Doctor of Podiatric Medicine Registration Renewal — \$195.

(7) All Board fees and fines are non-refundable and non-transferable.

(8) Registration fees in this rule and other fees described in section (5)(b), (5)(c), and (5)(e) for Active, Administrative Medicine, Inactive, Locum Tenens, Military/Public Health, Telemedicine, Telemonitoring and Teleradiology statuses are collected biennially except where noted in OAR chapter 847.

**(9) Five-needle protocol (5NP) Technician Fees:**

**(a) Application & Registration — \$100.**

**(b) Renewal Registration: Active — \$50/year.**

**(c) 5NP applicants and technicians are exempt from fees outlined in other sections of this rule, except for the Criminal Records Check Fee in section (5)(d).**

Statutory/Other Authority: ORS 677.265, 181A.195, 431A.880 & 676.410

Statutes/Other Implemented: ORS 677.265, 181A.195, 431A.880, 676.410 & 677.290, [Oregon Laws 2025, chapter 296, section 2](#)

## Enrolled House Bill 2143

Sponsored by Representative NOSSE; Representative NELSON (Presession filed.)

CHAPTER .....

AN ACT

Relating to five-needle protocol; creating new provisions; amending ORS 677.761; and prescribing an effective date.

**Be It Enacted by the People of the State of Oregon:**

**SECTION 1.** Section 2 of this 2025 Act is added to and made a part of ORS chapter 677.

**SECTION 2.** (1) As used in this section, “five-needle protocol” means the standardized five-needle treatment protocol in which five points on the human outer ear are stimulated with sterile, single-use disposable needles, ear seeds or ear beads for the purpose of achieving temporary relief from the symptoms of substance use disorder, mental health conditions or trauma. The five points are the shen men, sympathetic, liver, kidney and lung points.

(2) The Oregon Medical Board may establish by rule a registry of individuals who are qualified to provide the five-needle protocol. The board may adopt rules to establish:

(a) Qualifications for registration, including but not limited to education and training requirements;

(b) An application and registration fee;

(c) The form and manner of application;

(d) Sanitation and best practice standards;

(e) A schedule of violations and disciplinary actions; and

(f) Any other requirements or standards the board determines necessary.

(3) The board may issue a five-needle protocol registration to an applicant who meets the requirements established by the board by rule under this section.

(4) The board shall adopt rules regarding the renewal of a registration issued under this section.

(5) The board may, for the purpose of requesting a state or nationwide criminal records check under ORS 181A.195, require the fingerprints of an individual who is applying for or renewing a registration under this section or an individual who is under investigation by the board for a reason related to registration under this section.

(6)(a) Except as provided in paragraph (b) of this subsection, only an individual registered under this section may provide the five-needle protocol and shall use only objectively safe practices and materials, as further described by the board by rule.

(b) An acupuncturist licensed under ORS 677.757 to 677.770 may provide the five-needle protocol without registration under this section.

(7) Subject to ORS 677.759, unless an individual is an acupuncturist licensed under ORS 677.757 to 677.770, the individual may not hold themselves out as being an acupuncturist or

otherwise indicate that the individual is authorized to practice acupuncture, as defined in ORS 677.757.

(8)(a) Subject to paragraph (b) of this subsection, a proceeding for disciplinary action of an individual registered under this section must be substantially in accord with the following procedure:

(A) An individual, including a member of the board, may file a complaint to the board and the board shall verify the complaint; and

(B) A hearing must be given to the individual accused in the complaint in accordance with ORS chapter 183 as a contested case.

(b) Paragraph (a)(B) of this subsection does not apply if the individual accused in the complaint admits to the facts of a complaint described in paragraph (a) of this subsection so long as the complaint alleges facts that establish the individual is in violation of one or more grounds for suspension or revocation of a registration, as determined by the board by rule.

**SECTION 3.** ORS 677.761 is amended to read:

677.761. Nothing in ORS 677.757 to 677.770 is intended to:

(1) Prevent, limit or interfere with an individual licensed or certified by the Oregon Medical Board from practicing health care other than acupuncture within the scope of the license or certification of the individual.

(2) Limit any other licensed or certified health care practitioner from practicing acupuncture or other therapy within the scope of the license or certification of the individual.

(3) Limit the activities of any person who engages in the business of providing Oriental massage, exercise and related therapeutic methods or who provides substances listed in an Oriental pharmacopoeia, or vitamins or minerals or dietary advice, so long as the activities of the person are not otherwise prohibited by law.

(4) Limit the ability of practitioners from outside Oregon to demonstrate the practice of acupuncture as part of a recognized and limited duration educational program, lecture or event within this state under rules adopted by the board.

(5) Prevent, limit or interfere with the provision of the five-needle protocol, as defined in section 2 of this 2025 Act, in compliance with the requirements of section 2 of this 2025 Act.

**SECTION 4.** (1) Section 2 of this 2025 Act and the amendments to ORS 677.761 by section 3 of this 2025 Act become operative on March 1, 2026.

(2) The Oregon Medical Board may take any action before the operative date specified in subsection (1) of this section that is necessary for the board to exercise, on and after the operative date specified in subsection (1) of this section, all of the duties, functions and powers conferred on the board by section 2 of this 2025 Act and the amendments to ORS 677.761 by section 3 of this 2025 Act.

**SECTION 5.** This 2025 Act takes effect on the 91st day after the date on which the 2025 regular session of the Eighty-third Legislative Assembly adjourns sine die.

---

**Passed by House April 10, 2025**

.....  
Timothy G. Sekerak, Chief Clerk of House

.....  
Julie Fahey, Speaker of House

**Passed by Senate June 2, 2025**

.....  
Rob Wagner, President of Senate

**Received by Governor:**

.....M.,....., 2025

**Approved:**

.....M.,....., 2025

.....  
Tina Kotek, Governor

**Filed in Office of Secretary of State:**

.....M.,....., 2025

.....  
Tobias Read, Secretary of State

---

---

## MEMORANDUM

---

**TO:** Acupuncture Advisory Committee, Oregon Medical Board  
**SUBJECT:** Overview of State 5NP Regulations and Accountability Frameworks  
**DATE:** November 18, 2025

---

In response to discussion during the prior Acupuncture Advisory Committee meeting regarding how other states regulate five-needle protocol (5NP) treatment, OMB staff compiled the following information.

Provided below is an overview of state-level laws and regulations governing 5NP treatment requirements and related accountability measures across the United States. The information was compiled by OMB staff using publicly available resources.

This document is designed to serve as a general reference tool for reviewing the landscape of 5NP laws nationwide, highlighting state requirements for providing 5NP treatments and the accountability frameworks established by each state to ensure public safety and quality care.

The document is provided for general informational purposes only and should not be considered a complete or comprehensive analysis of 5NP laws across the United States. All information contained in this document should be independently verified.

Overview of State 5NP Regulations and Accountability Frameworks

State	Auricular Acupuncture 5NP Law	Requirements	State Board Registration, Certificate, or License	Type of Person	Supervision	Name	State Accountability Framework	Other Requirements
Arizona	<a href="#">AZ R4-8-Article 3</a>	training program clean needle course	Yes	No limit	AC	Acupuncture Detoxification Specialist	Supervision, Registration	For Board-approved alcoholism, substance, abuse, or chemical dependency programs and specific informed consent form.
Arkansas	<a href="#">AR Title III (F)</a>	none	Yes	No limit	DOM	Acupuncture Detoxification Specialist	Supervision, Registration	For substance abuse.
Colorado	<a href="#">CO 12-200-108</a> <a href="#">CO 12-245-233</a>	professional license training program	No	professional license	None	Auricular Acudetox	Prof. License	None
Connecticut	<a href="#">CT Sec. 20-206b(h)</a> <a href="#">CT Sec. 20-206b(j)</a>	certification with approved organization	No	No limit	MD/DO	Acupuncture Detoxification Specialist	Supervision	For the treatment of alcohol and drug abuse in a (1) private free-standing facility licensed by the Dept. of Public Health for the care or treatment of substance abusive or dependent persons, or (2) setting operated by the Dept. of Mental Health and Addiction Services.
Delaware	<a href="#">DE Title 24, chapter 17, §1799F</a>	professional license training program	Yes	professional license	None	Acupuncture Detoxification Specialist	Prof. License, Registration	For the purpose of preventing and treating alcoholism, nicotine dependency, substance abuse, or chemical dependency
Georgia	<a href="#">GA Rule 360-6-.06</a>	21+ training program clean needle course employer's professional liability insurance	Yes	No limit	AC, MD/DO	Auricular Detoxification Therapy	Supervision, Registration	In a Board approved city, county, state, federal or private chemical dependency program.
Indiana	<a href="#">IN IC 25-2.5-2-7</a>	training program clean needle course	No	No limit	AC	Auricular Acupuncture	Supervision	For the purpose of treating alcoholism, substance abuse, or chemical dependency within the context of a state, federal, or board approved alcohol, substance abuse, or chemical dependency program.
Louisiana	<a href="#">LA RS 37 §1357.1</a>	training program	Yes	No limit	AC, MD/DO	Acupuncture Detoxification Specialist	Supervision, Registration	None
Maine	<a href="#">ME Title 32 Ch 113-B §12551-12554</a>	professional license training program	Yes	professional license	AC	Acupuncture Detoxification Specialist	Professional License, Supervision, Registration	For the purpose of treatment of substance use and co-occurring disorders in, or in collaboration with, a program for substance use and co-occurring disorders or other state-approved program. Supervising AC must be available by phone or electronic means during business hours and conduct at least 2 in-person or videoconferencing visits with the specialist during the first year.
Maryland	<a href="#">MD §1A-316</a>	professional license training program	Yes	professional license	AC	Acupuncture Detoxification Specialist	Prof. License, Supervision, Registration	Within the context of a clinical substance abuse program in hospitals, prisons, outpatient clinics, or other settings approved by the Board.
Massachusetts	<a href="#">Mass. General Laws c.112 § 162A</a>	professional license training program	Yes	professional license	AC	Acupuncture Detoxification Specialist	Prof. License, Supervision, Registration	For the purpose of providing integrated health care delivery interventions in substance use disorder treatment and wellness promotion including, but not limited to, treating mental and behavioral health conditions or trauma. Supervision by phone or other electronic means during business hours with in-person site visits as deemed necessary by AC.
Michigan	<a href="#">MI 333.16513</a>	training program	No	No limit	MD/DO, AC	Acupuncture Detoxification Specialist	Supervision	For substance use disorder prevention and treatment.



Overview of State 5NP Regulations and Accountability Frameworks

State	Auricular Acupuncture 5NP Law	Requirements	State Board Registration, Certificate, or License	Type of Person	Supervision	Name	State Accountability Framework	Other Requirements
Missouri	<a href="#">MO 20 CSR 2015-4.010</a>	training program	No	No limit	AC	Auricular Detox Technician	Supervision	In a hospital, clinic or treatment facility which provides comprehensive substance abuse services, including counseling. AC supervisory meetings with the technician a minimum of four (4) hours per month and be available on-site, by telephone or pager, when the technician is providing services.
New Hampshire	<a href="#">328-G:9-a</a>	training program professional license, recovery coach, peer counselor, or other board approved professional	Yes	professional license+	AC	Acupuncture Detoxification Specialist	Prof. License, Supervision, Registration	Allows licensed health care professional, recovery coach, peer counselor, or other board approved professionals to be a specialist. General supervision provided by site visit, phone, or other electronic means during business hours with at least 2 site visits per year by AC. Supervising acupuncturist must be available at least by electronic means.
New Mexico	<a href="#">NM 16.2.16</a>	training program Clean Needle Course State laws exam high school diploma	Yes	No limit	DOM	Certified Auricular Detoxification Specialist	Supervision, Registration	Only in the treatment and prevention of alcoholism, substance abuse and chemical dependency.
Oklahoma	None	None	No	No limit	None	N/A	None	Oklahoma doesn't require a license in order to practice acupuncture.
Oregon	<a href="#">HB 2143 (2025)</a>	18+ training program	Yes	No limit	None	5NP Technician	Registration	For the purpose of achieving temporary relief from the symptoms of substance use disorder, mental health conditions or trauma.
Rhode Island	<a href="#">216-RICI-40-05-8.5.1, R.I. Gen. Laws § 5-37.2-2(11)</a>	professional license training program	Yes	No limit	AC	Auricular Acupuncture Technicians	Prof. License, Supervision, Registration	Within that individual's current scope of practice working in, or in collaboration with, behavioral health and healthcare agencies, or other state-approved programs or agencies.
South Carolina	<a href="#">SC SEC 40-47-730</a> <a href="#">SC SEC 40-47-735</a>	21+ training program Clean Needle Course	Yes	No limit	MD/DO, AC	Auricular Detoxification Specialists	Supervision, Registration	For the sole purpose of treatment of chemical dependency, detoxification, and substance abuse. Also have an auricular therapist license to do any point on ear, not limited to 5.
South Dakota	None	None	No	No limit	None	N/A	None	South Dakota doesn't require a license in order to practice acupuncture.
Tennessee	<a href="#">Tenn. Code Ann. § 63-6-1002</a>	training program	Yes	No limit	MD/DO, AC	Auricular Detoxification Specialists	Supervision, Registration	For the purpose of the treatment of alcoholism, substance abuse or chemical dependency in a hospital, clinic or treatment facility that provides comprehensive alcohol and substance abuse or chemical dependency services, including counseling.
Texas	<a href="#">TX Title 3 Sec. 205.303</a> <a href="#">IAC 184.36(a)(3)</a>	professional license training program clean needle course	Yes	professional license	None	Acudetox Specialist	Prof. License, Registration	Must obtain informed consent and keep a record of each client. Removed supervision in 2023, HB 1106, <a href="https://legiscan.com/TX/text/HB1106/2023">https://legiscan.com/TX/text/HB1106/2023</a>
Utah	<a href="#">UT 58-1-602</a>	professional license training program	No	professional license	None	N/A	Prof. License	For the adjunctive treatment and prevention of substance use disorders or to provide support for individuals who have experienced physical or emotional trauma.
Vermont	<a href="#">VT Title 26 ch 75 §3402(g)</a>	appropriate training in clean needle technique	No	No limit	None	N/A	None	Vermont by statute unregulated the practice of auriculotherapy.
Virginia	<a href="#">VA § 54.1-2901(23)</a>	training program	No	No limit	None	N/A	None	Can make no statements implying that practice of the 5NP is licensed, certified, or otherwise overseen by the Commonwealth.
West Virginia	<a href="#">WV §32-14</a>	18+ training program professional license	Yes	professional license	None	Auricular Acudetox Therapist or Specialist	Prof. License, Registration	For the treatment of substance abuse, alcoholism, chemical dependency, detoxification, behavioral therapy, or trauma recovery.
Wyoming	<a href="#">WY Ch 49</a>	training program	Yes	No limit	None	Auricular Acupuncture	Registration	For the purpose of treating mental and emotional health, post and acute trauma, substance abuse and chemical dependency.



# Oregon

Tina Kotek, Governor

## Medical Board

1500 SW 1<sup>st</sup> Avenue, Suite 620

Portland, OR 97201-5847

(971) 673-2700

FAX (971) 673-2669

[www.oregon.gov/omb](http://www.oregon.gov/omb)

**Date:** November 25, 2025

**To:** Acupuncture Advisory Committee  
Oregon Medical Board

**From:** Elizabeth Ross, Legislative & Policy Analyst, Hearing Officer

**Subject:** Hearing Officer's Report on OAR 847 Division 71 and OAR 847-005-0005

---

### Hearing Officer's Report

**Hearing Date:** November 18, 2025, 10 a.m.

**Hearing Location:** Oregon Medical Board, videoconference

**Rule Number:** OAR 847-071-0000, 847-071-0005, 847-071-0007, 847-071-0020, 847-071-0025, 847-071-0030, 847-071-0035, 847-071-0040, 847-071-0050, 847-005-0005

**Rule Title:** Implementing HB 2143 (2025) to establish five-needle protocol technician qualifications and regulations.

The rulemaking hearing on the proposed rule convened at 10:01 a.m. Attendees were informed of the procedures for taking comments. They were also told that the hearing was being recorded. The purpose of the hearing was to provide an opportunity for public comment on the rules proposed by the Oregon Medical Board implementing HB 2143 (2025) to establish five-needle protocol technician qualifications and regulations.

#### Staff Present:

Elizabeth Ross, JD, Legislative & Policy Analyst  
Gretchen Kingham, Executive Assistant

#### **SUMMARY OF ORAL COMMENTS:**

The following persons testified at the hearing. Their testimony is summarized below.

#### **Lisa Rohleder, People's Organization of Community Acupuncture (POCA) Tech**

Supports the proposed 5NP rules as written and introduced a group of POCA Tech students to provide testimony.

#### **Andrew Babson, POCA Tech Student**

Supports the 5NP rules as written.

**Joanna McClish, POCA Tech Student**

Supports the 5NP rules as written.

**Dave Bamberger, POCA Tech Student**

Supports the 5NP rules as written.

**Kiara LaManna, POCA Tech Student**

Supports the 5NP rules as written.

**Lillian Olson, POCA Tech Student**

Supports the 5NP rules as written.

**Marie Songer, POCA Tech Student**

Supports the 5NP rules as written.

**Ella Gomez, POCA Tech Student**

Supports the 5NP rules as written. Ella Gomez just moved from Washington State where they can practice 5NP and noticed a significant difference in friends and family well-being due to it.

**Nancy Lopez, POCA Tech Student**

Supports the 5NP rules as written.

**Erin Cook, POCA Tech Student**

Supports the 5NP rules as written.

**Kristen Melissa Garvin, POCA Tech Student**

Supports the 5NP rules as written.

**Kathleen Bodie, POCA Tech Student**

Supports the 5NP rules as written.

**Skip Van Meter, POCA Tech Dean of Students**

Supports the 5NP rules as written.

**Chad McCarty, POCA Tech Student**

Supports the 5NP rules as written.

**York Miller, POCA Tech Student**

Supports the 5NP rules as written.

**Julie Kronilkin, POCA Tech Student**

Supports the 5NP rules as written.

**Alyssa Mittling, POCA Tech Student**

Supports the 5NP rules as written.

**Winona Vaitekunas, Oregon Association of Acupuncturists Secretary and Registrar at POCA Tech**

Supports the current version of the 5NP rules as written.

**Jane Tarabocha, POCA Tech Student**

Supports the 5NP rules as written.

**Sara Biegelsen, Acupuncturist**

Member of the 5NP Workgroup and is in full support of the current rules as written.

**Elizabeth Ribeiro, POCA Tech Student**

Supports the 5NP rules as written. Elizabeth Ribeiro is from Michigan where 5NP is legal and saw it used as a vital and accessible tool by non-physician and non-acupuncture providers, including nurses, peer support specialists, and other professionals. They stated 5NP can then be used in places as a low-barrier treatment and it's wonderful.

**Maddie Foley, Oregon Association of Acupuncturists Treasurer and Vice President**

Serves as the sole acupuncturist at Coburg Serenity Lane and has observed that residents find 5NP treatments highly beneficial and valued. Maddie Foley supports the 5NP rules as written.

**Ryan Hofer, Naturopathic Doctor, POCA Tech Board Member**

Supports the 5NP rules as written and noted the rules honor 5NP's history as a complementary modality by increasing accessibility and fostering community development. The rules enable 5NP technicians to both receive training and eventually become trainers themselves, creating a sustainable educational pathway. Ryan Hofer noted Oregon needs right-sized credentials to provide access to the training and affordable treatments.

**Riley Cushing, POCA Tech Student**

Supports the 5NP rules as written.

**Zachary Krebs, Acupuncturist**

Supports the current rules as written. Zachary Krebs thinks the rules are cool and are going to help a lot of people.

**Haley Merrit, Acupuncturist.**

Works at Working Class Acupuncture and supervises students for POCA Tech. Supports the 5NP rules as written.

**Yarrow Geggus, POCA Tech Student**

Supports the 5NP rules as written.

**Katia Bushanski, Acupuncture Student**

Third-year student of acupuncture planning to practice in the Corvallis area. Katia Bushanski read all the rules thoroughly and fully supports them as written.

**Jamila Wilson, POCA Tech Student**

Employee at the United Way of the Columbia Willamette serving in the Disaster and Climate Resilience Department. Supports the 5NP rules as written and emphasized the value of providing community-based organizations with access to 5NP training and resources. Jamila Wilson highlighted how 5NP will expand the toolkit available to community health workers.

**Julia Neese, POCA Tech Student**

Supports the 5NP rules as written.

**Sonya Hargrove, POCA Tech Student**

Completely and wholeheartedly supports the 5NP rules as written.

**Letty Dogheart**

Disabled veteran and community health educator and supports the 5NP protocol as it stands.

**Jaye Mejía-Duwan**

PhD candidate at the University of California in the Department of Environmental Science working in Portland and supports the 5NP rules as written. Jaye Mejía-Duwan noted in this political climate communities need these kinds of resources and access. The current rules ensure that the 5NP program is safe, accessible, affordable, and centers on community.

**Jennifer Kehl, Registered Nurse and Licensed Acupuncturist**

Provides 5NP in a harm reduction program in Eugene and supports the 5NP rules as written.

**Adrianna Locke, Acupuncturist**

Member of the 5NP Workgroup that developed the rules and clinic owner in Northeast Portland. Adrianna Locke was glad to see how the rules progressed and stands by them.

**Moses Cooper**

Supports the rules as written in the current write-up.

The public hearing adjourned around 10:19 a.m.

**WRITTEN COMMENTS:**

Written comments were accepted until 5 p.m. on November 24, 2025. Written comments attached below.

---

**From:** dare <[REDACTED]>  
**Sent:** Wednesday, October 22, 2025 10:22 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED] [learn why this is important](#)

I support the current version of the 5NP rules.

---

**From:** Carie Arps <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 7:17 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** : 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

**Dear Elizabeth,**

**As a licensed mental health provider and massage therapist, I support *access to 5-Needle Protocol (5NP) care* for the communities who need it most.**

Please ***finalize the current draft rules as written***, allowing trained 5NP technicians to provide community-based care ***without additional supervision requirements*** that would limit access and increase costs.

*The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

Sincerely,  
Carie Arps, LPC

Sent from my iPhone

---

**From:** Victoria Roessler <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 7:31 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

**Subject:** 5NP Public Comment

**Body:**

*I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most.*

*Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.*

*The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

*Please help our community have access to recovery.*

*-Victoria Roessler*



---

**From:** Celine Hollombe <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 7:49 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** Draft 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

*I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most.*

*Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.*

*The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

Best,

**Céline Hollombe**

---

**From:** Hannah Dwertman <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 8:16 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED] [Learn why this is important](#)

Hello,

I support access to 5-Needle Protocol (5NP) care for the communities who need it most.

Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

Thanks so much,  
Hannah Dwertman, L.Ac.

---

**From:** Dorine Nafziger <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 8:37 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from d[REDACTED] [Learn why this is important](#)

Good morning Elizabeth,

*I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most. Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.*

*The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

## Quick Points:

- **Access & equity.** Many communities most affected by trauma, substance use, and suicide can't sustain costs of L.Ac.-supervised groups. A **technician model** (like Community Health Workers) keeps care local, relational, and affordable. (IHS's long-running work in meth and suicide prevention underscores the need for community-centered approaches.)
- **Safety & scope.** The rules define training content (sanitation, infection control, consent, trauma-informed care) and **limit** practice to five ear points for **temporary** relief of SUD/mental-health/trauma symptoms, with discipline provisions if boundaries are crossed. The OMB has already drafted responsible access and we just need to let them know we support that.
- **Evidence & experience.** Decades of community use (including tribal programs and post-crisis responses) show 5NP's value as a **regulating, connecting** intervention, often a bridge to counseling, primary care, and ceremony.

Please, let's make care accessible to the folks that need it most.

In gratitude,  
Dorine

---

**From:** Anna Murphy-Moore <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 8:52 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED] [Learn why this is important](#)

Greetings,

I am writing to confirm that I support access to the 5-Needle Protocol (5NP) for the communities that need it most.

I ask that you please finalize the current craft rules as written, allowing trained 5NP technicians to provide community-based care without additional supervision requirements. These requirements would both limit access and increase costs.

As a licensed acupuncturist who is familiar with this protocol, I believe that the current draft rules already ensure safety, clear scope of practice limitations and accountability while honoring the intent of expanding access to care and providing culturally grounding, community driven healing. At this time, when access to health care is already in crisis, we should not be creating unnecessary obstacles to care. We need to focus on expanding access.

**Access & equity.** Many communities most affected by trauma, substance use, and suicide can't sustain costs of L.Ac.-supervised groups. A **technician model** (like [Community Health Workers](#)) keeps care local, relational, and affordable. (IHS's [long-running work in meth and suicide prevention](#) underscores the need for community-centered approaches.)

**Safety & scope.** [The rules define training content](#) (sanitation, infection control, consent, trauma-informed care) and **limit** practice to five ear points for **temporary** relief of SUD/mental-health/trauma symptoms, with discipline provisions if boundaries are crossed. The OMB has already drafted responsible access and we just need to [let them know](#) we support that.

**Evidence & experience.** [Decades of community use](#) (including tribal programs and post-crisis responses) show 5NP's value as a **regulating, connecting** intervention, often a bridge to counseling, primary care, and ceremony

Let's do what we can to support these communities that are already struggling. The 5NP protocol is a simple and evidence based treatment that is incredibly low risk and was designed to function is a community based health care model.

Sincerely,  
Anna Murphy-Moore LAc

---

**From:** Megan Bulloch [REDACTED] >  
**Sent:** Thursday, October 23, 2025 8:51 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5np public comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

*Hi Elizabeth,*

*I've heard that there is a move to limit the scope of the 5NP protocol; namely to include supervision. I wanted to reach out to support the draft rules as written (i.e., no supervision).*

*I'm sure someone has sent you this [successful program](#), Stuck's community acupuncture, from Flagstaff, where young First Nations are trained in 5NP and then work in their communities. This seems exactly what this medicine was developed for. I hope for the same in Oregon.*

*I ask that you work to **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs. The draft rules already ensure safety, clear scope, and accountability while honouring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

*My very best,*

*mjb*

*Megan Bulloch, PhD, LAc*

AC223288

---

**From:** Yume Takeuchi, L.Ac. [REDACTED] >  
**Sent:** Thursday, October 23, 2025 10:23 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

Hello Elizabeth

My name is Yume Takeuchi and I am a licensed acupuncturist in Portland, Oregon. I am writing today to show my support for the access to 5-Needle Protocol for the communities who need it most.

Please finalize the current draft rules as written, allowing trained 5NP technicians to provide community-based care without additional supervision requirements that would limit access and increase costs. The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

Thank you,  
Yume Takeuchi, L.Ac.

--

YUZU Acupuncture Studio  
Yume Takeuchi, L.Ac., MSTCM  
[REDACTED] Portland, OR 97214

Ph: [REDACTED]  
<https://www.yuzuacupuncture.com/>

**Book your Appointment Now!**  
<https://yuzuacupuncture.janeapp.com/>

---

**From:** Laura Clevenger <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 10:47 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most. Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

--

**Dr. Laura Clevenger (she/her), ND**

*Naturopathic Physician*

[Kwan-Yin Healing Arts Center](#)

p: [REDACTED]  
f: [REDACTED]  
a: [REDACTED] Portland, OR 97212  
s: [Schedule here-West location](#)  
e: [REDACTED]  
telemedicine: via Athena patient portal

Please allow at least 48-72 hours for email response.

Confidential Communication:

This email message and any attachments are intended only for the addressee. This email and any attachments may be privileged, confidential, and protected from disclosure. If you are not the intended recipient, any dissemination, distribution, or copying is expressly prohibited. If you received this email message in error, please notify the sender immediately by replying to this email message or by telephone.

---

**From:** Ryan Hofer <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 12:12 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED] [Learn why this is important](#)

Greetings,

My name is Ryan Hofer and I am a Naturopathic Doctor. Credentialism and fear-based safetyism have contributed to inaccessible, inequitable complementary healthcare in Oregon for too long. Access to complementary healthcare is essential, and the 5NP draft rules are the kind of common sense rules that will directly help communities in need. The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

Thank you,  
Ryan Hofer



---

**From:** Sue Viens <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 12:54 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** Support for Finalizing 5-Needle Protocol

You don't often get email from [REDACTED]. [Learn why this is important](#)

Dear Elizabeth and To Whom this May Concern,

I'm writing to express strong support for finalizing the current draft rules for the 5-Needle Protocol (5NP) as they are written. These rules thoughtfully balance safety, scope, and accountability while staying true to the intent of HB 2143—to expand access to culturally rooted, community-driven healing.

Allowing trained 5NP technicians to provide care without additional supervision requirements will make this service more accessible and affordable for the people who need it most. Many communities deeply affected by trauma, substance use, and suicide simply cannot sustain the cost of Licensed Acupuncturist-supervised programs. A technician model—similar to that of Community Health Workers—keeps care grounded in local relationships and community trust. The success of community-based approaches within Indian Health Service programs for methamphetamine and suicide prevention demonstrates just how vital this model can be.

The proposed rules already set clear expectations for safety and professionalism. Training includes sanitation, infection control, informed consent, and trauma-informed care, and the scope is appropriately limited to the five established ear points used for temporary relief of substance use, mental health, and trauma-related symptoms. Accountability measures are also in place to ensure responsible practice.

For decades, communities—including tribal programs and disaster response teams—have relied on 5NP as a stabilizing and connecting intervention. It has proven to be a valuable bridge to counseling, primary care, and traditional healing.

Please move forward with adopting the draft rules as written, so that community members can continue to offer and receive this essential, culturally responsive care.

Sincerely,

Sue Viens

Sent from my iPhone

---

**From:** Quinn Miller <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 1:46 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP care

You don't often get email from [REDACTED] [Learn why this is important](#)

Dear Elizabeth,

I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most. Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

Access & equity. Many communities most affected by trauma, substance use, and suicide can't sustain costs of L.Ac.-supervised groups. A technician model keeps care local, relational, and affordable. (IHS's long-running work in meth and suicide prevention underscores the need for community-centered approaches.)

Thank you for considering these needs,

Quinn Miller

4th Year Doctoral Student of Acupuncture and Chinese Herbal Medicine, NUNM

---

**From:** Rebecca Groebner [REDACTED]  
**Sent:** Thursday, October 23, 2025 2:04 PM  
**To:** ROSS Elizabeth \* OMB  
**Cc:** Lisa Rohleder; Adrianna Locke  
**Subject:** 5NP Public Comment, Support for Access Without Supervision

You don't often get email from [REDACTED] [Learn why this is important](#)

The sender cannot be verified, use extreme caution!

Dear Oregon Medical Board Members,

I'm writing both as an acupuncturist and as a mother.

In 2023, my family lost our son, **Lief (age 32)**, to suicide. He was Native American (Yakima/Wasco) and had been working so hard to survive by attending counseling, seeing his primary care provider, and looking for meaningful work. He was even considering becoming a Community Health Worker.

During that time, I searched for a space where he could sit in circle with other Native people and receive the five-needle protocol (5NP) in a group setting that supports calm, connection, and regulation. The Native American Rehabilitation Association had paused groups during the pandemic, and we couldn't find anything similar in time.

I'm writing now in the hope that others like Lief will have access to this care in the future. **Please finalize the current draft 5NP rules as written, without adding supervision requirements.**

**5NP was created for access, community, and solidarity, not for hierarchy.** It works because it centers trust, autonomy, and cultural safety. If a technician, who may be Native or from another BIPOC community, must be supervised by someone outside that circle, it is no longer a circle; it becomes a hierarchy. People like my son would not have felt safe participating under those conditions.

For many communities most affected by trauma, substance use, and suicide, peer-delivered, community-based care is what makes participation possible. A technician model (like that used with Community Health Workers) keeps care local, relational, and affordable. The current draft rules already ensure responsible, safe practice.

Thank you for considering this from both my professional and personal heart. Lief is not the only close family member we have lost this way and I do believe that people need this option, without supervision to retain their dignity. Please protect the integrity of the circle by keeping supervision requirements out of the final rules.

Warmly,  
**Rebecca Groebner, DAc, LAc**  
Portland, Oregon

---

**From:** Das Kamhout <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 3:11 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP support

[You don't often get email from [REDACTED] Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification> ]

Hi Elizabeth,

I support access to 5-Needle Protocol (5NP) care for the communities who need it most. Please finalize the current draft rules as written, allowing trained 5NP technicians to provide community-based care without additional supervision requirements that would limit access and increase costs. The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

Thanks,  
-Das

---

**From:** Anne Zander <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 12:46 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

Dear Dr. Ross,

I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most.

Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

We need access to services like these now more than ever, ways to bring us into community, feel less alone and heal together. I thank you for your time and careful attention to this matter.

Sincerely,

Anne Zander (she/her)

*Parent, Artist, Community Member*

---

**From:** Cecilia <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 9:00 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP public comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

*I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most. Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.*

*The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

*Cecilia Dominguez, PSYD  
Clinical psychologist*

Sent from my iPhone

---

**From:** sara lawrence <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 8:29 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED] [Learn why this is important](#)

Hello,

*I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most.*

*Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.*

*The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

Sincerely,

Sara

---

**From:** PJ Alexander <[REDACTED]>  
**Sent:** Thursday, October 23, 2025 9:12 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

I support the current version of the 5NP rules.

Thank you!  
PJ Alexander

This email is confidential and may be legally protected. It is intended solely for the addressee. Access to this email by anyone else, unless expressly approved by the sender or an authorized addressee, is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution or any action omitted or taken in reliance on it, is prohibited and may be unlawful. If you believe that you have received this email in error, please contact the sender and delete this e-mail and destroy all copies.



---

**From:** Meaghan Kennedy <[REDACTED]>  
**Sent:** Friday, October 24, 2025 8:39 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

Hi Ms. Ross,

I am writing as a Nurse and future Psychiatric/Mental Health Nurse Practitioner in support access to 5-Needle Protocol (5NP) care for the communities who need it most. I have seen firsthand the benefit of this technique in patients for regulating the nervous system and helping with insomnia, chronic pain, anxiety, and cravings.

Please finalize the current draft rules as written, allowing trained 5NP technicians to provide community-based care without additional supervision requirements that would limit access and increase costs. Treatments that are not accessible are not effective, period.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

Thank you,

Meaghan Kennedy  
[REDACTED]

---

**From:** Cora Siebert <[REDACTED]>  
**Sent:** Friday, October 24, 2025 9:18 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

I support access to 5-Needle Protocol (5NP) care for the communities who need it most.

Please finalize the current draft rules as written, allowing trained 5NP technicians to provide community-based care without additional supervision requirements that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

Thank you,

Cora Siebert

Sent from [Proton Mail](#) for iOS.

---

**From:** Sarah May <[REDACTED]>  
**Sent:** Friday, October 24, 2025 8:24 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

Hello,

I support access to 5-Needle Protocol (5NP) care for the communities who need it most.

Please finalize the current draft rules as written, allowing trained 5NP technicians to provide community-based care without additional supervision requirements that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

With the current uncertainty of healthcare options in our country, the 5NP protocol could help bridge a very wide gap in care, especially for underserved populations.

Thank you,  
Sarah Robinson

---

**From:** Haley Bott <[REDACTED]>  
**Sent:** Friday, October 24, 2025 9:29 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

The sender cannot be verified, use extreme caution!

*To whom it may concern,*

*I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most. Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.*

*The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.*

*As a licensed acupuncturist, I fully support the expansion of access to needle usage for 5NP, and do not agree with my peers who think it should only be accessible to licensed professionals. This way of healing our communities is safe, cost efficient, and effective.*

*Thank you,  
Haley Bott, DACM, L.Ac*

---

**From:** Drew Lewis <[REDACTED]>  
**Sent:** Saturday, October 25, 2025 5:04 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

The sender cannot be verified, use extreme caution!

Ms. Ross

I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most.

Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

I understand that there are some voices pressuring the OMB to add a requirement for supervision by a licensed acupuncturist or social worker or nurse. However, the claims that this would enhance "safety" are unsupported by evidence. Please do not allow career protectionism from a small group of interests to over ride the potential life-affirming benefits of wider access to proven, safe, and sensible life-affirming care that will benefit Oregonians.

Thank you for your attention, and for your continuing work to enhance access to care for all of us.

Respectfully,

- Drew Lewis  
Portland, Oregon  
[REDACTED]

---

**From:** Kate Malone Kimmich <[REDACTED]>  
**Sent:** Monday, October 27, 2025 10:04 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

Hello Elizabeth,

I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most.

Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of **HB 2143**, which is to expand access to culturally grounded, community-driven healing.

Thank you!

Kate Malone Kimmich, MS, RDN, LDN

---

**From:** Tree WoodSmith <[REDACTED]>  
**Sent:** Tuesday, October 28, 2025 12:54 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED] [Learn why this is important](#)

I support **access to 5-Needle Protocol (5NP) care** for the communities who need it most.

Please **finalize the current draft rules as written**, allowing trained 5NP technicians to provide community-based care **without additional supervision requirements** that would limit access and increase costs.

The draft rules already ensure safety, clear scope, and accountability while honoring the intent of HB 2143, which is to expand access to culturally grounded, community-driven healing.

In Wellness,  
Tree



---

FOLLOW BOTH OUR BRANDS

**@josandtree** + **@woodandsmithphoto**

Top 50 Fearless Photographers of All Time

Top 50 Worlds Best Wedding Photos of the Decade

Top 100 ISPWP Worlds Best Wedding Photographers 2022/23

October 27, 2025

NADA leadership is 100 percent in support of the new NADA 5 Point Protocol (N5PP) law in Oregon. Oregon's expanded scope for NADA practice is entirely in the Spirit of NADA as intended by our visionary, innovative, and compassionate forerunners. NADA leadership wishes the citizens of Oregon continued success in removing barriers, increasing access, and lowering the costs of effective treatment for those suffering from substance use disorders, trauma, stress, suicidality and other mental/emotional conditions.

Kenny "Khensu" Carter

M.D., M.P.H., L.Ac., Dipl.Ac.

NADA President



---

**From:** Krista A Bargsten <[REDACTED]>  
**Sent:** Thursday, October 30, 2025 7:27 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED] [Learn why this is important](#)

I support the current version of 5NP rules.



**Krista A Bargsten, LAc**

---

**From:** Melissa Poulin <[REDACTED]>  
**Sent:** Thursday, October 30, 2025 12:55 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Public Comment

You don't often get email from [REDACTED]. [Learn why this is important](#)

Dear Elizabeth,

I support the current version of 5NP rules.

Thank you,  
Melissa Poulin L.Ac.

---

**From:** Dolores Jimerson <[REDACTED]>  
**Sent:** Thursday, November 6, 2025 2:57 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP Rules HB2143

Good Afternoon Elizabeth,  
I am writing to comment my support of the proposed 5NP rules.  
Respectfully,  
Dolores Jimerson, LCSW, ADS, RT  
NADA certified 5NP provider and registered trainer

EMAIL CONFIDENTIALITY:

This message is a confidential communication from Dolores Jimerson. The information contained in this communication, and any attachments thereto, is privileged and confidential and intended solely for use by the addressee(s). Any other use or dissemination, or copying of this communication is strictly prohibited. If this was erroneously sent to you, please notify Dolores Jimerson and permanently delete the original and any electronic or printed copies of this electronic communication. Thank you for your assistance.

---

**From:** Jason Wilson <[REDACTED]>  
**Sent:** Wednesday, November 12, 2025 12:23 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** Comment Regarding 847-071-0000, 847-071-0005, 847-071-0007, 847-071-0020, 847-071-0025, 847-071-0030, 847-071-0035, 847-071-0040, 847-071-0050, 847-005-0005: Implementing HB 2143 to establish five-needle protocol technician qualifications and regulations.

The sender cannot be verified, use extreme caution!

#### Comment on the Implementation of HB2143

- What makes this 5NP different than acupuncture? Isn't the insertion of needles into named acupuncture points with the intention to affect change (even temporary) in trauma, mental health conditions and/or substance use disorder a form of acupuncture? If so, why should the Board be convinced that a 32 hour training should suffice when it requires over 3000 hours of training to qualify as a licensed acupuncturist?
- The workgroup chair, Dilip Babu, was unwilling to have a conversation regarding any supervision of 5NP technicians with acupuncture committee members because he had been privileged to participate in the workgroup that had decided to commit to Pocatech's guidelines on training. Since when did the work of a workgroup, especially one populated by the private interests of a training institute that stands to gain financially from this decision, supersede the opinions of committee members or the board as it relates to public safety and the pursuit of excellence in quality medicine? Is his unwillingness to meet his colleague in respectful conversation not a violation of NCCAOM ethics as it relates to a commitment to establishing healthy boundaries?
- The text of the Bill states in section 2(2)(f) that the Board may impose, "Any other requirements or standards that the board determines necessary." However, Executive Director Nicole Krishnaswami interpreted the legislative intent to the acupuncture committee that no supervision is intended by the legislators, and that the Bill would have to be 'started over from scratch' if supervision were to be added (see meeting minutes and recordings of September 12 Acupuncture committee). In response to this non-textual interpretation of intent, committee member Gaines decided to change her vote from nay to aye in deciding to pass these rules as written to the Board for review. Without the change in vote, the review would still be in committee. If legislative intent is to suffice in matters of technical expertise like medicine, why then do we even need a State Medical Board?
- Ms. Krishnaswami should clarify her source material for the interpretation she provided since the text of the Bill is clearly open to 'any other requirements' as stated above. Furthermore, when committee members expressed interest in collecting more data pertaining to the way that other States have implemented 5NP, rather than provide them with the information as described in her miscellaneous job duties, Nicole decided to sway the voting members' mind with a non-textual interpretation of legislative intent.
- During the Acupuncture Committee meeting on September 12, Dr. Dibu stated that he could not understand what safety concerns could be of interest to require further training or supervision of 5NP practitioners. I would recommend that he search the internet for images of needle infections in the auricular cartilage. There are several images of infected ears that might enlighten him of the potential negative health impact that can arise due to poor administration of needles into the ear.
- Jill Shaw, Board Chair and liaison to the Acupuncture Committee was absent from the Acupuncture Committee meeting on September 12 and during the subsequent Board meeting on October 2 the Board had 15

seconds of silence as a 'discussion' on this matter before unanimously voting to move forward as written. I would think that a little more audible discussion would be merited considering the amount of comments that the implementation of this Bill has garnished in the hours and hours of workgroup discourse and the nearly two hour discussion at the acupuncture committee. I invite Dr. Shaw to comment on how her absence as liaison may have impacted the lack of audible discussion at the proceedings of the Board at first review.

- Overall, the proceedings in the implementation of HB2143 appear to be more of a dog-and-pony show created to rebuff qualified public commentary in lieu of a pre-determined path that was laid out behind closed doors by the staff of the OMB before the initial workgroup meeting was even convened. Since the staff at the OMB report to the Executive Director, this is Executive Directive rulemaking by proxy.

---

**From:** cb <[REDACTED]>  
**Sent:** Sunday, November 16, 2025 11:54 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5np

You don't often get email from [REDACTED] [Learn why this is important](#)

hello,  
i'm writing to express my support for 5np and that i support the rules as written.  
sincerely,  
cyrus bartlett, LAc

This email is confidential and may be legally protected. It is intended solely for the addressee. Access to this email by anyone else, unless expressly approved by the sender or an authorized addressee, is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution or any action omitted or taken in reliance on it, is prohibited and may be unlawful. If you believe that you have received this email in error, please contact the sender and delete this e-mail and destroy all copies.

NOV 21 2025

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

HB 2143 is a project of the Native American Youth and Family Center (NAYA) and the NAYA Action Fund; its goal is to address systemic barriers in healthcare – specifically the lack of culturally responsive, accessible, and affordable treatment options for communities disproportionately impacted by addiction, trauma, and mental health challenges. HB 2143 eliminates unnecessary regulatory hurdles so that trained, trusted community members – not just licensed acupuncturists – can provide 5NP, a holistic, non-verbal, community-centered and cost-effective form of care. The progress of HB 2143 has been community-led, community-driven, and transparent.

5NP is legal in many states, although every state regulates it differently. The current version of the Oregon Medical Board's rules are the result of a painstaking, careful, open, quintessentially Oregonian public process.

The OMB's rule making included the input of a workgroup with diverse perspectives, including community representatives. The workgroup's discussions focused on safety and accountability, down to the smallest details. The current version of the rules has been reviewed and approved by the workgroup, the OMB's Acupuncture Advisory Committee, and the board itself.

The proposed rules (which are not identical to other states') reflect the distinct culture of the Oregon Medical Board, which has earned national awards for outstanding best practices, including support for its mission to protect the public, education of both the public and practitioners, and demonstration of a partnership approach to problem-solving. Unlike some other states that outsource accountability for 5NP to other licensing boards or to individual practitioners, the OMB has taken a rigorous, responsive, hands-on approach to 5NP in Oregon, which includes making 5NP Technicians directly accountable to the OMB itself.

The current version of the OMB's rules will benefit a long list of Oregonians, including: people in rural communities where services are scarce, people in recovery from substance use, people with mental health challenges, people navigating housing instability, people involved with the criminal justice system, people navigating gaps with health insurance and/or continuity of care, first responders, farmworkers, and anyone who wants to support their own wellbeing with 5NP.

5NP is a safe, simple treatment and the proposed rules, as written, both protect the public and are faithful to the inclusive community spirit of HB 2143.



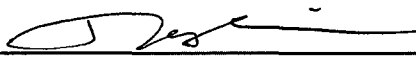
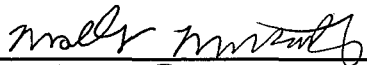
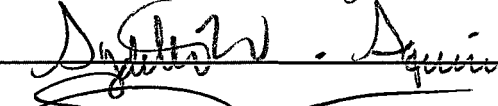

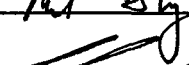
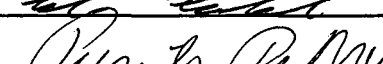
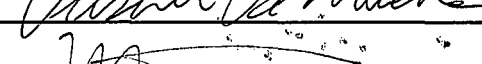
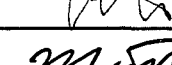


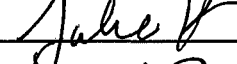
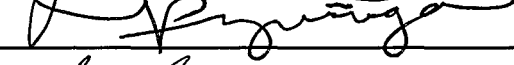
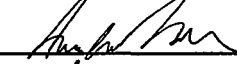



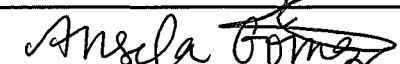

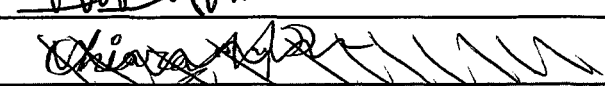
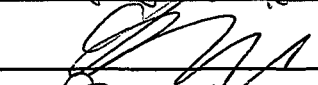

434 PDX



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Nancy Lopez Sosa	Nancy Lopez Sosa
Kiersten Anshulerich	Kiersten Anshulerich
Kathleen Bode	Kathleen Bode
Allison Glass	Allison Glass
Andrea Leoncavallo	Andrea Leoncavallo
<del>Andrea Leoncavallo</del>	<del>Andrea Leoncavallo</del>
Theresa DeLoe	Theresa DeLoe
<del>Theresa DeLoe</del>	<del>Theresa DeLoe</del>
Kathleen Benz	Kathleen Benz
Sara Butz Mest	Sara Butz Mest
MARLENE ANDRESCO	MARLENE ANDRESCO
DEBBIE ANDRESCO	DEBBIE ANDRESCO
Corey Young	Corey Young
Sarah Petrich	Sarah Petrich
Arielle Tour de la Poterie	Arielle Tour de la Poterie
LIABE K-S	LIABE K-S
CONNOR EBBINGHAUSE	CONNOR EBBINGHAUSE
LUCA BAGGS	LUCA BAGGS
Nita Davidson	Nita Davidson
Angie Neff	Angie Neff

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.


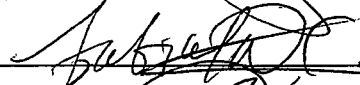


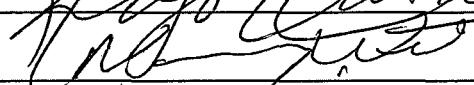

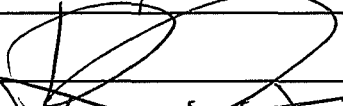

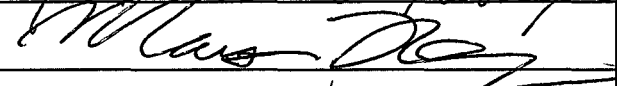
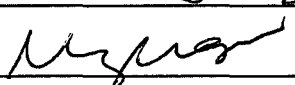
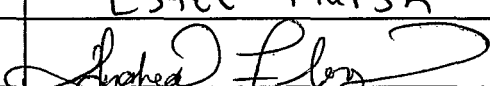
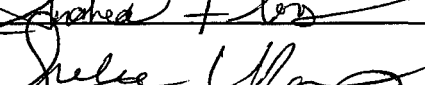

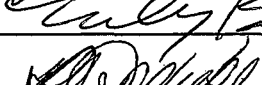
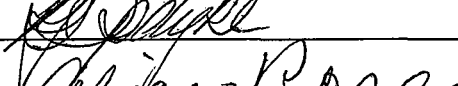
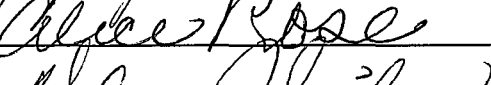

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Tianyu Qiao	
Molly McCarthy	
Sydney Squire	
Sara Hargrove	
Michael Shapiro	
Leah Castañeda	
Priscila De Macedo	
Will Harrison	
Matt Tennstedt	
Chad McPartly	
Julie Kornilkin	
Pauline Zúñiga	
Andrew Babson	
<del>Chloe</del> Chiara Lamanna	
YORICK MILLER	
Alessa Midtlynn	
Angela Gómez	
David Bamberger	
<del>Chloe Lamanna</del>	
Jamie Alam	
Phoebe Stryder	

2



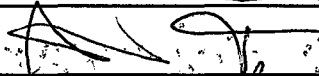

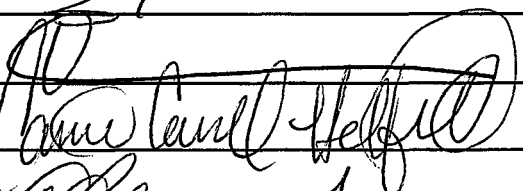
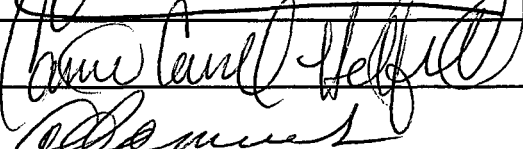
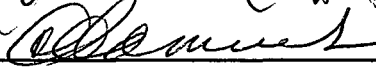
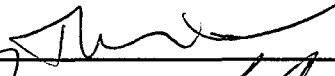

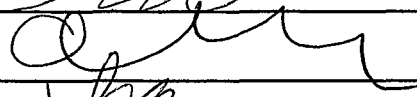
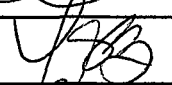
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Rose Bliss	Rose Bliss
Sheila Romero Rios	Sheila Romero Rios
Jessica Cheri McLaughlin	J Cheri McLaughlin
Rosa M Rios	Rosa M Rios
William Joel Pomreis	William Joel Pomreis
Noah Staller	Noah Staller
Krystal Howard	Krystal Howard
Capella Lapham, FNP-C	Capella Lapham, FNP-C
Robin Corbo	Robin Corbo
Jill Melnick	Jill Melnick
Jaki Rose Warren	Jaki Rose Warren
Tori Scholl	Tori Scholl
Nindy Sonaw	Nindy Sonaw
Hilgrid Kellenter Girdner	Hilgrid Kellenter Girdner
Greaser Goetz	Greaser Goetz
John C. Cowan	John C. Cowan
Susan E Joslyn	Susan E Joslyn
Angela Moos	Angela Moos
Wendy Tangen-Foster	Wendy Tangen-Foster
Reggie Ruffin	Reggie Ruffin

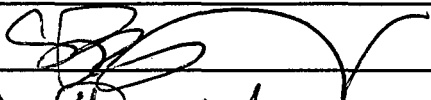

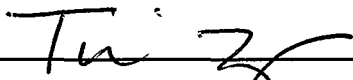
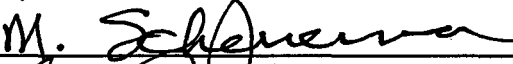

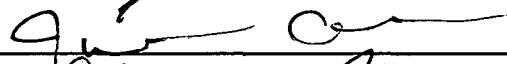
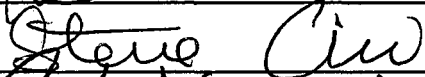

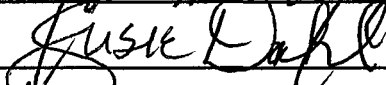
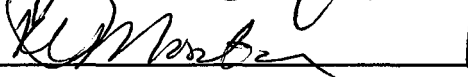
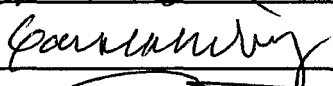
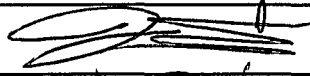

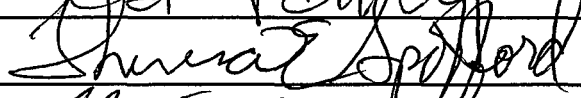


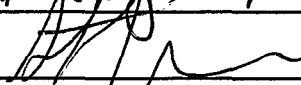
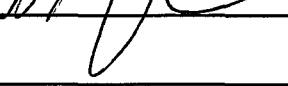

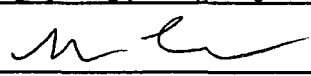
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Allison Stock	
Fabiola Casas	
Karen Stephens	
Dominic Krenovich	
Nancy Webster	
Gleen Bolzale	Gleen Bolzale
Mikko Claly <sup>Mikko Aaby</sup>	Mikko Claly
<del>Nathan Gohlman</del>	
SIOBHAN O'CONNOR	
Patricia Thompson	
MARISSA MAJOR	
NAN LEE WHITSON	
Estee Marsh	Estee Marsh
Andrea Flores	
JULIE RAMOS	
Emily Weaver	
PATRICIA OPDYKE	
Alice Rose	
Nancy J Seiker	
Sara Biegelsen	

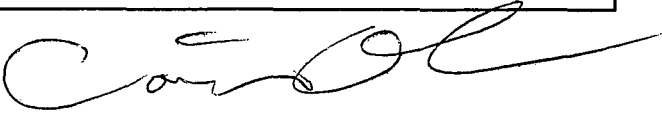
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
George McCall	
Mickey Bratton	
Steve Chu	Steve Chu
Fatuma Abdi	
Theresa E Spofford	Theresa E. Spofford
Brenda Prochilo	Brenda Prochilo
Zuli Mallinson	Zuli Mallinson
Cara Keenan	
Jeremy Tiefer	JT
Kate Brown	
Carrie Ann McElfrich	
Deborah Samuels	
Lisa Bowman	Lisa Bowman
Theresa Jelders	
Wendy Cohen	Wendy Cohen
Annie Luttrell	Annie Luttrell
Connie Oh	
Missy Chae	
Anapaula B. Foster	
Dilip Babu	Dilip Babu

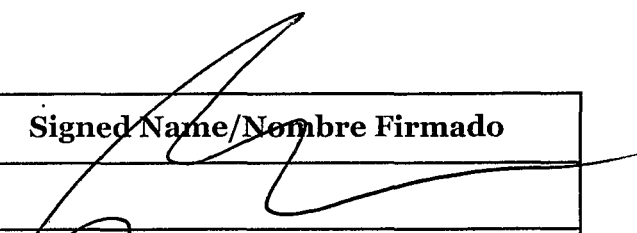

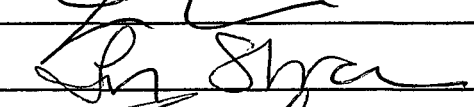
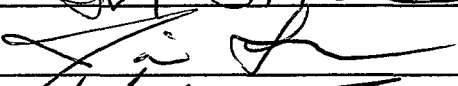
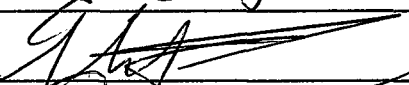

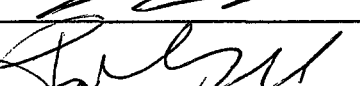
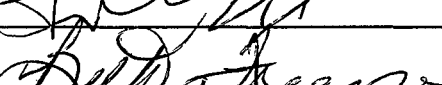

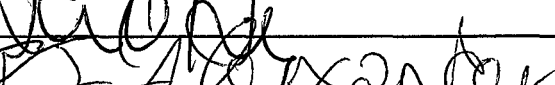
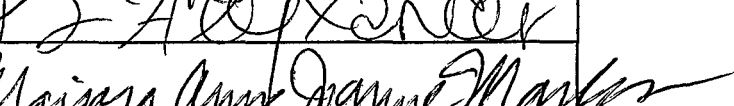


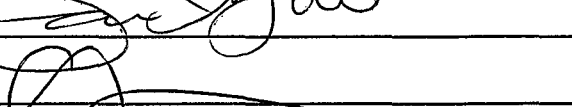


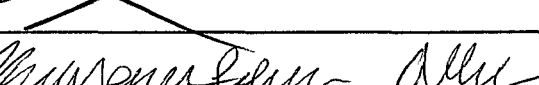
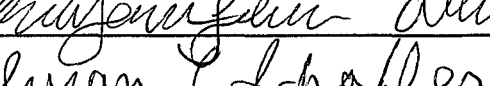
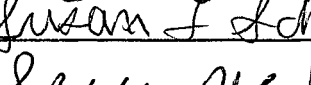
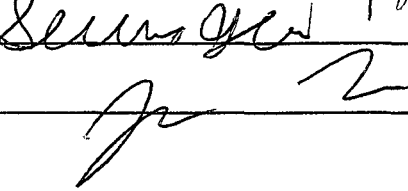
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
STEPHANIE BATES	
Bethany Carder	
Tim Parsons	
MARILYN SCHUEPMAAN	
MARY DALTON	
Julian Olson	
Steve Ciu	
Jill Carzy Torrey	
SUSIE DAHL	
<del>Kristen</del> Kristoulee Meeta	
Carol Wong	
Julie Jones	
Pat Valley	
Theresa E Spofford	
Hai Minh	
Kristine Lundan	
Stephanie Stephan	
Sandra	
CAROL MEYROW	
<del>Maria</del> Emma Ennos	

Monica  
Connie



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Colleen Knapp	
Jim Bowman	
Tracy STRAWN	
Jessica Lambert	
Nathan Lambert	
Andrea Johnson	
Tracy Sprinberry	
Beth Freeman	
Tim O'Neil	
PJ Alexander	
Marjora Anne Marks	
Amy Mirato	
Dawn Grischow	
Amber Jaitrong	
Connie Olsen	
Sean Cate	
Marjorie Joan Allen	
Susan L. Schaffer	
Serena Glick	
Jeanne Fe	

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Linda Butler	Linda Butler
ERIN NIELSON	Erin Nielson
STANLEY POSTLETHWAIT	Stanley Postlethwait
Hillary Clautice	Hillary Clautice
MARILYN SMITH	Marilyn Smith
Sharon Wilkins	Sharon Wilkins
Kristin Gamm-Prochelo	Kristin Gamm-Prochelo
Ara Dougherty	Ara Dougherty
Marita Ingalsbe	Marita Ingalsbe
NYLA MCCARTHY	Nyla McCarthy
Erika Van Winkle	Erika Van Winkle
Rainer Rivenburgh	Rainer Rivenburgh
Andrea Middleton	Andrea Middleton
Mary Goulet	Mary Goulet
Ted Gino	Ted Gino
Angie Mendbuer	Angie Mendbuer
Anne Cohn	Anne Cohn
Andrew Bunting	Andrew Bunting
David Bineau	David Bineau
Heather Bawn	Heather Bawn



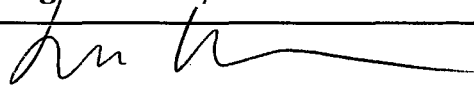
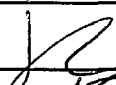

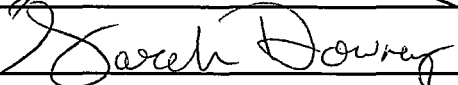

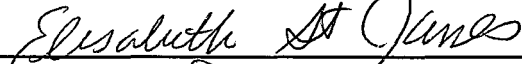





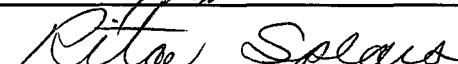
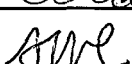
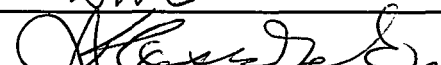

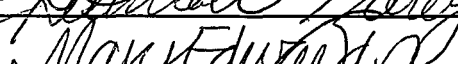
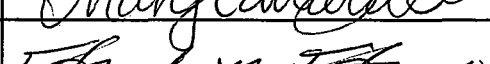

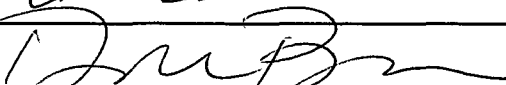
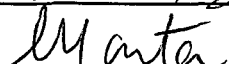
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
nancy alford	nancy alford
Suzanne Lawler	Suzanne Lawler
RAI ARORA	
Joseph McAuley	Joseph McAuley
Bernadette Torres	Bernadette Torres
Emery Olson	Emery Olson
Marcia Long	Marcia Long
Amy Schiveley	Amy Schiveley
Selesté Sanchez	Selesté Sanchez
MIGUEL BARRIOS	Miguel Barrios
CARA TOMLINSON	Cara Tomlinson
Dawna Miller	
Jennifer Harrington	Jennifer Harrington
LOIS HARRINGTON	Lois Harrington
Mignon Hamlin	Mignon Hamlin
ARLIE KANGAS	Archie Kangas
Juanita Garrow	Juanita Garrow
Kathryn L Conway	Kathryn L Conway
Jazmin Miranda	Jazmin Miranda
Charles Knapp	Charles Knapp
Cyrus Barthatt	Cyrus Barthatt

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Lillian Olson	L Olson
Haley Merritt	H. J. Merritt
DAVID LOITZ	David Loitz
Deborah Stevenson	Deborah Stevenson
Stephanie Stephan	Stephanie Stephan
Virginia Watzel	Virginia Watzel
DAN TURL	Dan Turl
Mary Cutler	Mary Cutler
Kristin Sacco	Kristin Sacco
Cynthia Marshice	Cynthia Marshice
Stephanie Palmer	Stephanie Palmer
Lisa Peters	Lisa Peters
Ben Crenshaw	Ben Crenshaw
Katie Kornberg	Katie Kornberg
Katie Kies	Katie Kies
Sheila CARTER	Sheila Carter
Marion Ostertag	Marion Ostertag
Heather Wornum	Heather Wornum
Kristin Wheary	Kristin Wheary
Michelle Brooks	Michelle Brooks

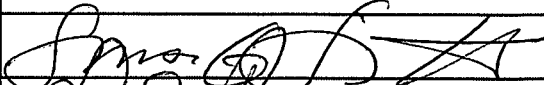
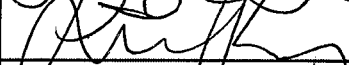

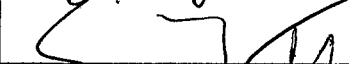
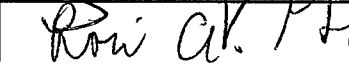
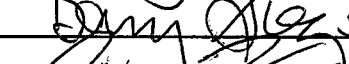

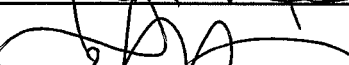

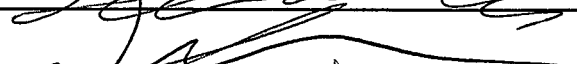
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Julia Neace	
Riley Crushing	
Moses Cooper	
Sarah Downey	
SANDRA MONDAL	
Elisabeth St James	
Barbara Danely	
Kristina Peel	
Hannah Ravira	
Catherine J Phillips	
Craig Gilson	
RITA SPEARS	
Andrew Chin	
J. Kimiko Escobedo	
Hannah Reyna	
Mary Edwards	
Edmund M. Edm	
Carol Edme	
Deborah Brown	
Angele Morutan	

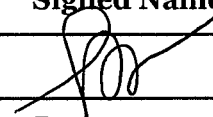
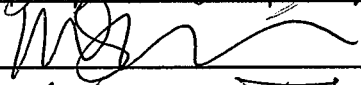
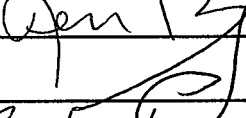
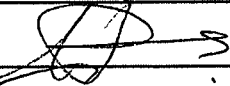

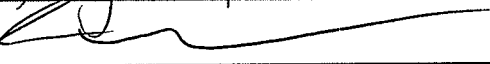
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Kilena Long	Kilena Long
Steve Haines	Steve Haines
Jeannette Skirder	Jeannette Skirder
Roslyn Hamilton	Roslyn Hamilton
Sharon Szolnaki	
Gail Hare	Gail Hare
Ryan Hofer	Ryan Hofer
Satina Manze	Satina Manze #32
Whitsitt Goodson	Whitsitt Goodson
MICHAEL GOTTZ	MICHAEL GOTTZ
KELLY GILSON	Kelly Gilson
CATHERINE CARUSO	CATHERINE CARUSO
Janet Walker	Janet Walker
David Rovik	David Rovik
Sheilagh Van Belthowing	Sheilagh Van Belthowing
Christine Emmach-Wray	Christine Emmach-Wray
Talen Stoner	Talen Stoner
ALISON BURT	
Carol Clapshaw	Carol Clapshaw
Eugenie Powell	Eugenie Powell


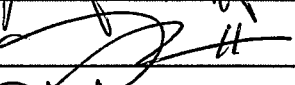
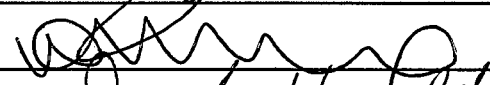
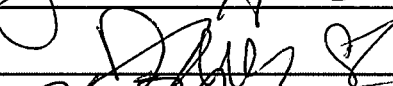
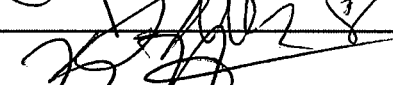
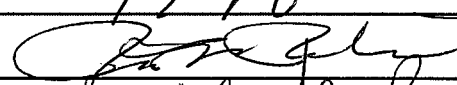

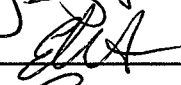
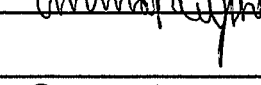
We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
SUSAN SCHMITT	
Lindy Rummy	
<del>Barry Gubner</del>	<del>Barry Gubner</del> (x2) in
STEVE CHEBOROMAK	
LORI GOLANI	Roni A. Holm and notified
Kristin Bowling	
Will Harrison	
Sarah Boeres	Sarah Boeres
Lillian Killian	Lilly Killian
BARRY SIEGEL	Barry Siegel
Jonathan Kirby	
PATRICIA KESSEL	Patricia Kessel
Kyle Newell	
Jan Albrich	Jan Albrich
Jaimie Lust	
Elizabeth Churchill	
MARTIN HELM	
CRAIG HEVERLY	Craig Heverly
Tzelev Diamondstone	<del>Tzelev</del> Tzelev Diamondstone
Drew Hansen	Drew Hansen
Gary Gregg	Gary Gregg

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Sonya Gregg	
Joanna McClish	Joanna McClish
Callie John	Callie John
Deborah Bell	Deborah Bell
Erin Engelke	
Maxx Tauldage	Max Tje
Charlotte Aborn	Charlotte Aborn
Sheryl S. Price	Sheryl S. Price
Steve Ciu	Steve Ciu
Jen Rauhousur	Jen Tje
Amandalyn Friedland	
Zora Machado	Zora Machado
Jaime Machado	J Machado 9718049487
ARCHER RIZZO	
Saskia Ferreira	
James Roberts	Jm Roberts
Margaret Fussell	Margaret F. Fussell
Sarah Wunderlich	
Amanda L. Miller	Amanda L. Miller
Steve Hansen	Steve Hansen

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Leslie Williams	Leslie Williams
Kathryn Kupunihi	
Epiphany Pizer	Epiphany Pizer
JEMILA HART	
Hunny Wheeler	
Sarah Howell	Sarah Howell
Dawn Furstenberg	
Kristine Henderson	
Richard Rohrich	
Lori Golani	Lori G. Golani
Jerry Fugate	
Elizabeth Fugate	
Sonja Pearson-Denning	Sonja Pearson
Rachel Williams	Rachel Williams
Stephanie A. Siakel	Stephanie A. Siakel
Emma Payne	Emma Payne
Sandra Paul	
Douglas Hiatt	Douglas Hiatt
Angie Renn	Angie Renn
Kathleen Madden	Kathleen Madden

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Jiles Kitzera	Jiles Kitzera
Wintry Verraneault	Wintry
Arabee Koun	Arabee Koun
Emily Castle	Emily Castle
Andrea Wiener	Andrea Wiener
Marie Songer	Marie Songer
Mary Reed	Mary Reed
Linda Livemore	Linda Livemore
Linda Weimer	Linda Weimer
Maggie Little-Reece	Maggie Little-Reece
Pamela Medley	Pamela Medley
Will McElhinny	Will McElhinny
Leland J. Bard	Leland J. Bard
Gloria Gostnell	Gloria Gostnell
Leeanna Kligis	Leeanna Kligis
Cyr Zeeberg-Forte	Cyr Zeeberg-Forte
Thia Zeeberg-Forte	Thia Zeeberg-Forte
Brittany Ingish	Brittany Ingish
Jane Tarabochia	Jane Tarabochia
Rodney Drake	Rodney Drake



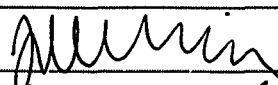
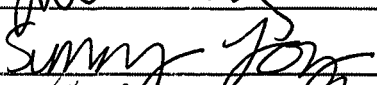
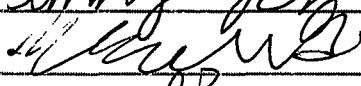
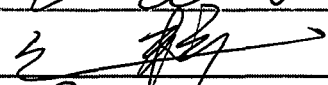
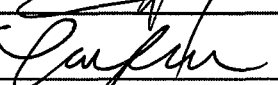
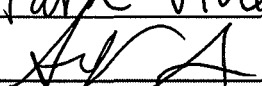
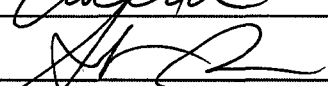
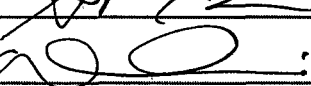
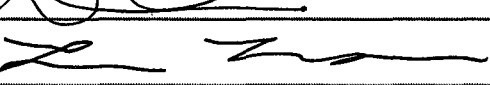

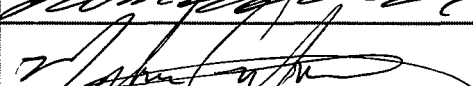
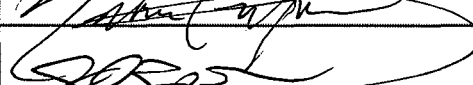
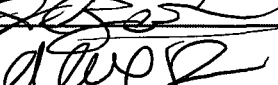
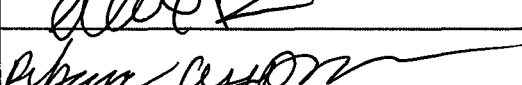


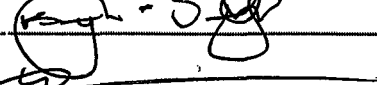
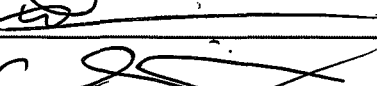



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Cindy Rimer	Cindy Rimer
R. CINDY GRENVIK	R. Cindy Grenvik
Xiaoying Ruan	Xiaoying Ruan
Lillian ERWIN	Lillian Erwin
Wayne Richardet	Wayne Richardet
J. Bruhn	J. Bruhn
TISH LEOS	Tish Leos
Jasmine Sergia	Jasmine Sergia
Joshua Cox	Joshua Cox
VIOLET PASCOE	Violet L. Pascoe
Ethan Roberts	Ethan Roberts
KAREN M. CAGO	Karen M. Cago
Di Ann Gillaspie	Di Ann Gillaspie
B Brett Hilberg	B Brett Hilberg
Milo Osswald	Milo Osswald
Max Day	Max Day
Unita Schmackey	Unita Schmackey
Charmaune Worthing	Charmaune Worthing
Brian Worthing	Brian Worthing

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

[illegible]

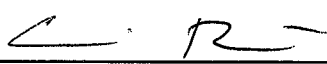

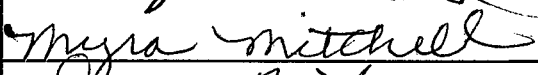






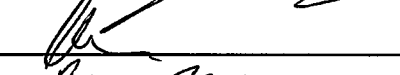
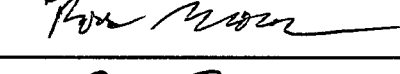
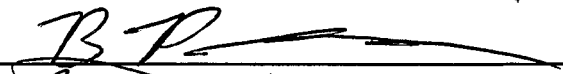
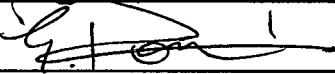
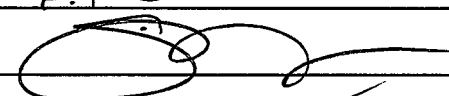


We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Flynnne Olivarez	
Sunny Joy	
Margr Schofield	
Emily Lai (aka Elm)	
Tara Violetta	
 Selin Strait	
Ariella Lai	
Laura Mangano	
John Freudensthal	
Nikeisah Newton	
Jennifer Boyce	
AUX Briff	
Rebecca Jesspoch	
Shaunte Greenway	
KARIN SANDERS	
Athira Veshay	
Andy Spalletta	
Jaye Mejia - Duwan	
Rubi Vergara-Grindell	
Polet Campos-Melchor	

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Theresa E Spofford	Theresa E. Spofford
Carol Scheans	Carol Scheans
Rockelle Dixon	Rockelle Dixon
Kristen Kelly	Kristen Kelly
R. Arora	R. Arora
Adrien Mishashani	Adrien Mishashani
Paige Martell	Paige Martell
Azriel Super	Azriel Super
Sherrill Leverich	Sherrill Leverich
Cathrine Teack	Cathrine Teack
Mary Dalton	Mary Dalton
Marilyn Scheuerman	Marilyn Scheuerman
Swan Cousins	Swan Cousins
Theresa E Spofford	Theresa E. Spofford
Janet Hitti	Janet Hitti
Joyce M. Hull	Joyce M. Hull
Jean Guether	Jean Guether

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Elizabeth Ribeiro	
Carolyn Brown	
MYRA MITCHELL	
Grace Ripplinger	
Jonathan Juarez	
Carrie Meech	
Step Van Meter	
Riley Cushing	
DYLAN LIVERMAN	
J Christensen	
Koss Moore	
Bethany Plaisance	
Esmeralda Roman	
Sonja Hargrove	
Robin Eggen	
Winona Vaitekunas	

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

[illegible]

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

[illegible]

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

[illegible]



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

[illegible]

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

[illegible]

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

[illegible]

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

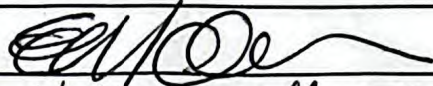

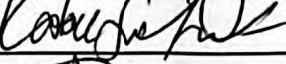

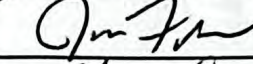


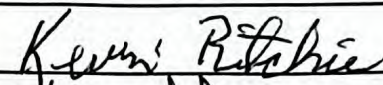
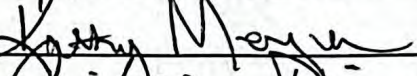
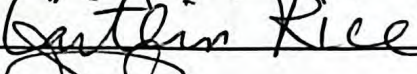

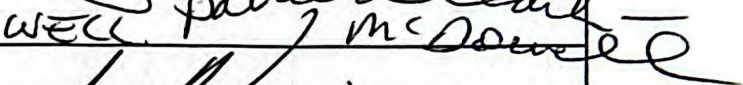
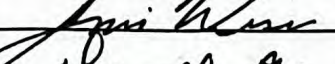
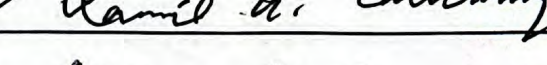
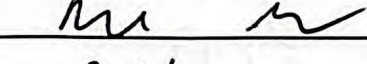

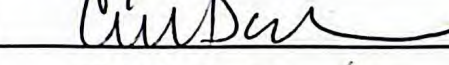
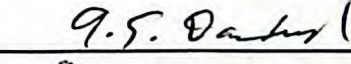


[illegible]

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Melissa Kearns	Melissa Kearns
Dennis Reed	Dennis Reed
Marsha Black	Marsha Black
Katherine Amelia Mae Kann	Katherine Kann
Sarah Lane	Sarah M. Lane
Louise Dandurand	Louise Dandurand
STEPHANIE AGNEW-CARR	Stephanie Agnew-Carr
Nancy Buell	Nancy Buell
Helmi Papoff	Helmi Papoff
Angel Swanson	Angel Swanson
Chloe Anderson	Chloe Anderson
Riva DiGiacomo	Riva DiGiacomo
Kris YATE	Kris Yate
Pam Weaver	Pam Weaver
Sharon Brim	Sharon Brim
Ted Bierma Welch	Ted Bierma Welch
Rebecca Rose	Rebecca Rose
Mary C. Diederich	Mary C. Diederich
La Padlock	La Padlock
Ben Forman-Vargas	Ben Forman

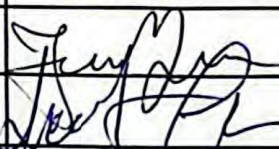
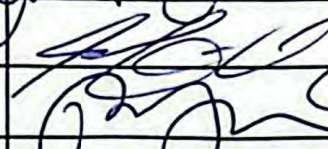
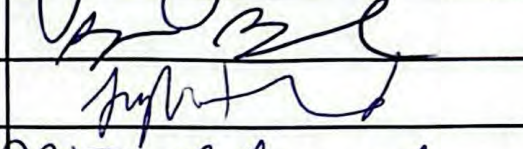
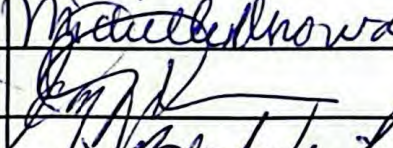
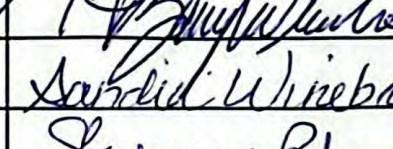
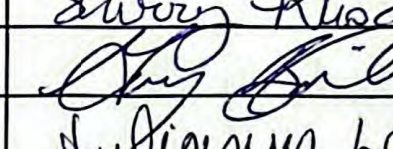
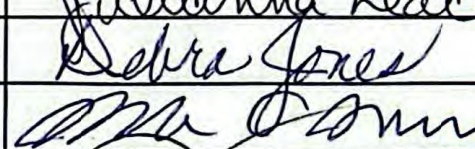

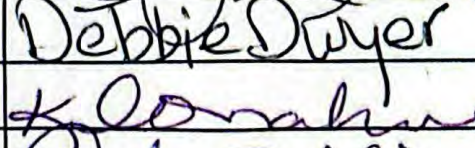
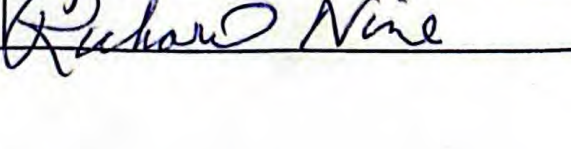



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Erika McGuire	
Karen Zoller	
Karee Sustata	
Q VANBENSCHOTEN	
JOSHUA FRIENDSON	
TERRI Brown	
Dana Dawson	
KEVIN RITCHIE	
Kathy Meyer	
CAITLIN RICE	
Seannette Adams	
PATRICIA CLARK-MCDOWELL	
Jim Wiser	
David A Courtney	
STARDUST DINE	
Joel Hether	
Cindy Danbolt	
Anthony S. Dandurand	
Amy McCannick	
Melissa Canino	



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
TEMY ZANE	
Scott Olsen	
Somerfield Habener	
Ryan McCarty	
Paige Bouvard	
Taylor Harwood	
Michelle D. Nowale	
Jody Esperanza	
<del>Barry Winebrenner</del>	
Sandra Winebrenner	
Sherry Rhoads	
GARY BALIKIAN	
Julianne Leach	
Debra Jones	
Maddie Fouy	
Kaye Joe	
Grace McNabb	
Debbie Dwyer	
Kellie Donahue	
Richard Nire	



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Aubree Cardwell	Aubree Cardwell
Gwen Taylor	Gwen Taylor
Rebecca J Taylor	Rebecca J Taylor
Jerome Cottrell	Jerome Cottrell
Zorayda Donovan	Zorayda Donovan
Jessica Bittner	Jessica Bittner
Christina Nash	Christina E Nash
Stephen Hermansen	Stephen Hermansen
Lisa Kraft-Gonzales	Lisa Kraft-Gonzales
ROXY BORTA	ROXY BORTA
Rafael P. P. P.	LINDA DIAZ
	ALAN FISH



We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Stephanie Allen	Stephanie Allen
Verdene McGuire	Verdene McGuire
Elaine Chang	Elaine Chang
Byron Shannahan	Byron Shannahan
Rob Singer	Rob Singer
SUSAN E. WIGET	Susan E. Wiget
Valerie Morris	Valerie Morris
Kara Brinkman-Addams	Kara Brinkman-Addams
Jerry Ferruccio	Jerry Ferruccio
Ad Rhinchart	Ad Rhinchart
Greg Armitage	Greg Armitage
Elizabeth Weber	Elizabeth Weber
Robyn Thompson	Robyn Thompson
Sonja Greenmyer	Sonja Greenmyer

We, the undersigned, are writing to express our wholehearted support for the Oregon Medical Board's proposed rules to implement HB 2143, a new law allowing individuals with specific training to provide the Five Needle Protocol (5NP) to Oregonians.

Printed Name/Nombre Impreso	Signed Name/Nombre Firmado
Teresa Little	Teresa Little
Stefanie Jeyema	Stefanie Jeyema
Rebecca Price	Rebecca Price
David Bineault	David Bineault
Terrence Francis	Terrence Francis
Terri Swanson	Terri Swanson
Cheyenne Morris	Cheyenne Morris
Jessie Clay	Jessie Clay
Sean Hannigan	Sean Hannigan
DANIELLE RECH	DANIELLE RECH
NAKITA BROWN	NAKITA BROWN
Carlton Walker	Carlton Walker
Julie Hoff	Julie Hoff
Erin Hamman	Erin Hamman
Julie Davis	Julie Davis
Cheyenne Morris	Cheyenne Morris
Christina Lacey	Christina Lacey
LGL Lorieu Eshrel	LGL Lorieu Eshrel

---

**From:** Shannon Conrad [REDACTED] >  
**Sent:** Sunday, November 23, 2025 10:39 AM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** Fwd: Concerns Regarding the Recently Passed OMB Law Allowing subpar 5np training

Resubmitting a letter originally submitted 9/1/25 for review and consideration.

Sent from my iPhone

Begin forwarded message:

**From:** Shannon Conrad <[REDACTED]>  
**Date:** September 1, 2025 at 19:26:16 PDT  
**To:** ROSS Elizabeth \* OMB <elizabeth.ross@omb.oregon.gov>  
**Subject: Concerns Regarding the Recently Passed OMB Law Allowing subpar 5np training**

Hi Elizabeth and OMB board,

I understand that this unfortunate law has already passed, and it may be too late to reverse it. However, I strongly urge you to uphold your duty to protect the public and place safety first. Please do not allow unqualified, undertrained individuals to practice medicine under the guise of acupuncture.

Even if limited to the 5NP ear protocol, acupuncture is still a medical procedure requiring skill, clinical judgment, and a foundation in the theory of Chinese Medicine. Without rigorous training, Clean Needle Technique, and clinical supervision, this becomes a dangerous, diluted form of medicine that jeopardizes patient safety.

I must ask: is this legislation truly about patient care, or is it simply a money grab by organizations looking to profit from training programs for minimally qualified practitioners? Here in Portland, we are fortunate to have a highly respected acupuncture school with teachers who possess advanced training and decades of experience. Why are we undermining their expertise and the profession's integrity by lowering the bar and handing medicine over to those with insufficient preparation?

If this law is to remain in place, at minimum it must be implemented with safeguards equivalent to those for licensed acupuncturists, including:

- 150 supervised clinical hours and 60 didactic hours.
- Treatments to take place in a clinical setting, with proper sanitation and EHR charting ability
- A college degree and a minimum age of 21 for maturity and professionalism.

- Certification in Clean Needle Technique.
- Ongoing supervision by a licensed acupuncturist.
- Equal licensing fees, malpractice insurance, and continuing education requirements.

To allow anything less is to weaken medical standards and risk public harm. I am disappointed this law was passed without adequate representation of our profession, but I urge you now to exercise your authority to enforce the highest medical standards. The public deserves nothing less.

Sincerely,  
Shannon Conrad, LAc

--

Shannon Conrad





Dear Members of the Oregon Medical Board,

I am an acupuncturist with 20 years of experience practicing in various clinical settings. I have treated in-patients in multiple hospital departments, have maintained a general private practice in both rural and urban environments, have held events for the treatment of veterans with pain and PTSD and have practiced at Lincoln Recovery Center, where NADA treatment was first popularized. I have also worked as a peer mentor at Riker's Island in NY and as a volunteer with a prison work release program. I am a proponent of community health improvements and also maintaining health safety. I request that the Oregon Medical Board consider specific regulatory measures regarding the training, supervision, and scope of practice for 5NP technicians.

Based on my understanding and concern for the safety, longevity and efficacy of this practice, I propose that 5NP technicians have required supervision, comparable to most other states allowing this practice, as per the document provided by POCA via the OMB for the rule making work group. Please note that of the **25 regulated state examples** provided by OMB, **at least 22 require supervision by a Licensed Acupuncturist or MD**. In addition to supervision, **many require the technician to maintain a previous healthcare license** and to practice **only in licensed healthcare facilities**. The AAC work group did not appear to be familiar with this document and some erroneous statements were made. I request that we adhere to these safety standards.

From the NADA website: "In the U.S.A. and Canada, many localities encourage the implementation of a NADA program through regulations that allow non-acupuncturist health providers to be trained in the NADA protocol, often under the supervision of a licensed acupuncturist or medical doctor."

After several hours of workshoping, over several weeks, it was stated at the end of the AAC/OMB meeting, that we may not be capable of adding supervision to the rules. I do not believe this to be true. The statute states that **the OMB may add any other requirements or standards they determine necessary**.

Please remember, that there is a great assumption of safety being discussed in these meetings because of the way that 5NP has been provided thus far, which has included medical and acupuncture supervision. **THIS BILL DOES NOT MAINTAIN THE CURRENT NOR PREVIOUS STANDARDS**. At this time, the required age of the technician is only 18 years. This 18 year old is not required to have any other job or education experience, is not vetted by lengthy training, teaching or testing, and is being given unrestricted access to independently provide medical care to vulnerable populations involving the insertion of needles. This is contrary to other medical technicians, most of which require 9 months + of training, some form of supervision, to work in a clinical setting, to have some form of liability insurance, and to have more skin in the game and licensure at stake. Furthermore, 5NP training creates an independent health care provider that inserts needles into cartilage, with **719 hours LESS training than those required for a cartilage ear piercer**, which is a cosmetic and not medical procedure. There has been an assumption that all technicians will have the same discretion as all of the healthcare providers in the room, however that discretion is learned with experience and months to years of training.

In the workgroup, some had said that problems will be minimal because Poca has been “tracking,” and has determined so, however one could speculate that a service with such minimal “tracking” built into its performance, ie no charting, minimal name use, and a lack of consistency in providers, patients and location, is not going to have the most accurate statistical account of adverse events. It is also assumed that communities will hold each other accountable so that greater safety rules are unnecessary. Let’s please remember that we are asking people to self regulate in the provision of a treatment where one of the primary afflictions being treated is due to the very fact that people cannot self regulate. It has been stated that medicine in the state of OR is already self regulatory, in that the OMB does not perform random inspections. However, in most scenarios it takes a long time to become a healthcare provider, requires many months or years of observation by peers and teachers, requires clinical experience and testing. None of that is self regulatory. Additionally, insurance companies do random audits all the time and large facilities are inspected by agencies such as the Joint Commission.

Please also remember that we cannot base rules on the safety of this treatment thus far because this bill expands the providers in quantity and context exponentially. Please also remember that the rule making workshop was made primarily of supporters of this bill and a large number of Poca or Poca Tech affiliates, both of which stand to profit from this bill being highly unregulated. Trainings are advertised at \$450 per person. This bill substantially expands the number of people that these organizations can offer trainings to.

I would also like to add that this bill specifically asks technicians not to pose as acupuncturists and yet across the country, this technique is being referred to as acuwellness and is predominantly offered for an up charge in out of pocket therapy offices and the like. Across the country, it appears to be less about treating the marginalized and more about up charging those who can afford to pay extra out of pocket costs.

It was mentioned in recent testimony that this treatment will only cost 70 cents per patient. Should we assume that treatment in Oregon will take place on street corners and not be charged for? How else could it cost 70 cents unless there are no fees for the location, the training, or the provider? Is this also to mean that the cost of a surgery should be solely determined by the wholesale cost of the tools needed or that MD office visits should be free if they don’t require tools?

This bill is not only reckless but it does not solve the problems that it intends to. At the least, I propose the following measures for the 5NP technician role:

### **1. Supervision Requirements:**

5NP technicians should practice under the clinical supervision of a licensed acupuncturist or MD/DO qualified to perform acupuncture. Supervision should not necessarily be required at all times, but a supervisor should be readily available in the event of complications or adverse reactions.

### **2. Training and Certification:**

Technicians should complete a standardized training program that includes at least:

- 30 hours of didactic training

- 40 supervised clinical treatment hours
- Certification in the NCCAOM Clean Needle Technique (CNT)
- OSHA-compliant Blood Born Pathogens training, as well as HIPAA protocols, as required

By working within these frameworks, we can continue to expand access to acupuncture services while maintaining the highest standards of patient safety and professionalism.

Thank you for your time and consideration.

---

**From:** Jonathan Juarez [REDACTED] >  
**Sent:** Monday, November 24, 2025 12:13 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** Public comment for 5NP

You don't often get email from [REDACTED]. [Learn why this is important](#)

Hello,  
I would like to submit a public comment for 5NP.

Here it is:

In Support of 5NP

I am in support of 5NP because I have seen these treatments work.  
I have received 5NP myself and it has helped me greatly.  
By passing this 5NP legislation we are creating more access to trauma informed healthcare.  
Thanks for everyone's work and support in making this dream a reality in Oregon.  
In this together,  
Jonathan Juarez  
Acupuncture Student at POCA Technical Institute

This email is confidential and may be legally protected. It is intended solely for the addressee. Access to this email by anyone else, unless expressly approved by the sender or an authorized addressee, is unauthorized. If you are not the intended recipient, any disclosure, copying, distribution or any action omitted or taken in reliance on it, is prohibited and may be unlawful. If you believe that you have received this email in error, please contact the sender and delete this e-mail and destroy all copies.



---

**From:** Charles Lev <[REDACTED]>  
**Sent:** Monday, November 24, 2025 4:35 PM  
**To:** ROSS Elizabeth \* OMB  
**Subject:** 5NP COMMENT

Hi Elizabeth,

First and foremost ~ thank you for your work coordinating our collective efforts to establish standards providing for training 5NP technicians.

I would like to register a comment:

I think that as we go forward training people in the state of Oregon to provide 5NP, It is likely that healthcare workers such as nurse practitioners or Medical Assistants who are already skilled doing blood draws, injections & working with patient care in general will find that 30 hours are excessive for learning a protocol as technically simple as the 5NP.

I do think it's important that our training provides background and history, as well as training in a degree of simple healing intention. It's true that 5NP constitutes more than technique alone.

And, all that said, it seems quite possible to accomplish all of that in far less than 30 hours with someone who has already trained in working with inserting needles in the course of providing healthcare.

30 hours seems perfect for non-medical people in the general public who want to provide this treatment.

I applaud these efforts, again thank you.

I hope that going forward we have a capacity to offer a second tier of training, with less hours, for people who are already licensed medical practitioners.

Very truly yours,  
Charles Rothschild Lev  
Licensed acupuncturist  
OHSU Family Medicine



Beardall Acupuncture and Chiropractic Clinic, PC  
Christopher Beardall, DC, L.Ac.

Canby OR 97013

**Date:** November 24, 2025

# **Critical Analysis of Oregon HB 2143 and OMB Administrative Rules: A Comprehensive Review of the Five-Needle Protocol (5NP) Implementation**

## **I. Executive Summary**

The impending implementation of Oregon House Bill 2143 (2025) and the associated administrative rules drafted by the Oregon Medical Board (OMB) represents a watershed moment in the state's approach to behavioral health integration, yet it simultaneously introduces a paradigm shift in the regulation of invasive medical procedures that warrants extreme caution. By authorizing the creation of a "5NP Technician" registry, the state is effectively sanctioning the autonomous performance of invasive auricular acupuncture procedures by laypersons with minimal training—specifically, 30 didactic hours and 40 ears needled—and, most critically, no statutory requirement for clinical supervision. This report, a Comprehensive Critique, determines that while the legislative intent is rooted in the equitable expansion of "low-barrier" adjunctive care for Substance Use Disorders (SUD), the current statutory and regulatory framework creates profound, unmitigated public safety risks that far exceed accepted medical standards. The 5NP statutes and draft rules authorize individuals to insert needles into vulnerable populations without the oversight of a licensed healthcare professional, a structural decision the OMB defends by citing a "statutory silence" in HB 2143 regarding supervision.<sup>1</sup> This interpretation has led to a regulatory abdication where the Board explicitly states it lacks the authority to mandate supervision, thereby creating a class of practitioner who is clinically autonomous yet educationally dependent. These technicians will operate in high-risk environments—SUD recovery centers, mental health clinics, and potentially unregulated community spaces—without the diagnostic capabilities to identify medical emergencies, contraindications, or the progression of communicable diseases.<sup>1</sup>

Critical structural flaws identified in this review include the absence of a robust mechanism for adverse event management, a "train-the-trainer" degradation loop where minimally trained technicians can credential new technicians after only two years of practice, and a reliance on Informed Consent forms that act as liability shields rather than true patient safety instruments.<sup>1</sup>

Furthermore, the fee structure (\$100 initial registration) and the reliance on "self-identification" for treatment eligibility create a system that is economically accessible but clinically porous.<sup>1</sup> This report concludes that without immediate legislative amendment to mandate supervision and bolster training standards, HB 2143 poses a significant liability to the State of Oregon and a direct physical threat to the immunocompromised and traumatized populations it aims to serve.

---

## II. Full Legal & Regulatory Analysis

The legal and regulatory architecture surrounding the Oregon 5NP initiative is characterized by a dangerous disconnect between broad legislative authorization and restricted regulatory implementation. A meticulous dissection of HB 2143 and the OMB's proposed Division 071 rules reveals a framework that prioritizes access over safety to a degree that is unprecedented in Oregon's medical history.

### Statutory Authority and the Supervision Void

The most glaring legal vulnerability in the current framework is the absence of a statutory mandate for supervision, a lacuna that the OMB has codified into a rigid policy position. As noted in the introduction to the OMB Draft Rules, the Board has adopted a strict constructionist view of HB 2143, stating unequivocally that "HB 2143 does not impose supervision requirements or authorize the OMB to write rules requiring supervision".<sup>1</sup> The Board further asserts that under ORS 183.400, "agencies cannot exceed the authority granted by the legislature" and that "the absence of statutory language does not create implied authority".<sup>1</sup> This legal interpretation creates a regulatory vacuum that is distinct from almost every other tiered healthcare profession in the state. In established hierarchies—such as Physician Assistants, Dental Hygienists, or Occupational Therapy Assistants—the statutes explicitly link the subordinate practitioner to a supervising licensee to ensure public safety and establish a chain of vicarious liability. By failing to include this language, and by the OMB's subsequent refusal to infer authority from its general mandate to protect the public (ORS 677.265), the state has inadvertently created an autonomous provider class. This class has a scope of practice that involves skin penetration, biohazard generation, and treatment of psychiatric conditions, yet requires less training than a cosmetologist or tattoo artist.

The legal implications of this "Supervision Void" are severe and multifaceted. Primarily, it results in **Liability Shifting**. In a standard medical setting, if a subordinate practitioner commits malpractice (e.g., causes a pneumothorax, severe infection, or misses a critical diagnosis), the supervising clinician and the facility share vicarious liability. Under the HB 2143 framework, a 5NP technician is an independent registrant. If they commit an error, there is no supervising clinician to hold accountable. Given that 5NP technicians are unlikely to carry high-value malpractice insurance, and the statutes do not mandate such coverage, the injured patient is left with little recourse, and the employing facility assumes total liability.

Secondly, the OMB has created a form of **Regulatory Estoppel**. By explicitly stating in the draft rules' preamble that they lack the authority to require supervision, the OMB has effectively estopped itself from disciplining a technician for "lack of supervision" or "practicing beyond competency" in future disciplinary hearings, provided the technician stayed within the mechanical confines of the 5-point protocol. If a technician treats a patient who subsequently collapses from an undiagnosed condition, the technician can legally argue that the state

explicitly authorized them to practice without the diagnostic oversight that would have caught the condition.

## Ambiguities in Definitions and Scope

The definition of "Five-Needle Protocol" in OAR 847-071-0005(3) limits the practice to the stimulation of five specific ear points (Shen Men, Sympathetic, Liver, Kidney, Lung) for "temporary relief from the symptoms of substance use disorder, mental health conditions or trauma".<sup>1</sup> While precise in anatomical location, the rule is legally vague in its clinical indications, specifically regarding the terms "Mental Health Conditions" and "Trauma."

The term **"Mental Health Conditions"** is legally undefined in the context of this rule. Without a restrictive definition or a requirement for a referral from a mental health professional, this terminology could arguably encompass the entire DSM-5 spectrum, from mild adjustment disorders to acute schizophrenic psychosis or severe bipolar mania. A 5NP technician, who is forbidden from diagnosing, is nonetheless authorized to treat the "symptoms" of these conditions. This creates a dangerous scenario where a technician acts as the sole provider for a patient with a severe, deteriorating psychiatric condition, masking symptoms with "temporary relief" while the underlying pathology goes untreated.

Similarly, **"Trauma"** is left open to interpretation. While the context implies psychological trauma (PTSD), the lack of statutory precision leaves room for dangerous interpretations by under-trained practitioners who might attempt to treat "physical trauma" or pain via these points.

Furthermore, the phrase "temporary relief" allows for an open-ended treatment duration. There are no guardrails in OAR 847-071 preventing a technician from treating a patient indefinitely—daily, for years—for a condition that requires escalating medical or psychiatric care. This "symptom management without diagnostic limit" effectively legalizes the delay of necessary medical care.

## Conflicts with ORS 677 and Constitutional Non-Delegation

The proposed rules potentially conflict with the broader intent of ORS 677 (Regulation of Medicine). ORS 677.190 outlines grounds for discipline, including "gross or repeated negligence." However, negligence is legally determined against a standard of care. By creating a new tier of practitioner with no established standard of care other than a 30-hour course, the state makes it legally difficult to define what constitutes "negligence" for a 5NP technician. Consider a scenario where a 5NP technician fails to recognize a diabetic ear infection that leads to auricular chondritis and permanent deformity. A Licensed Acupuncturist (L.Ac.) or MD would be held liable because their training includes pathology and dermatology. However, a 5NP technician, whose training is only required to cover "Ear needling and point location" and basic hygiene<sup>1</sup>, could legally argue that recognizing early-stage necrosis or distinguishing it from a "healing reaction" is outside their scope of training. This creates a paradox where the practitioner is effectively too unskilled to be negligent in complex scenarios, insulating them from accountability for diagnostic failures.

## Regulatory Responsibility Chains and Enforcement

The enforcement mechanisms detailed in OAR 847-071-0050 are entirely reactive, lacking any proactive oversight. The Board may suspend registration if a technician is found to be "incompetent" or guilty of "unprofessional conduct".<sup>1</sup> However, without a supervision requirement, there is no mechanism for *detecting* incompetence before patient harm occurs. In licensed fields, the supervisor acts as the regulatory proxy, the first line of defense who corrects technique and judgment daily. Here, the OMB is the sole oversight body, yet it has no physical presence in the varied community settings—church basements, outdoor shelters, private living rooms—where 5NP will be performed.

The rules also fail to establish a clear responsibility chain for infection control at the facility level. While "Sanitation and hygiene protocols" are a required training element<sup>1</sup>, the rules do not specify who is responsible for the facility's overall biohazard compliance (OSHA Bloodborne Pathogens Standard). If a 5NP technician is working as a volunteer in a pop-up shelter—a scenario plausible and encouraged under the "low-barrier" intent<sup>1</sup>—there may be no facility-level compliance officer. This leaves the regulation of biohazard disposal, needle stick protocols, and facility sterility in a legal gray area, potentially violating federal OSHA mandates which typically require an employer-employee relationship for enforcement.

### Contradiction in "Good Moral Character"

OAR 847-071-0020(1)(c) mandates that an applicant have "good moral character," yet Section (2) immediately qualifies this by stating "Criminal history is not an automatic disqualification".<sup>1</sup> The rule further clarifies that "Substance use disorder in remission... are not a reflection of current moral character." This language clearly aims to support the peer-support model common in SUD recovery, where lived experience is valued.

However, the lack of specific disqualifying offenses creates a significant regulatory vulnerability. While the Board will conduct a "national fingerprint-based background check"<sup>1</sup>, the absence of a matrix of disqualifying convictions (e.g., violent felonies, sexual assault, elder abuse) leaves the decision to a subjective "case-by-case" evaluation. This subjectivity creates two risks: first, that individuals with history of violent offenses may be credentialed to insert needles into vulnerable, traumatized populations; and second, that the Board exposes itself to administrative legal challenges every time it denies a registration based on criminal history, as it lacks a clear statutory exclusion list to point to. The reliance on the Board to interpret "moral character" without specific guidelines invites inconsistency and potential bias in the credentialing process.

---

## III. Clinical Safety & Public Health Risk Matrix

The clinical deployment of the 5-Needle Protocol by minimally trained technicians introduces a spectrum of risks that differ significantly from those present when the same procedure is performed by a licensed acupuncturist or physician. The primary driver of this risk is the "Symptom-Diagnosis Gap": 5NP technicians are authorized to treat symptoms but are strictly forbidden from, and untrained in, diagnosis. This fundamental disconnect creates a blind spot where serious medical pathology can be masked, ignored, or exacerbated.

### The Danger of Unscreened Procedures

The Informed Consent document explicitly states: "no extensive intake or discussion" is required prior to treatment.<sup>1</sup> This feature, designed to reduce barriers to entry for traumatized patients who may be reticent to share personal histories, removes the primary safety filter in medical practice: the history taking.

**Bleeding Disorders & Anticoagulants:** Patients with Alcohol Use Disorder (AUD) frequently present with coagulopathies due to liver dysfunction (cirrhosis) or thrombocytopenia. Additionally, many patients in the target demographic may be on anticoagulant therapy for cardiovascular conditions. A 5NP technician, untrained in recognizing the physical signs of liver disease (e.g., jaundice, ascites, spider angiomas, caput medusae) and legally absolved from conducting a medical intake, is flying blind. Needling a patient with an INR of 4.0 or severe thrombocytopenia can lead to excessive bleeding, auricular hematoma (cauliflower ear), or prolonged hemorrhage. The lack of screening creates a direct pathway for these adverse events.

**Immunocompromise:** The SUD population has higher prevalence rates of HIV, Hepatitis C, and uncontrolled diabetes. The use of ear seeds and beads, which rely on pressure to stimulate points, poses a specific risk to diabetics. Pressure necrosis can occur rapidly in diabetic patients with microvascular compromise.<sup>1</sup> While the consent form mentions this caution, a technician with no medical training may not understand the pathophysiology of diabetic neuropathy (where the patient cannot feel the pain of the necrosis) or know to visually inspect the ear for pre-existing circulatory compromise. The rule requires "caution," but provides no mechanism (training or intake) to exercise it.

## Infection Control and Community Settings

The proposed rules emphasize "low-barrier access" to "expand access to safe... treatment" <sup>1</sup>, implying treatment in non-clinical settings such as community centers, shelters, and outdoor encampments. These environments inherently lack the controlled sterility of a clinical office.

**Aerosolized Pathogens:** The 5NP protocol often occurs in a group circle ("sit quietly for 30-45 minutes" <sup>1</sup>). In a shelter setting or crowded community room, this creates a high-density vector for airborne pathogens such as Tuberculosis, COVID-19, and Influenza. A group of 10-20 individuals sitting in a circle for 45 minutes constitutes a significant exposure event. Without facility standards requiring air filtration or spacing, the 5NP circle can become a super-spreader event, particularly given the compromised immune status of many in the SUD community.

**Needlestick Injuries:** In chaotic community settings, the risk of a patient moving unexpectedly, a technician stumbling, or a sharps container being kicked over is heightened. The lack of a mandatory OSHA Bloodborne Pathogen (BBP) certification in the training requirements <sup>1</sup> is a critical oversight. A technician sticking themselves with a needle used on a high-risk patient requires immediate Post-Exposure Prophylaxis (PEP) protocols. A lay technician, operating potentially as a volunteer without an employer's safety net, is unlikely to have established PEP protocols or access to immediate occupational health services, increasing the risk of HIV or Hepatitis transmission to the provider.

## Psychiatric Instability and Syncope

The "Sympathetic" and "Shen Men" points are potent autonomic modulators. In highly traumatized or constitutionally depleted individuals, needling can precipitate a strong physiological release, ranging from emotional catharsis to a vasovagal response (syncope/fainting).<sup>1</sup>

**Syncope Domino Effect:** If a patient faints in a group setting, it introduces chaos. A patient slumping forward with needles in their ears risks driving the needles deeper or lacerating the skin. Furthermore, seeing a fellow participant collapse can trigger anxiety or panic in others. A single technician managing 10 patients cannot safely manage a fainting patient—which requires maintaining an airway, checking vitals, and preventing falls—while monitoring the needles in 9 other patients to ensure they remain calm and safe.

**Psychiatric Decompensation:** For individuals with severe PTSD or psychosis, somatic interventions can trigger flashbacks, dissociation, or acute paranoia. A technician with no mental health training (Mental Health First Aid is not mandated in 1) is ill-equipped to de-escalate a psychiatric emergency. This creates a risk that a medical intervention intended to soothe could precipitate a crisis necessitating law enforcement intervention, a result that directly contradicts the "safe space" ethos of the program.

## Risk Matrix Table

Risk Category	Specific Hazard	Source of Vulnerability	Likelihood	Severity	System Weakness
<b>Infection</b>	Auricular Chondritis / Perichondritis	Pathogen introduction into avascular cartilage; poor sanitation in community settings.	Moderate	High (Disfigurement)	Lack of strict facility hygiene standards; absence of supervision.
<b>Medical</b>	Uncontrolled Bleeding / Hematoma	Coagulopathy in alcoholic/hepatic patients; "No intake" policy.	Moderate	Moderate	No medical history intake; technician inability to assess signs of liver disease.
<b>Medical</b>	Diabetic Necrosis (Ear Seeds)	Pressure ulcers from seeds in diabetic patients with poor microcirculation.	Low	High (Tissue Loss)	Reliance on patient self-report of diabetes; lack of technician pathophysiology training.
<b>Psychiatric</b>	Acute Decompensation	Triggering of PTSD/Psychosis during somatic release.	Moderate	High (Safety of Self/Others)	Lack of mental health crisis training; lack of diagnostic scope.

<b>Safety</b>	Syncope (Fainting)	Vagal response to needle insertion in anxious/depleted patients.	High	Moderate (Fall Injury)	Group setting makes individual monitoring difficult; lack of CPR/First Aid mandate.
<b>Biohazard</b>	Needlestick Injury	Accidental puncture of technician or third party.	Moderate	High (HIV/Hep C/B transmission)	No OSHA Bloodborne Pathogen training requirement in rules.
<b>Systemic</b>	Delayed Diagnosis	Patient relies on 5NP for serious condition (e.g., endocarditis masked as "malaise").	Moderate	High (Death/Sepsis)	"Temporary relief" definition allows indefinite treatment without referral.

## IV. Training & Competency Evaluation

The training standards proposed in OAR 847-071-0025 are dangerously insufficient when compared to the risk profile of the procedure and the vulnerable nature of the patient population. The requirement of "at least 30 hours of didactic and 40 ears needed" <sup>1</sup> represents a trivial amount of education for an invasive procedure, creating a "competency illusion."

### The "40 Ears" Fallacy

The requirement to needle "40 ears" equates to treating 20 patients (assuming bilateral treatment) or 40 patients (unilateral). In medical education pedagogy, competency curves suggest that a learner is still a novice after 20 repetitions. This volume is insufficient to expose the trainee to the necessary variance in human anatomy (e.g., deformed ears, scar tissue, keloids) or the variance in patient behavior (agitation, anxiety).

By contrast, a Licensed Acupuncturist (L.Ac.) in Oregon typically completes over 2,500 hours of training, with hundreds of hours of direct clinical supervision. The 5NP standard represents approximately 1.2% of the training of an L.Ac., yet the 5NP technician is granted full autonomy within the protocol. The rules implicitly rely on external organizations like the National Acupuncture Detoxification Association (NADA) and the People's Organization of Community Acupuncture (POCA) to set the curriculum.<sup>1</sup> While these organizations have established histories, outsourcing state regulatory standards to private advocacy groups without adding state-specific safety overlays (like supervision) is a dereliction of the Board's independent duty to assure competency.

### The "Train-the-Trainer" Degradation Loop

OAR 847-071-0025(1)(B) establishes a pathway for a 5NP technician to become a "5NP Trainer" if they have held registration for two years and co-taught two programs.<sup>1</sup> This provision creates a perilous "closed-loop" degradation of knowledge. A technician, who received only 30



hours of initial training and has practiced unsupervised for two years—potentially reinforcing bad habits or incorrect techniques—can then become the primary educator for a new generation of technicians.

This "Train-the-Trainer" model lacks the external injection of higher-level medical knowledge. In most medical professions, educators are required to hold a degree *higher* or significantly more advanced than the students they teach. Here, the blind lead the blind. Without a requirement that trainers be Licensed Acupuncturists or Physicians, the nuance of aseptic technique, point location, and safety management will inevitably atrophy with each generation of technicians.

## Missing Critical Curricula

The required training elements listed in Section (2) of the rule include "Sanitation" and "Trauma informed care" <sup>1</sup>, but glaringly omit standard medical safety certifications:

1. **CPR / Basic Life Support (BLS):** Essential for managing syncope or cardiac events in high-risk populations. A technician without BLS cannot legally or competently respond to a cardiac arrest in their group circle.
2. **OSHA Bloodborne Pathogens (BBP):** The federal standard for anyone exposed to needles. The omission of this specific certification suggests a lack of seriousness regarding the occupational hazards of acupuncture.
3. **Mental Health First Aid:** Critical for recognizing when a patient is escalating beyond the scope of 5NP.
4. **Red Flag Recognition:** Specific training on when *not* to treat (e.g., signs of cellulitis, intoxication, psychosis, impetigo).

## Comparison of Minimum Safe Standards

Domain	5NP Technician (Proposed)	Licensed Acupuncturist (L.Ac.)	Medical Doctor (MD/DO)	Minimum Safe Standard
<b>Didactic Hours</b>	30 Hours	2,500+ Hours (Masters/Doctorate)	4,000+ Hours (Medical School)	<b>100 Hours</b> (to include A&P/Safety)
<b>Clinical Supervision</b>	40 Ears (approx. 20 patients)	800+ Hours	10,000+ Hours (Residency)	<b>100 Patient Encounters</b>
<b>Supervision Level</b>	<b>None</b> (Independent Practice)	Independent Practice	Independent Practice	<b>Direct or General Supervision</b>
<b>Infection Control</b>	"Sanitation techniques"	Clean Needle Technique (CNT) Cert.	Sterile Technique / Infection Control	<b>CNT Certification + OSHA BBP</b>
<b>Emergency Skills</b>	Not Required	CNT / CPR often required	ACLS / BLS	<b>BLS / CPR Certification</b>
<b>Scope</b>	5 Points Only	Full Body / Diagnosis	Full Scope Medicine	<b>5 Points Only</b>

<b>Referral Ability</b>	No training on <i>when</i> to refer	Trained in Differential Diagnosis	Full Diagnostic Capability	<b>Mandatory Referral Protocols</b>
-------------------------	-------------------------------------	-----------------------------------	----------------------------	-------------------------------------

## V. Informed Consent Analysis

The OMB has placed significant weight on Informed Consent as a primary safety mechanism, likely to counterbalance the lack of supervision. However, the analysis of the draft Consent Form<sup>1</sup> and the regulatory requirements reveals that the consent process is designed more for bureaucratic compliance than true patient education or protection.

### The "Daily Signature" Bureaucracy

OAR 847-071-0040(3) and the FAQs<sup>1</sup> mandate that consent be obtained "prior to providing treatment" and confirmed "prior to each treatment," implying a fresh signature or distinct validation every single visit.

- **Clinical Reality:** In a high-volume community detox setting, requiring a full informed consent signature daily leads to "click-through" behavior. Patients, often in withdrawal or distress, will sign without reading to access care.
- **Form Fatigue:** The repetition devalues the content of the warning. If a patient signs the same paper for 30 days straight, they stop processing the risks.
- **Recommendation:** A "Master Consent" signed at induction, coupled with a brief verbal check-in ("Has anything changed medically since yesterday?") documented in a treatment log, is standard clinical practice and far more effective at capturing day-to-day changes in health status.

### Content Deficiencies and Liability

The draft consent form<sup>1</sup> lists generic risks ("local bruising, slight bleeding, fainting") but misses population-specific warnings that are critical for informed decision-making:

1. **Diabetes:** While it mentions caution for ear seeds, it does not explicitly warn that *needles* also pose infection risks for uncontrolled diabetics.
2. **Pregnancy:** The form is silent on pregnancy. While 5NP is generally considered safe, certain points (Sympathetic) have strong autonomic effects. Pregnant patients should be screened or at least warned to consult their OB/GYN, especially in high-risk pregnancies.
3. **Drowsiness/Driving:** The form states "deep relaxation, or even fall asleep" is normal. It does not warn patients about driving or operating machinery immediately after treatment. If a patient drives home in a "deeply relaxed" or dissociated state and causes an accident, the lack of warning creates a liability for the technician.

### Legal Sufficiency of "Self-Identification"

The rule requires the individual to "self-identify the reason(s) for the 5NP treatment".<sup>1</sup> This is a legal maneuver to avoid the technician making a diagnosis.

- **Liability:** If a patient writes "Headache" or "Back Pain" (which are not qualifying conditions of SUD, Mental Health, or Trauma), and the technician treats them, the

technician has violated the scope of practice. The reliance on patient self-reporting places the burden of scope compliance on the patient, not the provider.

- **Privacy & HIPAA:** The form asks patients to identify as having "substance use disorders, mental health conditions, and trauma".<sup>1</sup> In a community setting, collecting this paper trail creates significant privacy vulnerabilities. The FAQs<sup>1</sup> state that HIPAA "may not apply if treatment is provided in certain community or volunteer settings." This is a dangerous ambiguity. If a volunteer technician collects forms identifying 50 people as having SUDs and leaves those forms in a car that gets stolen, there is a massive breach of privacy with unclear federal recourse (HIPAA vs. 42 CFR Part 2). The lack of clear data security mandates in the rules is a major oversight.

## The "Healing Reaction" Clause

The consent form includes "nausea or vomiting" as a "Possible Side Effect/Healing Reaction".<sup>1</sup> Grouping vomiting as a "healing reaction" is medically dubious and potentially dangerous. Vomiting can be a sign of a severe vagal reaction, anaphylaxis, or overdose. Framing it as "healing" encourages technicians and patients to ignore a symptom that should prompt immediate medical assessment.

---

## VI. Administrative Rulemaking Errors & Oversights

The OMB's Division 071 Draft Rules contain several administrative errors, contradictions, and under-implementations that weaken the regulatory framework and create confusion.

### Missing Definitions

The rules rely heavily on terms that are not defined in OAR 847-071-0005, leaving them open to broad interpretation:

- **"Trauma":** As previously noted, this is undefined.
- **"Mental Health Conditions":** Undefined.
- **"Community Standards of Care" (referenced in 0040(5)(c)):** The FAQs define this as "care... used by ordinarily careful 5NP technicians".<sup>1</sup> This is circular logic. Since there are currently *no* 5NP technicians in Oregon, there is no community standard. The standard is being created *ex nihilo* by the first batch of trainees. This makes it impossible to adjudicate malpractice cases until a standard evolves, which may take years of trial and error.

### Contradictory Authority on Supervision

The Notice of Proposed Rulemaking<sup>1</sup> contains a significant logical and legal contradiction. It states: "Agencies cannot exceed the authority granted by the legislature" to justify the lack of supervision. However, ORS 677.265 (cited as authority) grants the Board broad powers to

"Make and enforce rules... necessary to regulate the practice of medicine." Since 5NP involves piercing the skin (a medical act), the Board arguably *does* have the authority to require supervision under its general mandate to protect the public, regardless of HB 2143's specific silence. The Board's narrow interpretation is a policy choice—a decision to prioritize the "low-barrier" political mandate over the "public safety" medical mandate—not a strict legal constraint. By hiding behind "statutory silence," the Board is abdicating its primary function.

## Under-Implementation of Reporting

OAR 847-071-0040(5)(d) requires technicians to "Establish clear procedures for handling complications".<sup>1</sup> It does not, however, require *reporting* those complications to the Board unless they rise to the level of "gross negligence." This means the Board will have no data on the frequency of adverse events (fainting, infections, accidental needle sticks) to evaluate the safety of the program. Without a mandatory reporting requirement for adverse events, the "sunset review" or future legislative adjustments will be based on anecdotal evidence rather than data.

## Fee Structure and Economic Reality

The proposed fee structure—\$100 for initial registration and \$50 for annual renewal—is extremely low.<sup>1</sup> While this aligns with the low-barrier goal, it raises questions about the Board's capacity to fund effective oversight. The cost of processing fingerprints, background checks, and maintaining the registry will likely exceed these fees. As noted in the Fiscal Impact statement<sup>1</sup>, "initial program costs will exceed the proposed registration fee revenue," and the agency will cover costs with "existing funds paid by OMB licensees." This means Physicians and Acupuncturists are effectively subsidizing the regulation of a new, competing provider class, which may create political friction within the licensee base.

## The "10-Year" Recency Clause

OAR 847-071-0020(1)(b) states that if training was completed more than ten years ago, the applicant must demonstrate "current competency".<sup>1</sup> However, it does not define what constitutes a demonstration of competency (e.g., a re-test, a refresher course). This ambiguity leaves the Board staff with discretionary power that could be applied inconsistently.

---

## VII. Impact on Acupuncturists, Physicians & Behavioral-Health Systems

The economic and professional ecology of Oregon's healthcare system will be significantly disrupted by the introduction of 5NP technicians, with ripple effects felt by existing licensees and the behavioral health system at large.

### Economic Impact and Practice-Creep

- **Devaluation of Services:** Licensed Acupuncturists (L.Acs) often work in SUD settings (detox clinics, community health). The introduction of a low-wage (or volunteer) workforce creates a "race to the bottom." Clinics facing budget cuts will be incentivized to replace

L.Acs with 5NP technicians. While this lowers costs, it reduces the quality of care, as Ld.Acs provide comprehensive treatment beyond the 5 ear points (e.g., body points for liver detox, pain, insomnia, digestion). The nuance of a tailored treatment is replaced by a standardized, "one-size-fits-all" protocol.

- **Displacement:** There is a tangible risk that 5NP technicians will displace L.Acs in community health clinics, limiting the employment market for licensed professionals and discouraging new students from entering the full acupuncture profession.

## Professional Boundary Erosion

The restriction against using the title "Acupuncturist" <sup>1</sup> is difficult to enforce in practice. Patients almost universally refer to the procedure as "acupuncture." Technicians will likely be colloquially called "acupuncturists" by staff and patients. This linguistic drift dilutes the professional identity of the L.Ac. credential and confuses the public regarding the level of training of the person holding the needle. The public may assume the technician has extensive medical training, leading to misplaced trust in their diagnostic opinions.

## Liability for Employing Clinics

Behavioral health clinics employing 5NP technicians face a unique liability paradox.

- **The Licensed vs. Unlicensed Dilemma:** If a clinic employs an L.Ac., the L.Ac. carries their own malpractice insurance and operates under a clear license. If they employ a 5NP technician, the clinic is employing an unsupervised layperson. Under the legal doctrine of *respondeat superior*, the clinic is fully liable for the technician's errors.
- **Insurance Complications:** Insurance underwriters for these clinics may view the lack of supervision as a high-risk factor. Clinics may find that their general liability policies exclude "invasive procedures performed by unsupervised non-licensed personnel," or premiums may skyrocket to cover the risk. This economic reality may inadvertently limit the deployment of 5NP technicians, countering the legislative intent.

---

## VIII. Ethical & Equity Evaluation

The driving force behind HB 2143 is equity—expanding access to culturally responsive care for marginalized populations.<sup>1</sup> The narrative of the 5NP protocol is deeply rooted in the social justice movements of the Black Panthers and Young Lords at Lincoln Hospital in the 1970s, as acknowledged in the Purpose Statement.<sup>1</sup> However, equity achieved by drastically lowering safety standards is a false economy and an ethical minefield.

### The "Two-Tiered" System of Care

The current framework codifies a two-tiered system of acupuncture in Oregon:

1. **Tier 1:** Wealthy and Insured Oregonians receive acupuncture from L.Acs and MDs with 3,000+ hours of training, in sterile clinics, with full diagnostic capabilities and individualized treatment plans.

2. **Tier 2:** Marginalized, Low-Income, and SUD populations receive 5NP from technicians with 30 hours of training, in unregulated community settings, with no medical oversight and a standardized, non-individualized protocol.

This is not health equity; it is the state-sanctioned provision of sub-standard care for the poor. True equity would involve expanding Medicaid (OHP) reimbursement for Licensed Acupuncturists to work in SUD settings, ensuring that the most vulnerable patients—those with the most complex medical and social needs—receive the highest standard of care, not the lowest.

## Cultural Competency as a Band-Aid

The requirement for "one hour per year of cultural competency" is a token administrative gesture that does not mitigate the physical risks of unsupervised needle insertion. Furthermore, the inclusion of the "Black Panthers and Young Lords" historical narrative in the administrative rules is unusual for a regulatory document. While the historical context is vital for the community's ownership of the practice, its inclusion in the rule's Purpose Statement risks romanticizing a medical procedure. It conflates revolutionary activism with regulatory safety. The state must ensure that respect for the *origins* of the practice does not lead to a suspension of the *standards* required for invasive procedures in the modern era.

## Ethical Risks of "Volunteer" Models

The model relies heavily on the idea of community volunteers. While noble, this introduces ethical risks regarding the exploitation of labor (often from within the recovery community itself) and the lack of accountability. A volunteer who burns out or harms a patient can simply walk away; a professional whose license is their livelihood is tethered to ethical codes and accountability structures.

---

## IX. Proposed Revisions & Legislative Fixes

To salvage the intent of HB 2143—expanding access—while mitigating its catastrophic risks, the following revisions are necessary. These recommendations bridge the gap between "low barrier" and "high safety."

### 1. Legislative Fix: Mandatory Supervision Clause

#### Add to HB 2143 / ORS:

"A 5NP technician must practice under the general supervision of a licensed acupuncturist, physician, physician assistant, or nurse practitioner. The supervising licensee need not be present at the time of treatment but must be available for consultation (telephonically or in-person) and must conduct a site visit at least quarterly to review hygiene, safety logs, and technician competency."

### 2. Redlined Edits to OAR 847-071 (Training)

- **Current:** "30 hours didactic, 40 ears needled."
- **Proposed:** "60 hours didactic (including 4 hours CPR/BLS, 2 hours OSHA Bloodborne Pathogens, 4 hours Mental Health First Aid), and 100 ears needled under direct supervision of an L.Ac. or MD."
- **Trainer Requirement:** Remove the ability for 5NP technicians to train other technicians. Trainers must be L.Acs, MDs, or NADA-certified trainers who also hold a higher-level healthcare license. This stops the "closed loop" degradation.

### 3. Standardized "Master" Consent & Screening Checklist

Replace the "Daily Signature" bureaucracy with a robust induction protocol:

- **Mandatory Screening Checklist:** The rule must require a documented negative screen for: Bleeding disorders, anticoagulant use, immunocompromise, history of fainting, and pregnancy (unless cleared by OB).
- **Adverse Event Reporting:** Mandate that *all* adverse events (including syncope requiring assistance, needle sticks, and infections) be logged and reported to the Board annually for data review.

### 4. Emergency Preparedness Clause

**Add to OAR 847-071-0040:**

"Any location where 5NP is administered must have a written emergency response plan, a functional telephone for calling 911, access to an AED (if available in the building), and a biohazard exposure control plan compliant with ORS/OSHA standards. The technician must carry a mobile sharps container and a basic first aid kit."

### 5. Title Protection and Public Clarity

Strengthen the language in OAR 847-071-0040(2) to explicitly forbid the use of terms like "acudetox specialist" or "ear acupuncturist." Mandate that technicians wear a badge clearly stating "Registered 5NP Technician - Not a Licensed Doctor or Acupuncturist."

---

## X. Final Summary — Page Policy Brief

TO: Oregon Legislature & Oregon Medical Board  
FROM: Multidisciplinary Regulatory Review Committee  
RE: Urgent Critical Vulnerabilities in 5NP Implementation (HB 2143)

**The Current Situation:** HB 2143 and the draft OMB rules authorize minimally trained laypersons (30 hours education) to perform invasive acupuncture procedures on high-risk populations without medical supervision. While intended to expand access to care, the current framework creates a dangerous "Tier 2" safety standard for vulnerable Oregonians and exposes the state and providers to significant liability.

### Top 20 Risks Identified

1. **No Supervision:** Technicians operate entirely autonomously, a deviation from all other medical extender models.
2. **Inadequate Training:** 30 hours is insufficient for invasive procedures; equates to <2% of L.Ac training.
3. **No Diagnostic Scope:** Techs cannot identify medical contraindications (liver disease, diabetes).
4. **Syncope Clusters:** Group fainting risks in unsupervised settings can lead to chaos and injury.
5. **Infection Control:** No facility hygiene standards defined for "community settings."
6. **Needlestick Injuries:** No OSHA Bloodborne Pathogen training required; high risk in SUD settings.
7. **Missed Pathology:** Liver disease/coagulopathy in SUD patients ignored due to "no intake" policy.
8. **Diabetic Complications:** Necrosis risk from ear seeds in unscreened diabetics.
9. **Psychiatric Crisis:** No training to manage acute decompensation or psychosis.
10. **Liability Void:** No supervisor to hold accountable for malpractice; patients left without recourse.
11. **Knowledge Degradation:** Techs training techs creates a "closed loop" of error transmission.
12. **Definition Ambiguity:** "Mental Health" and "Trauma" are undefined, allowing scope creep.
13. **Criminal History:** No automatic disqualification for violent offenses; subjective Board review.
14. **Form Fatigue:** Daily consent signatures reduce patient comprehension and compliance.
15. **Scope Creep:** "Temporary relief" allows indefinite, unmonitored treatment of serious conditions.
16. **Privacy Risks:** Collection of SUD status on paper forms without clear HIPAA/Part 2 mandates.
17. **Economic Displacement:** State-subsidized undercutting of Licensed Acupuncturists.
18. **Two-Tiered Care:** Codifying lower safety standards for the poor/SUD population.
19. **Lack of Reporting:** No mechanism to track adverse events or safety data.
20. **Regulatory Estoppel:** OMB claims it *cannot* regulate safety via supervision due to statutory silence.



## Top 20 Recommended Fixes

1. **Mandate General Supervision:** Require a licensed sponsor (L.Ac/MD) for every technician.
2. **Increase Training:** Raise minimum to 60 hours + 100 ears clinical experience.
3. **Mandate CPR & BBP:** Require BLS and OSHA Bloodborne Pathogens certification.
4. **Eliminate "Tech-Trainers":** Only L.Acs/MDs should teach the certification course.
5. **Define "Mental Health":** Limit scope to non-acute conditions; require referral for complex cases.
6. **Screening Protocol:** Mandate a medical intake checklist for bleeding/diabetes/pregnancy.
7. **Emergency Plans:** Require site-specific safety protocols (phone, AED access).
8. **Define Negligence:** Establish a clear standard of care for disciplinary purposes.
9. **Disqualifying Crimes:** List specific offenses (violence, sex abuse) barring registration.
10. **Master Consent:** Replace daily forms with induction consent + verbal check-in log.
11. **Referral Mandate:** Require referral to a PCP/L.Ac after a set number of treatments (e.g., 20).
12. **Adverse Event Log:** Mandate annual reporting of all syncope, infection, and accidents.
13. **Insurance Requirement:** Mandate professional liability coverage for technicians/employers.
14. **Title Protection:** Stricter enforcement against "acupuncture" usage; mandatory ID badges.
15. **Facility Standards:** Apply basic clinical hygiene rules to all community sites.
16. **Continuing Ed:** Increase CE requirements; focus on safety/red flags.
17. **Age Restriction:** Ensure treatments are appropriate for minors; parental consent mandates.
18. **Diabetes Warning:** Explicitly add needle/seed infection risks to the consent form.
19. **Pregnancy Screen:** Mandate screening for pregnancy due to point sensitivity.
20. **Sunset Review:** Mandate a safety data review after 2 years of implementation.

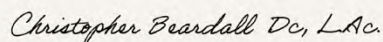
**Conclusion:** Rules alone cannot fix the "Supervision Gap" if the Board believes its hands are tied. HB 2143 requires legislative amendment to explicitly mandate supervision. Without this, Oregon is effectively experimenting on its most vulnerable citizens with an unsupervised, under-trained workforce, prioritizing access over the fundamental medical dictum:

***Primum non nocere (First, do no harm)***

### Works cited

1. 5NP FAQs.pdf
2. Five-Needle Protocol (5NP) Treatment & Informed Consent DRAFT
3. 5NP\_Draft Rules

Sincerely,



Christopher Alan Beardall, DC, L.Ac.

## Visual Diagrams Below:

### THE CORE PROBLEM: UNSUPERVISED & UNDER-TRAINED

**ONLY 30 HOURS**  
Didactic Instruction

**40 EARS**  
Clinical Experience



#### A New Practitioner Class with No Supervision

HB 2143 authorizes "SNP Technicians" to perform invasive acupuncture on high-risk populations with no statutory requirement for clinical supervision.

#### The "Supervision Void"

OMB states "statutory silence" on supervision, creating clinically autonomous yet educationally dependent practitioners.

#### A Two-Tiered System of Care



### A STARK COMPARISON: THE TRAINING CHASM

The training for a SNP Technician is a tiny fraction of that required for other professionals.

#### TRAINING HOURS COMPARISON

SNP TECHNICIAN (Proposed)	30 DIDACTIC HOURS	40 EARS (Triggers 19 patients) CLINICAL
LICENSED ACUPUNCTURIST (L.Ac.)	2,500+ HOURS	800+ CLINICAL HOURS
MEDICAL DOCTOR (MD/DO)	4,000+ HOURS	10,000+ CLINICAL HOURS

	SUPERVISION LEVEL	EMERGENCY SKILLS	INFECTION CONTROL	DIAGNOSTIC ABILITY
SNP TECHNICIAN (Proposed)	NONE (Independent Practice)	NOT REQUIRED	"Sanitation techniques"	FORBIDDEN
LICENSED ACUPUNCTURIST (L.Ac.)	INDEPENDENT PRACTICE	CPR/FIRST AID REQUIRED	CLEAN NEEDLE TECH. CERT.	TRAINED IN DIFF. DIAGNOSIS
MEDICAL DOCTOR (MD/DO)	INDEPENDENT PRACTICE	ACLS / DLS REQUIRED	STERILE TECH. / INFECTION CONTROL	FULL DIAGNOSTIC CAPABILITY

This disparity in education and oversight is central to the public safety risk.

### A MATRIX OF UNMITIGATED RISKS

**SYNCOPE (Fainting) in Group Settings**  
One technician cannot safely manage a fainting patient while monitoring up to 19 others.

**DELAYED DIAGNOSIS of Serious Illness**  
Providing "temporary relief" may prevent a patient from seeking necessary care for a serious, undiagnosed condition.

**PSYCHIATRIC DECOMPENSATION**  
Technicians are not equipped to handle PTSD Flashbacks, dissociation, or acute psychosis.

#### DANGER OF UNSCREENED PROCEDURES

A "no touch" safety leads to needing high-risk patients (bleeding disorders, blood thinners, immune compromised).

**THE "KNOWLEDGE DEGRADATION LOOP"**  
Technicians with 30 hours of training become trainers, creating a "blind leading the blind" system.

#### LIABILITY VOID and Lack of Recourse

Without a supervising clinician, patients harmed may have little to no legal recourse.

### URGENT RECOMMENDATIONS FOR A SAFER LAW

- ✓ **MANDATE GENERAL SUPERVISION**  
Amend HB 2143 to require supervision by a licensed acupuncturist, physician, PA, or nurse practitioner.
- ✓ **DRASTICALLY INCREASE TRAINING STANDARDS**  
Increase minimum training to at least 60 hours, with mandatory certifications in CPR/BLE, OSHA Bloodborne Pathogens, and Mental Health First Aid.
- ✓ **REQUIRE A MEDICAL SCREENING CHECKLIST**  
Mandate documented screening for high-risk contraindications before every initial treatment.
- ✓ **ELIMINATE THE "TECHNICIAN-AS-TRAINER" PATHWAY**  
Require all trainers to hold a higher-level healthcare license (L.Ac., MD) to prevent knowledge degradation.
- ✓ **ESTABLISH MANDATORY ADVERSE EVENT REPORTING**  
Require all complications to be logged and reported to the OMB for data-driven safety oversight.
- ✓ **STRENGTHEN TITLE PROTECTION**  
Mandate badges clearly stating "Registered SNP Technician - Not a Licensed Doctor or Acupuncturist" to avoid public confusion.



## When 'Relaxation' Becomes a Group Crisis

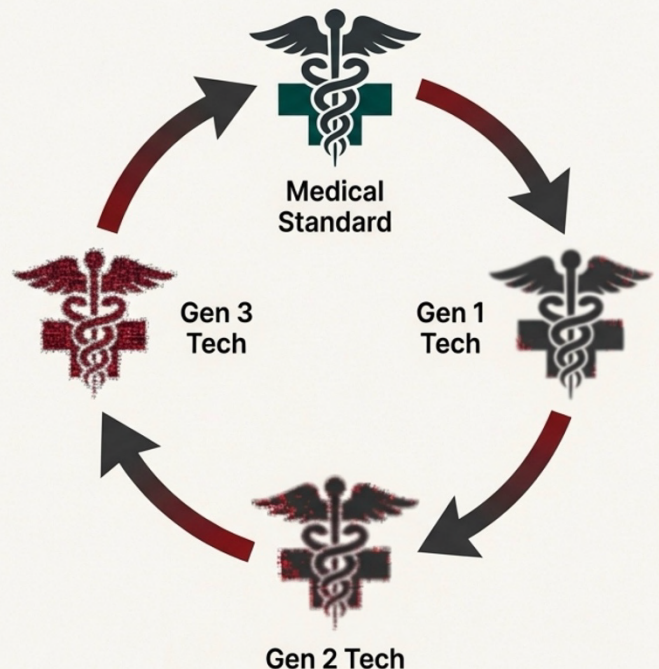
Key Risks in Group Settings:

- **Syncope Domino Effect:** A patient faints from a vasovagal response. A single, unsupervised technician cannot manage the falling patient (maintaining airway, preventing injury) while simultaneously monitoring up to 19 other needed individuals who may panic.
- **Psychiatric Decompensation:** A somatic intervention triggers a flashback or acute psychosis in a patient with severe PTSD. The technician has no mental health crisis training to de-escalate the situation safely for the individual or the group.

## The Degradation Loop: When the Untrained Train the Untrained

The Flawed Mechanism (per OAR 847-071-0025):

- A technician with only **30 hours** of initial training can become a '5NP Trainer' after just **two years** of unsupervised practice.
- This creates a closed loop where bad habits, incorrect techniques, and safety blind spots are reinforced and passed down to the next generation of technicians.
- There is no requirement for external injection of higher-level medical knowledge from a licensed professional.





## The Illusion of Equity Creates a Two-Tiered System of Care

### Tier 1 (The Insured & Affluent):

Receive comprehensive diagnosis and individualized acupuncture from a 3,000-hour professional in a sterile, clinical setting.



### Tier 2 (The Vulnerable & Low-Income):

Receive a standardized, one-size-fits-all protocol from a 30-hour technician in potentially unregulated community settings with no medical oversight.

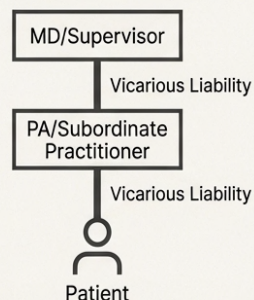
This is not health equity. It is the **codification of a lower standard of care** for the state's **most medically complex and traumatized populations**.

## The Liability Shell Game: Who Pays When a Patient is Harmed?

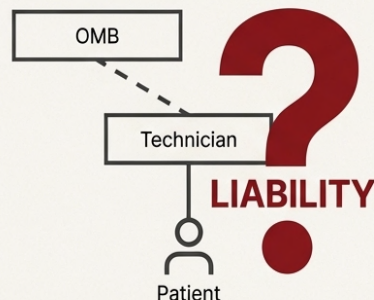
### Two Critical Legal Flaws:

- **Liability Shifting:** Without a supervising clinician, vicarious liability is eliminated. The burden shifts **entirely** to the (likely uninsured) technician and the employing facility. The injured patient is left with little recourse.
- **Regulatory Estoppel:** By stating it lacks authority to require supervision, the OMB has legally estopped itself from disciplining a technician for practicing beyond competency, as long as they stick to the 5 points. The state has tied its own hands.

#### Standard Medical Model



#### HB 2143 Model



## A Prescription for Safety: Three Pillars to Protect Oregonians



### 1. MANDATORY SUPERVISION

Amend HB 2143 to require general supervision by a licensed L.Ac., MD, PA, or NP. The supervisor must be available for consultation and conduct quarterly site visits.



### 2. ROBUST TRAINING & COMPETENCY

Increase didactic training to 60+ hours, mandate certifications in CPR/BLS and OSHA Bloodborne Pathogens, and require 100 ears needed under 'direct' supervision.



### 3. REAL OVERSIGHT & CONSENT

Mandate a medical screening checklist (for bleeding disorders, diabetes, pregnancy), require emergency plans for all sites, and institute mandatory reporting of all adverse events to the OMB.

**The fundamental principle of medicine must  
be the foundation of public policy.**

**\*Primum non nocere\***

First, do no harm.



## Concerns & Recommendations for the Practice of 5NP

I urge the Oregon Medical Board to **NOT PASS** the Final Rules Proposal.

Take additional time to revise and strengthen the Final Rules Proposal.

**The Final Rules Proposal raises multiple public safety and professional oversight issues:**

### 1. \*\*\*INSTITUTE SUPERVISION\*\*\*

*Note: the OMB states that they see that the law (HB 2143) does not specify supervision of 5NP practitioners.*

*And, thus the OMB has no authority to institute supervision.*

*However, the law clearly states: (2) "...The board may adopt rules to establish:" (2) (f) "Any other requirements or standards the board determines necessary."*

*This is called "enabling legislation", common in lawmaking. The law authorizes the agency which is implementing the law the liberty to write rules to perform its job. This is intentional, since legislators cannot know the specifics of a situation and can not know ahead of time what will be needed.*

2. The current rules draft permits individuals as young as 18 to perform needling procedures independently after only 31 hours of training, with **NO requirement for medical supervision, prior medical experience, or referral.**
3. There are **NO restrictions on treatment locations**, potentially allowing procedures to take place in settings such as shopping malls, patients in their cars, or the beach.
4. Basic **infection control practices are notably absent.** Alarming, patients can remove their own needles, creating significant risk of bloodborne pathogen exposure, in direct conflict with **CDC and OSHA standards.**
5. The rules draft does **NOT require medical documentation** (ie chart notes) of the treatment given, beyond a simple consent form.
6. There is **no description of oversight by the Oregon Medical Board** over the institutions providing training.

**These provisions fall far below acceptable standards of medical care and public safety.**

---

**Recommendations of the following revisions to the Final Rules Proposal:**

**See the documents from Dr. Christopher Beardall. I concur with that content plus:**

A- Add a source of the ear point locations.

### 1. Age Requirements

- 5NP Technicians should be **at least 21 years old**, or work under **direct supervision** from a qualified practitioner if between the ages of **18–20**.

### 2. Clinical Setting

- 5NP treatment should only be performed in **established medical clinics**, under the supervision of a **Licensed Acupuncturist or similarly qualified medical professional** with experience in 5NP and infection control.
- Allowances can be made for **mobile medical units** providing services in community outreach settings.

### 3. Training Requirements

- Require a **minimum of 90 hours** of training, including in-person **classroom and supervised clinical practice.**
- Training must include the details of the **Clean Needle Technique**, national acupuncture hygiene standards.

### 4. Standard Medical Practices

- Protocols for **infection control, patient rights, and medical documentation** used in general medical practice.

### 5. Patient Safety for Retained Objects

- Safety procedures for **retained objects** (needles, seeds, or beads taped to the ear), to prevent infections that could lead to serious complications such as **cauliflower ear** or ear deformity.

### 6. Oversight of Training Institutions

- The **Oregon Medical Board must oversee and approve all training institutions and curricula** to ensure consistent, high-quality education and public safety.
- 

These recommendations are essential to uphold the integrity of acupuncture as a medical practice and to ensure public trust and safety.

Write rules for a comprehensive and medically sound approach.



November 24, 2025

Oregon Medical Board  
1500 SW 1st Avenue, Suite 620  
Portland, OR 97201

Re: Public Hearing and Public Comment Period for HB2143

Dear members of the Oregon Medical Board,

My name is Winona (Noni) Vaitekunas and I am a licensed acupuncturist practicing in the state of Oregon and currently serving as the Secretary of the Oregon Association of Acupuncturists.

I would like to wholeheartedly and enthusiastically support the 5NP Draft Rules, Draft 5NP Treatment & Informed Consent Form, and Draft 5NP FAQs as they are currently written. I deeply appreciate the due diligence of the Oregon Medical Board throughout the 5NP Rule Development Process and am confident that the rules, as they are currently written, are in the best interest of Oregonians' safety and accessibility of this protocol.

I have compiled immense research over the past three years regarding the nationwide regulations around 5NP. I have attached a copy of my research notes to this public comment letter. In my years of experience, I have heard from every single person I reached out to from POCA Cooperative, National Acupuncture Detoxification Association, and from practitioners across the country that the more accessible this protocol is the better the implementation has gone in those states. Multiple legislative updates to expand the scope and accessibility of 5NP supports this trajectory.

Thank you for the current draft of rules and I look forward to the future implementation of 5NP in Oregon.

Sincerely,



Winona (Noni) Vaitekunas

To the best of my knowledge, these are all of the states with 5NP laws. States without 5NP laws are not listed on this sheet. States without 5NP laws where people are currently organizing to expand access to this protocol include California, Idaho, Pennsylvania, and Washington.

States with 5NP laws where people are currently organizing for additional access are: Maryland, Michigan, New York.

### Color coding:

States where a route to specific 5 Needle Protocol practitioners has been approved are **GREEN** and are as follows: AR, AZ, CO, DE, GA, IN, MA, MD, ME, MI, MO, NM, NY, OK, RI, SC, SD, TN, TX, UT, VT, WV, WY, NH, VA, OR

States with more restrictive terminology or physician delegation remain black and white: CT, LA, NC, OH, WI, WA

state		requirement	who	terminology	supervision	restrictions
AZ	statutory	Auricular Acupuncture Certification from the State of AZ. Training program in auricular acupuncture for the treatment of alcoholism, substance abuse, trauma, or chemical dependency.	anybody	Acupuncture Detoxification Specialist	general, AZ LAc	BEFORE TREATING A PATIENT, AN AURICULAR ACUPUNCTURIST SHALL OBTAIN FROM THE PATIENT A SIGNED INFORMED CONSENT THAT HAS BEEN APPROVED BY THE BOARD. See full details here: <a href="https://www.azleg.gov/legtext/55leg/1R/laws/0312.pdf">https://www.azleg.gov/legtext/55leg/1R/laws/0312.pdf</a>
AR	statutory	Education not specified.	anybody	ADS, registered	general, DOM	Substance abuse treatment only. Detox specialists shall register with the Board. They shall be permitted to use only the five (5) point ear protocol of NADA for substance abuse and shall not treat or offer treatment in any other capacity.



CO	statutory	Any appropriate training.	<p>"In 2020, the general assembly repealed the requirement in the mental health practice act that a professional must be licensed, registered, or certified as a mental health professional in order to practice auricular acudetox. The act makes a conforming amendment to clarify that it is not an unlawful act for a professional who is trained to perform auricular acudetox to perform the practice without a license, registration, or certification as a mental health professional."</p> <p><a href="https://leg.colorado.gov/bills/hb21-1146">https://leg.colorado.gov/bills/hb21-1146</a></p>	Auricular Acudetox	None	For stress, trauma, alcoholism, substance abuse, or chemical dependency program, etc.
CT	statutory	Must maintain certification with NADA.	anybody	Auricular Acupuncture	General supervision by a MD that is within 20 minutes of site, with a review and on-site	State, federal, or board approved alcohol, substance abuse, nicotine dependency, or chemical dependency program or other healthcare setting approved by the Board and Council.

					visit every 3 months.	
DE	statutory	NADA or equivalent that meets or exceeds the standards of training set by NADA including instruction in clean needle technique.	Healthcare related profession	ADS, licensed	None	State, federal, or board approved alcohol, substance abuse, nicotine dependency, or chemical dependency program or other healthcare setting approved by the Board and Council.
GA	statutory	Successfully completed a nationally recognized training program in auricular (ear) detoxification therapy for the treatment of chemical dependence as approved by the Board, board approved CNT.	21+	Auricular Detoxification Technician ADT, licensed	Direct supervision of LAc or MD with acu training.	Must be provided in a city, county, state, federal, or private chemical dependency program approved by the Medical Board.
IN	statutory	Successful completion of a board approved training program in acupuncture for the treatment of alcoholism, substance abuse, or chemical dependency that meets or exceeds the standards of training set by the NADA, CNT.	anybody	Auricular acupuncture, no designation	General by LAc or MD	Within the context of a state, federal, or board approved alcohol, substance abuse, or chemical dependency program.
LA	statutory	NADA training by a registered NADA trainer, NADA certification.	anybody	ADS, certification	General supervision by acupuncturist assistant or MD	none

MA	<a href="#">statutory</a>	A certificate of completion from NADA or from a state-recognized organization or agency that meets or exceeds the NADA training standards	Licensed physicians, Licensed psychologists, Licensed PCNS, LICSW, LCSW, LMHC, CARN, LADCI or LADCII, CADCII or CADC, RNs + NPs	ADS, licensed 'qualified professional'	General supervision of a licensed acupuncturist	Auricular acupuncture must be performed in: (i) a private, freestanding facility licensed by the department that provides care or treatment for individuals with substance use disorders or other addictive disorders; (ii) a facility under the direction and supervision of the department of mental health; (iii) a setting approved or licensed by the department of mental health; or (iv) any other setting where auricular acupuncture detoxification is an appropriate adjunct therapy to a substance use disorder or behavioral health treatment program; provided, however, that individual or 1-on-1 appointments with a health care provider shall occur within a setting permissible under this subsection.
MD	statutory	Minimum 70-hour basic training of which 40 hours are clinical training which includes the following training and subject matter - long list of specifics including "At least 20 treatments during a 4-hour period with good point location and techniques."	Certified Professional Counselors, Certified Associate Counselors, supervised counselors (all specific to alcohol and drug), Licensed Clinical Alcohol and Drug Counselors, Psychologists, Licensed Clinical Social Workers, and Nurses	ADS, registered	General/occasional direct by LAc or MD with acu-detox training	Professional setting approved by the Board of Acupuncture that meets reasonable community standards, or a clinical substance abuse program or professional setting for patients with documented substance abuse concerns.
ME	<a href="#">statutory</a>	Training from NADA or	Cert/Licensed Drug	ADS, Licensed	General by	NADA protocol, substance use and

		other board approved auricular acupuncture training, including POCA training Licensed by <a href="#">the Board</a> of Complementary Health Care Providers.	and Alcohol Counselors, Physicians, PA's, Nurses, NP's, Professional Counselors, Psychologists, Licensed Social Workers	ADS	LAc with license in good standing	co-occurring disorders.
MI	statutory	Certified as ADSes by NADA "or an organization that the Board determines to be a successor organization."	anybody	ADS	LAc or MDs with acupuncture training	Must be used for substance use disorder treatment.
MO	restricted	(NADA) or other national entity approved by the advisory committee.	anybody	Auricular Detox Technician ADT	LAc with 4 hours face to face time each month	Must be provided in a hospital, clinic, or treatment facility which provides comprehensive substance abuse services and maintains necessary licenses and certification.
NC	physician delegation					
NH	statutory	NADA training or a training that meets or exceeds the NADA training, as determined by the board. POCA Training approved by the board.	Licensed health care professionals, recovery coaches, peer counselors, or other board approved NT professionals (anybody).	ADS certification	General by LAc	Must be provided for the purposes of behavioral health applications, including addictions, mental health, and disaster and emotional trauma.
NM	statutory	Must complete an Acupuncture Board-approved training.	anybody	ADS, certification	General by DOM	Must be provided for the purpose of harm reduction or treating and preventing alcoholism, substance

						abuse, or chemical dependency. This can be done only within an Acupuncture Board-approved treatment program that demonstrates experience in disease prevention, harm reduction, or the treatment or prevention of alcoholism, substance abuse, or chemical dependency.
NY	statutory	Valid certification.	anybody		General by DOM	Must be provided for the purpose of substance abuse treatment.
OH	physician delegation					
OK		Not regulated	anybody			No restrictions.
OR	statutory	Must meet educational and OMB rule requirements and register with the Oregon Medical Board.	anybody	5NP technician		Rules become effective 3/1/26 and OMB starts accepting 5NP technician applications 3/2/26 (Monday).
RI	statutory	Meets or exceeds the NADA training from a recognized agency.	Licensed chemical dependency professionals, social workers, peer recovery counselors, mental health counselors, and nurses.	ADS,licensed 'qualified professional'	General by LAc	May be provided within the provider's current scope of practice, working in or in collaboration with behavioral health and healthcare agencies or other state-approved programs or agencies.
SC	statutory	Nationally recognized training program in auricular detoxification therapy for the treatment of chemical dependency detoxification and	21+	Auricular Detoxification Therapy, Auricular therapist / ADS, licensed	Direct by LAc or MD	Must be provided for the purposes of treatment of chemical dependency, detoxification, and substance abuse.

		substance abuse, as approved by the board, CNT.				
SD		Not regulated	anybody			No restrictions.
TN	statutory	Board-approved training program in auricular detoxification acupuncture. To become board-approved, the training program must meet or exceed standards of training set by NADA.	anybody	ADS, certification	General by LAc	Must be provided in a hospital, clinic, or treatment facility that provides comprehensive alcohol and substance abuse or chemical dependency services, including counseling.
TX	statutory	Successfully completed a training program in acupuncture detoxification that meets guidelines approved by the medical board.	Licensed Social Workers, Licensed Professional Counselors, Licensed Psychologists, Licensed Chemical Dependency Counselors, Licensed Vocational Nurses, and Licensed Registered Nurses if NT. Continuing education is required and includes six hours of education in the practice of acupuncture and a course in either CNT or universal	ADS, certification	Removed Sec. 205.303(b)(2) "under the supervision of a licensed acupuncturist or physician" in 2023.	For the treatment of addiction, trauma, or physical, emotional, or psychological stress.  Texas passed a bill, effective 9/1/23, to expand the scope. <a href="https://capitol.texas.gov/tlodocs/88R/billtext/html/HB01106S.htm">https://capitol.texas.gov/tlodocs/88R/billtext/html/HB01106S.htm</a>

			infection control precaution procedures.			
UT	statutory	NADA or POCA AAT Training approved.	MD, DO, Chiropractor, Naturopathic Physician, Licensed Acupuncturist, RN, APRN, LPN, PA, Psychologist, LCSW, CSW, LMFT, CMHC, SUDC, ASUDC.			Adjunct treatment for substance use disorders and mental health-trauma  <a href="https://le.utah.gov/~2022/bills/static/HB0195.html">https://le.utah.gov/~2022/bills/static/HB0195.html</a>
VT	statutory	Deregulated 7/1/19 (1) has appropriate training in CNT, (2) uses sterile, single-use needles, without reuse, (3) does not claim to treat any disease, disorder, infirmity or affliction by using auriculotherapy, (4) does not use any letters, words, or insignia indicating or implying that he or she is an acupuncturist, and (5) does not make any statement implying that his or her practice of auriculotherapy is licensed, certified or otherwise overseen by the State of VT.	anybody		none	none
VA	statutory	NADA or an equivalent	anybody		none	Exempt from regulation as an

		certifying body, including POCA.				acupuncturist as long as practitioners only use 5NP.
WA	physician delegation					
WV	statutory	NADA or equivalent – POCA approved.	Must be 18yrs old, - Physicians Asst., Dentist, Registered Nurse, Practical Nurse, Psychologist, Occupational therapist, social worker, professional counselor, emergency medical services professional, correctional medical providers and any other profession the board determines is eligible to engage in the practice of auricular acudetox		none	Treatment of substance abuse, alcoholism, chemical dependency, detox, behavioral therapy, or trauma recovery.
WY	statutory	NADA or equivalent.	anybody	Auricular Acupuncture	none	Must be provided within the scope of the health care provider's practice for the purpose of treating mental and emotional health, post and acute trauma, and/or substance abuse and chemical dependency.
WI	physician delegation					



---

---

**MEMORANDUM**

---

**TO:** Acupuncture Advisory Committee, Oregon Medical Board  
**SUBJECT:** NCCAOM Route 4, Apprenticeship Training  
**DATE:** May 20, 2025

---

The Oregon Medical Board received two requests to review the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) Route 4 pathway, see attached request forms.

**Route 4 Background**

NCCAOM introduced the Route 4 pathway in 2007 as part of a broader effort to ensure inclusivity and recognize qualified practitioners who obtained their education and training outside of ACAHM-accredited institutions. This pathway was specifically designed for individuals who received their training through a combination of formal instruction and supervised clinical apprenticeship, especially those practicing acupuncture prior to widespread accreditation standards in the United States.

The intent behind Route 4 was to provide a viable path to national certification for experienced practitioners who might not meet the eligibility criteria under more traditional academic routes, while still upholding the rigor and competency standards required for safe and effective practice.

Route 4 allows eligibility to sit for NCCAOM examinations through a three-year formal education and apprenticeship training acupuncture program:

- **Apprenticeship Training:** maximum two years or no less than one year. One apprenticeship year is a minimum of 1,000 contact hours over a 12-month period, defined as clock hours that the apprentice spends under the direct supervision of the preceptor. Off-site supervision is not included.
- **Formal Education:** a minimum of one full year (635 hours) and no more than two full years (1,270 hours) of formal education from an accredited acupuncture degree program.

Since 2020, NCCAOM reports 21 applicants have sat for their exams using the Route 4 pathway, making up less than 1 percent of all NCCAOM exam applicants.

An excerpt from NCCAOM's Certification Handbook outlining routes to certification is provided below along with NCCAOM specifications/workbook for Route 4.

**Other State Licensure Requirements**

State acupuncture licensure requirements vary, but NCCAOM staff report that at least ten states recognize NCCAOM Route 4 for acupuncture licensure purposes.

Idaho, Utah, and Missouri only require NCCAOM certification for licensure. They do not require specific education and accept all NCCAOM routes for licensure, see Idaho law 54-4706, Utah laws 58-72-302 and R156-72-302a and Missouri law 20 CSR 2015-2.010. Idaho also requires completing an acupuncture internship or pre-professional practice program, coordinated program, or such other equivalent experience as may be approved by the board.

New Hampshire allows an application to be reviewed by the Board to approve a combination of education and apprenticeship training to qualify for licensure, see New Hampshire law Acp 302.05.

Specific information was not collected from New Jersey, Rhode Island, Illinois, Tennessee, Georgia, and Vermont which, according to NCCAOM staff, also recognize NCCAOM Route 4 for acupuncture licensure purposes in some capacity.

Additionally, California allows approved educational and training programs to satisfy the licensure requirements and specifies detailed requirements for the training program (not linked to NCCAOM Route 4), see CA Bus & Prof Code §4938 and §4940.

### **OMB Qualifications Rule**

The Oregon Medical Board's acupuncture qualification rule, OAR 847-070-0016 attached below, requires a person to graduate from an acupuncture program that satisfies the standards of the Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM). Although NCCAOM Route 4 would allow one to sit for the required NCCAOM exams for Oregon licensure, they would not have met the OMB rule requirement to have graduated from an accredited program.

ORS 677.759 gives the OMB authority to examine the qualifications of an applicant and determine who shall be authorized to practice acupuncture. The OMB must also adopt rules governing the issuance of a license to practice acupuncture.

### **Does the Acupuncture Advisory Committee recommend exploring apprenticeship training options?**

#### **If so, does the Committee recommend:**

- **A particular pathway for including apprenticeship training options in lieu of graduating from an ACAHM accredited acupuncture program.**
- **A work group to review and discuss apprenticeship training options and form recommendations.**
- **Something else?**

## **OAR 847-070-0016 Qualifications (Acupuncture)**

(1) An applicant for licensure as an acupuncturist must have:

(a) **Graduated from an acupuncture program that satisfies the standards of the Accreditation Commission for Acupuncture and Herbal Medicine (ACAHM)**, or its successor organization, or an equivalent accreditation body that are in effect at the time of the applicant's graduation. An acupuncture program may be established as having satisfied those standards by demonstration of one of the following:

(A) Accreditation, or candidacy for accreditation by ACAHM at the time of graduation from the acupuncture program; or

(B) Approval by a foreign government's Ministry of Education, or Ministry of Health, or equivalent foreign government agency at the time of graduation from the acupuncture program. Each applicant must submit their documents to a foreign credential equivalency service, which is approved by the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) for the purpose of establishing equivalency to the ACAHM accreditation standard. Acupuncture programs that wish to be considered equivalent to an ACAHM accredited program must also meet the curricular requirements of ACAHM in effect at the time of graduation.

(b) **Current certification in acupuncture by the NCCAOM.** An applicant will be deemed certified by the NCCAOM in Acupuncture if the applicant has passed the NCCAOM Acupuncture Certification Examinations or has been certified through the NCCAOM Credentials Documentation Examination.

(A) The applicant must pass three (3) NCCAOM Certification exam components:

Biomedicine, Foundations of Oriental Medicine, and Acupuncture with Point Location.

(B) The applicant has no more than four attempts to pass each component of the NCCAOM Certification Exam listed in subsection (A) of this section. If the applicant does not pass each component of the NCCAOM Certification Exam within four attempts, the applicant is not eligible for licensure.

(C) An applicant who has passed each component of the NCCAOM Certification Exam but not within the four attempts required by this rule may request a waiver of this requirement if the applicant passed each component of the exam within five attempts and:

(i) Has obtained a Doctor of Acupuncture and Oriental Medicine degree; or

(ii) Experienced extenuating circumstances that do not indicate an inability to safely practice acupuncture as determined by the Board.

(2) **An applicant who does not meet the criteria in OAR 847-070-0016(1)** must have the following qualifications:

(a) **Five years of licensed clinical acupuncture practice in the United States.** This practice must include a minimum of 500 acupuncture patient visits per year. Documentation must include:

(A) Two affidavits from office partners, clinic supervisors, accountants, or others approved by the Board, who have personal knowledge of the years of practice and number of patient visits per year; and

(B) Notarized copies of samples of appointment books, patient charts and financial records, or other documentation as required by the Board; and

(b) **Practice as a licensed acupuncturist in the U.S. during five of the last seven years prior to application for Oregon licensure.** Licensed practice includes clinical practice, clinical supervision, teaching, research, and other work as approved by the Board within the field of acupuncture and oriental medicine. Documentation of this practice will be required and is subject to Board approval; and

(c) **Successful completion of the ACAHM western medicine requirements in effect at the time of graduation from the acupuncture program,** unless the applicant graduated from a non-accredited acupuncture program prior to 1989; and

(d) **Current certification in acupuncture by the NCCAOM.** An applicant will be deemed certified in Acupuncture by the NCCAOM if the applicant has passed the NCCAOM Acupuncture Certification Examinations or has been certified through the NCCAOM Credentials Documentation Examination.

(A) The applicant must pass three (3) NCCAOM Certification exam components: Biomedicine, Foundations of Oriental Medicine, and Acupuncture with Point Location.

(B) The applicant has no more than four attempts to pass each component of the NCCAOM Certification Exam listed in subsection (A) of this section. If the applicant does not pass each component of the NCCAOM Certification Exam within four attempts, the applicant is not eligible for licensure.

(C) An applicant who has passed each component of the NCCAOM Certification Exam but not within the four attempts required by this rule may request a waiver of this requirement if the applicant passed each component of the exam within five attempts and:

- (i) Has obtained a Doctor of Acupuncture and Oriental Medicine degree; or
- (ii) Experienced extenuating circumstances that do not indicate an inability to safely practice acupuncture as determined by the Board.

### **ORS 677.759 License required; qualifications; effect of using certain terms; rules.**

(1) No person shall practice acupuncture without first obtaining a license to practice medicine and surgery or a license to practice acupuncture from the Oregon Medical Board except as provided in subsection (2) of this section.

(2) Notwithstanding subsection (1) of this section, the board may issue a license to practice acupuncture to an individual licensed to practice acupuncture in another state or territory of the United States if the individual is licensed to practice medicine and surgery or acupuncture in the other state or territory. The board shall not issue such a license unless the requirements of the other state or territory are similar to the requirements of this state.

(3) **The board shall examine the qualifications of an applicant and determine who shall be authorized to practice acupuncture.**

(4) Using the term “acupuncture,” “acupuncturist,” “Oriental medicine” or any other term, title, name or abbreviation indicating that an individual is qualified or licensed to practice acupuncture is prima facie evidence of practicing acupuncture.

(5) In addition to the powers and duties of the board described in this chapter, **the board shall adopt rules consistent with ORS 677.757 to 677.770 governing the issuance of a license to practice acupuncture.**

To: Oregon Medical Board Acupuncture Advisory Committee  
From: Travis Kern, MAcOM, DiplOM, LAC  
Re: Follow-up Response on NCCAOM Route 4 Pathway  
Date: 07/15/2025

Dear Members of the Acupuncture Advisory Committee,

Thank you for your time and thoughtful discussion during the June 6th meeting regarding the NCCAOM Route 4 apprenticeship pathway. I regret that I was unable to attend due to a scheduling miscommunication. I apologize for bringing this issue to your attention again, but I think the importance of the request calls for another pass at this discussion. Having now reviewed the meeting recording in full, I appreciate the concerns that were raised and would like to offer several clarifications and responses in hopes of reopening a deeper consideration of this issue.

I also want to acknowledge that while Grace Caswell's letter was given a detailed discussion, my own submission on this matter was not addressed directly. I was not aware that I could write a letter independently of the request form I filled out online, so I'd like to take this opportunity to clarify my original position and respond specifically to the three primary areas of concern that emerged in the June meeting: public safety, consistency with other OMB licensees, and the structure and regulation of the Route 4 apprenticeship pathway.

### **On the question of public safety**

Concerns were raised about whether allowing licensure via Route 4 might compromise public safety. I would respectfully counter that this concern, while understandable, is based more on assumption than on evidence. The Route 4 pathway is not an unregulated, casual apprenticeship track. It is a rigorously defined, NCCAOM-administered process that includes detailed curriculum and clinical competency requirements; documentation of hours equivalent to ACAHM-accredited programs; a blend of both formal education and supervised clinical apprenticeship; and evaluation and approval by the NCCAOM before a candidate is even allowed to sit for the national certification exams.

Graduation from an ACAHM-accredited school, while valuable, does not in itself guarantee clinical safety. The national board exams remain the actual competency filter. If the NCCAOM—the same body Oregon already trusts to evaluate practitioner readiness—has judged the Route 4 framework to be sufficient preparation for its exams, then safety concerns should not be extrapolated based solely on educational format. In short: Route 4 is not a shortcut, and its graduates are not inherently less competent or less safe. They are evaluated by the same national standards and held to the same professional obligations.

### **On the question of OMB consistency**

It was also suggested that allowing this pathway would make acupuncture the only profession under the Oregon Medical Board to permit a non-academic route to licensure. But this overlooks a key point: the OMB already relies on the NCCAOM to determine who is eligible to sit for

certification in acupuncture. This is not a special carve-out. It is simply an extension of the existing relationship between OMB and the field's national certifying body. If NCCAOM has determined that Route 4 is a legitimate and structured path to competence—and if that determination applies to practitioners across multiple other states—then allowing its use in Oregon is not inconsistent with OMB standards. On the contrary, it shows that the OMB is listening to professional consensus and honoring the field's own regulatory processes. Oregon would not be acting unilaterally or lowering its standards. It would be aligning with other jurisdictions and continuing to defer, as it already does, to the expertise of NCCAOM.

#### **On the question of robust training standards in Route 4**

While much of the June committee discussion raised concerns about the quality and oversight of the Route 4 pathway, a closer look at the actual program design reveals a robust, clearly defined, and nationally administered framework that reflects the same professional standards Oregon already relies upon through ACAHM-accredited education. The idea that this pathway is inherently inferior or under-regulated does not stand up to scrutiny. Route 4 requires at least one full academic year of formal training at an ACAHM-accredited institution and supplements that with a 2,000 hours of supervised clinical apprenticeship. Alternatively, students can choose to do two years at a school with 1000 hours of apprenticeship. The program allows flexibility for both student needs and educational design limitations. Preceptors must be licensed acupuncturists with at least 5 years of experience and 100 patients under their belts with a minimum of 500 acupuncture treatments and must also be active NCCAOM diplomates in good standing. Detailed logs, case tracking forms, and curriculum documentation are required throughout the training process, and the entire package must be reviewed and approved by NCCAOM before a candidate can sit for board exams. I've included a chart below to compare these requirements to the ACAHM requirements for schools.

	NCCAOM Route 4*	ACAHM- Accredited School**
Total Instruction Hours for Acupuncture Certification	<b>2635</b> (1 year school, 2 years apprenticeship) or <b>2270</b> (2 years school, 1 year apprenticeship)	1905
Total Hours for Acu + Herbs	+1000 hours (3635 or 3270)	2625
Clinical Experience for Acu	2000 or 1000	660
Didactic Training for Acu	635 or 1270	1245
Mentor/Instructor Credentials	5 years of practice immediately preceding preceptorship, 100 individual patients, 500 minimum acu treatments	"Have relevant credentials and experience"

\* Please see attachment for NCCAOM Apprenticeship Workbook

\*\*ACAHM [Standard 7](#) and [Standard 8](#)

This structure is not casual or improvised—it is intentional, documented, and explicitly built to mirror, or exceed, the rigor of ACAHM standards through a different delivery model. Apprenticeship in this context is not something tacked on after school; it is a carefully guided and deeply supervised part of the candidate's core clinical formation. And just as ACAHM-accredited schools must track clinical competencies, ensure supervised treatment hours, and meet instructional benchmarks, Route 4 candidates must fulfill those same outcomes—just through a model that emphasizes one-on-one clinical mentorship and flexibility in educational delivery. To suggest that this model lacks oversight is to overlook the fact that Route 4 documentation requirements often exceed what students are required to produce in conventional program structures.

What this pathway offers is not a shortcut, but an alternative route to the same destination: board-eligible, nationally certified, safe, and competent acupuncturists. The standards remain high; the structure is already built. If anything, Route 4 demands more initiative, documentation, and individualized accountability than traditional schooling. This is not an erosion of professionalism—it is a different mode of cultivating it, one that may be especially suited to a field with deep roots in mentorship, diversity of practice, and adaptation across cultural and educational contexts.

### **This question's relevance to the larger acupuncture field**

Lastly, I want to speak directly to the question of whether licensure policy has any meaningful connection to the national education crisis in acupuncture. While one speaker mentioned efforts by NUNM to make their program more accessible through online coursework—a commendable step—I would note that these efforts address physical access, not financial access. In my role as the board chair of OCOM in its final years, I had insight into the budgets and financial structures of several leading Chinese medicine and alternative medicine programs in our region as we looked for partnerships and efficiencies to stem the tide of declining enrollment and ballooning costs. I can say unequivocally from those reviews: tuition is not becoming more affordable. The regulatory environment makes it structurally impossible for most programs to cut hours or streamline delivery without risking their accreditation. The result is that schools cannot meaningfully reduce tuition costs, even when they want to. Even schools trying to innovate are trapped within a system that no longer fits the economic realities facing new students.

And here is the key concern: educational reform is inherently slow. Developing new curricula, gaining accreditation, and building new training models takes years. Even with OMB's approval of this pathway, apprenticeship leaders will need to build out relationships with schools like NUNM and Bastyr to create the educational certificate necessary for apprenticeship and the preceptors will need to be recruited and the course material will need to be created and implemented.

If we wait until the crisis has further deepened to act, it will already be too late to pivot. Schools will continue to close and at a faster rate. The next generation of practitioners will dwindle, and our profession will eventually be absorbed into larger medical groups like MDs and PTs until we are a small, diminished version of what we once were and certainly compared to what we could

have been. Innovation will be stifled by the simple fact that we failed to act when there was still time.

I know that these predictions are gloomy but I have been on the inside of this problem for nearly a decade, and I have watched as the people who are supposed to be safeguarding and supporting our profession have failed to grasp the scale of the problem. Students applying for diplomates from NCCAOM have declined by nearly half over the last 20 years, and I have been in the room as schools like OCOM and AOMA had to figure out how to survive, efforts which ultimately failed. It is not an exaggeration to say that without change, even small ones like allowing this pathway toward licensure to work in Oregon, the acupuncture profession will look much worse in the next generation than at any other time in our history in the US. We are all part of an acupuncture ecosystem that cannot afford to say that any other part of the system is not our problem. As practitioners yourselves, you know that there is nothing more deeply Chinese medicine than to understand that all the parts of a body are connected and cannot be treated as isolates except at risk of disease and harm.

NCCAOM has already built the infrastructure for a parallel, robust, apprenticeship-informed model of education. But because most states don't allow licensure through Route 4, no institution has incentive to implement that model. By allowing Route 4 licensure in Oregon, the OMB would not be lowering standards—it would be enabling new standards to emerge. That small but meaningful policy change would give schools and prospective students a signal that thoughtful, competency-based alternatives to the traditional model are welcome here.

The Route 4 pathway is not a threat to professional standards. It is an opportunity to safely expand access, reflect our field's diversity of learning, and reduce the bottlenecks of an unsustainable educational monopoly. As the board continues its important work of protecting the public and upholding the integrity of our field, I hope you will take a closer and more open look at Route 4—not as a compromise, but as a thoughtful, structured evolution already endorsed by the national body you rely on.

I would welcome any opportunity to continue this conversation and would be glad to appear before the committee or speak directly with board members to clarify any point made here.

Thank you again for your time and dedication.

Warmly,

Travis Kern, MAcOM, DiplOM, LAc

Owner, Root and Branch Chinese Medicine

Former Chair of the Board

Oregon College of Oriental Medicine

[travis.kern@rootandbranchpdx.com](mailto:travis.kern@rootandbranchpdx.com), 504-451-1739



NCCAOM



## **NCCAOM Certification for Route 4 Applicants**

**Combination of Formal Education  
and**

**Apprenticeship**

**U.S. and International Applicants**

**And**

**Conversion to Oriental Medicine**

**Workbook**

*National Standards of Competence in  
Acupuncture and Oriental Medicine*

June 1, 2023

2001 K Street NW, 3rd Floor North  
Washington, DC 20006  
(888) 381-1140  
[www.nccaom.org](http://www.nccaom.org)



## NCCAOM® Mission

*To assure the safety and well-being of the public and to advance and advocate for the professional practice of NCCAOM Board-Certified Acupuncturists™ by promoting established national standards focused on competence and credentialing.*

## NCCAOM® Vision

*NCCAOM Board-Certified Acupuncturists™ will be globally recognized and integral to person-centered healthcare and accessible to all members of the public. NCCAOM Board Certification will be nationally recognized by all employers and government entities as the standard for acupuncturists.*

## NCCAOM® Core Values

*Through its commitment to lifelong learning and the highest quality of credentialing standards for public safety, the NCCAOM upholds the values of integrity, community, service, inclusiveness, advocacy, and accountability in all of its interactions and relationships.*



The NCCAOM programs in Oriental Medicine, Acupuncture, and Chinese Herbology are accredited by the National Commission for Certifying Agencies (NCCA) and carry the NCCA seal.

### Non-Discrimination Policy

The NCCAOM does not discriminate on the basis of race, color, age, gender, sexual orientation, political or religious beliefs, handicap, marital status, national origin, or ancestry.



## NCCAOM® Formal Education and Apprenticeship Workbook

### Table of Contents

NCCAOM® Mission .....	2
Introduction .....	4
<b>About the NCCAOM®</b> .....	4
<b>Apprenticeship Training for Conversion From Acupuncture Certification to Oriental Medicine Certification</b> .....	6
<b>Route 4 Combination of Formal Education and Apprenticeship for United States and International Applicants</b> .....	6
Apprenticeship Preceptor Pre-Registration .....	7
<b>Apprenticeship Preceptor Qualifications</b> .....	7
Apprenticeship Program Requirements .....	8
<b>Apprentice's Increasing Responsibilities</b> .....	8
<b>Preceptor's Responsibilities</b> .....	8
<b>Orientation</b> .....	9
<b>Curriculum Design Program Requirements:</b> .....	9
<b>Clinical Supervision and Teaching</b> .....	10
<b>Evaluation of Apprentice's Performance</b> .....	11
Apprentice's Responsibilities .....	11
NCCAOM REQUIRED FORMS TO BE USED BY .....	13
PRECEPTOR AND APPLICANT .....	13

## Introduction

Achieving NCCAOM certification does not guarantee a license to practice. **Many states do not accept apprenticeship training**, it is the applicant's responsibility to contact the state in which they wish to practice verifying licensure requirements. NCCAOM strives to help applicants achieve a rigorous and valuable experience, yet the use of this workbook does not guarantee eligibility or success on exams. This should be used as a guidebook for the experience.

## About the NCCAOM®

Founded in 1982 as a non-profit certification organization, the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM®) is widely accepted as the most influential leader in the field of certification for acupuncture and herbal medicine. There are currently over 20,000 active NCCAOM Diplomates (NCCAOM certificate holders) practicing with a current NCCAOM certification. The NCCAOM is responsible for the development and administration of the Acupuncture, Chinese Herbology, and Oriental Medicine Certification Programs. The NCCAOM evaluates and attests to the competency of its nationally board-certified Diplomates through rigorous eligibility standards and demonstration and assessment of the core knowledge, skills and abilities expected for an entry level practitioner of acupuncture and herbal medicine. The Acupuncture, Chinese Herbology and Oriental Medicine NCCAOM certification programs are accredited by the National Commission for Certifying Agencies (NCCA) and carry the NCCA seal.



In order for the NCCAOM certification programs in Acupuncture, Chinese Herbology, and Oriental Medicine to remain accredited by the NCCA, the NCCAOM must adhere to strict national accreditation standards for administration of the certification programs and examination development. All Diplomate level certification examinations must meet content validity standards set forth by NCCA. As a requirement of accreditation for the NCCAOM certification programs, the NCCAOM must submit annual reports to NCCA, and the certification programs must undergo a full NCCA reaccreditation every five years. Additional information is available at the [Institute for Credentialing Excellence](#) website. All practitioners certified by the NCCAOM are committed to responsible and ethical practice, to the growth of the profession within the broad spectrum of American



healthcare, and to their own professional growth. All Diplomates, applicants and candidates for certification are bound by the NCCAOM® Code of Ethics and the NCCAOM® Grounds for Professional Discipline. The NCCAOM addressed issues of Diversity, Equity, and Inclusion (DEI) within the acupuncture and herbal profession and formed the NCCAOM® Diversity, Equity and Inclusion Statement (PDF).

## About Apprenticeship Training

An Apprenticeship is defined as clinical and didactic training completed under a **qualified** preceptor who assumes responsibility for the theoretical and practical education of the apprentice. The curriculum is designed by the preceptor and should include [ACAAM Standard 7: Program of Study, 7.04 Professional Competencies](#) and the competencies identified in the [NCCAOM® Expanded Exam Content Outlines](#). Once your apprenticeship is completed, organize the apprenticeship documents in the order identified in the attached NCCAOM Apprenticeship Workbook, create a PDF (one or two as needed depending on size) portfolio. Bookmarked and page number the files and upload at the time of application submission. If the documentation is not in a PDF format and bookmarked per each document submitted (ex: Quiz 1, Test 2, Quiz 3, etc., Case study 1, Case study 2, etc.), the file will be rejected and returned.

A preceptor is a licensed practicing acupuncturist that takes on the additional role of educator of an apprentice. The job of a preceptor is to work one-on-one with an apprentice to help them develop clinical competencies and gain practical experience by working directly with patients in a clinical setting. In order to train apprentices effectively, a preceptor needs to understand the learning outcomes and competencies required in a preceptor-apprentice clinical training. Preceptors should design a clinical experience based on learning outcomes and clinical skills required of an acupuncturist in practice. They should also design appropriate methods of assessment and evaluation that measure how an apprentice is performing in a clinical setting. The main goal of the learning component of this type of program should be how to integrate the knowledge, skills and abilities into practice. These clinical opportunities are a unique and rich way to educate an apprentice.

See the detailed preceptor, education, and documentation requirements in this workbook. For additional information concerning apprenticeship training please contact NCCAOM by email at [info@thenccaom.org](mailto:info@thenccaom.org).

## Apprenticeship Training for Conversion From Acupuncture Certification to Oriental Medicine Certification

Chinese Herbology program for conversion to Oriental Medicine: minimum one (1) year.

A year is defined as 1,000 contact hours. Contact hours are defined as clock hours that the apprentice spends under the direct supervision of the preceptor. Off-site supervision is not included. All apprenticeship training requirements can be found in this handbook below Route 4.

The Route 5: Conversion from Acupuncture Certification to Oriental Medicine Certification Handbook containing all eligibility requirements is located on the NCCAOM website. [Click Here](#) The NCCAOM also provides, on its website, instructions for [How to Submit Application for Conversion](#).

## Route 4 Combination of Formal Education and Apprenticeship for United States and International Applicants

Applicants using Route 4 to reach eligibility to sit for NCCAOM examinations require Formal Education and Apprenticeship training. Route 4 is a three (3) year program and may only be used for initial NCCAOM Certification in Acupuncture.

One (1) apprenticeship year is equal to a minimum of 1,000 contact hours over a 12-month period. If more than 1,000 contact hours are completed over the 12-month period, it is still equal to one (1) year of apprenticeship. Contact hours are defined as clock hours that the apprentice spends under the direct supervision of the preceptor. Off-site supervision is not included. The apprenticeship preceptor and documentation requirements are described in this workbook.

One (1) formal education year is equal to 635 hours completed in an accredited acupuncture degree program and submitted on an official transcript. Hours are not prorated (635 = 1, year; minimum 1,270 = 2 years).

### Apprenticeship Training

1. Acupuncture program: maximum two (2) years or no less than one (1) year.



## Formal Education

1. Acupuncture program: a minimum of one (1) full year and no more than two (2) full years of a formal education from an accredited acupuncture degree program.

A [formal academic program](#) must meet the criteria described in *Route #1: Formal Education: Graduate from United States* or *Route #2: Formal Education: International Applicants*.

## Apprenticeship Preceptor Pre-Registration

The NCCAOM does not approve or accredit educational programs, but rather, verifies that the educational program documentation requirements are met. First, create an NCCAOM online account to obtain your NCCAOM ID number. DO NOT complete the NCCAOM online application at this time. Applicants are asked to email NCCAOM [info@thenccaom.org](mailto:info@thenccaom.org) to state their intent to apply for NCCAOM Certification via Route 4. Please include your NCCAOM ID number in your email.

The NCCAOM® *Formal Education and Apprenticeship Workbook* is available to the applicant and preceptor to plan and document the combination of formal education and apprenticeship training.

## Apprenticeship Preceptor Qualifications

United States:

Must be an active NCCAOM Diplomate or a licensed acupuncturist in good standing and free from disciplinary action by the NCCAOM and their state acupuncture regulatory board.

International:

Must be registered or licensed by, and in good standing with, a government, oversight agency or association to practice acupuncture, as applicable in the country of his or her practice.

## Minimum Preceptor's Clinical Practice Requirements – U.S. and International

- A. During each of the five (5) consecutive years immediately prior to becoming the applicant's preceptor, the preceptor must have practiced on a minimum of 100 different patients:

Acupuncture Certification: performed a minimum 500 acupuncture treatments

Conversion to Oriental Medicine Certification: performed a minimum 500





Chinese herbology consultations/prescriptions.

**OR**

During his or her career to-date, the preceptor must have practiced on a minimum of 250 different patients:

Acupuncture Certification: a minimum of 5,000 acupuncture treatments.

Conversion to Oriental Medicine Certification: a minimum of 5,000 Chinese herbology consultations/prescriptions.

**AND**

- B. The preceptor may be in a solo practice, a group practice, a hospital or community clinic, or an integrative healthcare setting. During each year of the apprenticeship training program, the preceptor must practice on a minimum of 100 different patients:

Acupuncture Certification: perform a minimum of 500 acupuncture treatments

Conversion to Oriental Medicine Certification: perform a minimum of 500 Chinese herbology consultations/prescriptions.

**NOTE:** Specialized practice (e.g., treatment for addiction or smoking withdrawal) may be included in the preceptor's practice; however, such specialized limited treatments do not count toward the required 500 acupuncture or 500 Chinese herbology patient visits per year.

## Apprenticeship Program Requirements

### Apprentice's Increasing Responsibilities

The apprentice's patient contact responsibilities must increase over the course of the program. By completion of the program, the apprentice shall have demonstrated the ability to perform comprehensive patient interviews, diagnoses and treatments under the preceptor's supervision.

### Preceptor's Responsibilities:

Preceptor responsibilities include the creation of a curriculum (competencies to be taught), orientation, supervision, teaching, evaluation, and tracking of the apprentice's performance in the clinical setting.

A notarized *NCCAOM® Preceptor Registration Form* is required to be completed by the preceptor and submitted with the following documents:

- A. At least a paragraph that describes the preceptor's practice and work





environment for the prior five (5) consecutive years, including the type of practice and the number of patient visits per year (enter on page 2 of the form).

- B. Copy of the preceptor's current state license discipline free or license to practice in their country.
- C. Notarized affidavits from two healthcare professionals. The affidavits must include written testimony based on personal knowledge of dates, volume, scope and type of practice of the preceptor.
- D. Curriculum Vitae (CV) or Resume
- E. Copy of the preceptor's current business license (private practice) or
- F. Employment verification letter on the employer's letterhead to include position, dates employed and signed by the employer.

### Orientation

- 1. The preceptor should meet with the apprentice for orientation prior to the start of the apprenticeship and clinical experience.
- 2. During orientation, the preceptor should:
  - A. Discuss and agree on the overall apprenticeship experience (Complete the *NCCAOM Apprenticeship Experience Outline form*)
  - B. Discuss guidelines for review and feedback of the apprentice's performance.
  - C. Review policies, procedures, and practice expectations specific to the preceptor's clinical practice.
  - D. Review expectations for documentation.
  - E. Review apprentice's assignment plan.
  - F. Review apprentice's previous education or clinical experiences.
  - G. Review learning outcomes expected of apprentice.
  - H. Perform an initial assessment of the apprentice's current level of proficiency through observation of performance and through directed, guided questioning.
  - I. Involve the apprentice in assessment/validation/decisions about learning strategies employed by the preceptor.
  - J. Review the clinical site's educational and state licensure requirements, parking, dress code, etc.
  - K. Develop a clinical schedule with the apprentice.

### Curriculum Design Program Requirements:

- 1. The Apprenticeship training program must include a minimum of 1,000 contact hours per year (no less or the year will be denied).
- 2. The training curriculum must incorporate:
  - A. NCCAOM's exam extended content outlines (located on the [NCCAOM website](#)) to include the core competencies and



B. [ACAHM Standard 7.04 Professional Competencies.](#)

3. Enter on the *NCCAOM Curriculum Design and Tracking Form*, the competencies to be taught and their objectives. Add competencies and objectives as needed throughout the apprenticeship training.
4. In addition to the apprenticeship training, the Preceptor should encourage the apprentice to complete educational coursework in pharmacology, pathology, diagnostics, immunology, genetics, pathophysiology, counseling, and nutrition
5. Record and submit a bibliography of all textbooks used during the apprenticeship training.
6. Create the assessments (multiple choice, essay, clinical demonstration) for the apprentice to demonstrate that each competency has been understood/assimilated (theory) and/or acquired (clinical practice).

### Clinical Supervision and Teaching

The preceptor should:

1. Provide input to the apprentice regarding their ability to meet learning outcomes throughout the clinical experience (Complete the *NCCAOM Apprenticeship Daily Attendance and Training Tracking Log*).
2. Assess the competence of the apprentice in providing care to clinic patients.
3. Ensure that the apprentice's performance is consistent with standards set regarding policies, procedures, and practice expectations for patient care, education, and any other responsibilities they may have in the clinic.
4. Direct the progression of student assignments based on both the preceptor's and co-worker's evaluation of readiness, knowledge, and skill competencies (Complete for each 6-month period the *NCCAOM Apprentice Evaluation Form*).
5. Mentor the apprentice in the performance of their roles and responsibilities.
6. Provide feedback on the accuracy and completeness of the apprentice's documentation of all assignments and clinical experiences (Complete the *NCCAOM Curriculum Design and Tracking Form* and *NCCAOM Clinical Internship Form*).
7. Assist the apprentice in identifying 5 unique patients per each training year and obtain written approval from these patients to participate anonymously in the new patient record interviews, diagnosis, treatment, record keeping and follow-up visit (Complete the *NCCAOM New Patient Record Form* with *NCCAOM Follow-Up Patient Visit Form*). Identify the apprentice's level of participation in each step performed to demonstrate increased level of responsibility over time.
8. Assist the apprentice in identifying 3 unique patients per each training year and obtain written approval from patients to participate anonymously in the required Case Studies (Complete the *NCCAOM Apprenticeship Case History Form*). Identify the



apprentice's level of participation in each step performed to demonstrate increased level of responsibility over time.

9. Meet regularly with the apprentice to discuss specific learning outcomes and experiences, such as:
  - A. The ability to accurately document clinical findings.
  - B. The ability to demonstrate clinical skills and abilities.
  - C. The ability to understand biomedical theory and how it relates to the treatment of patients.
  - D. The ability to develop patient-centered treatment strategies, including the ability to use critical thinking for decision-making.
  - E. The ability to communicate and collaborate effectively with preceptors, patients, staff, and other health care professionals
  - F. The ability to understand professional issues related to acupuncture practice.
  - G. The development of plans for ongoing lifelong learning for continued professional growth.

### **Evaluation of Apprentice's Performance**

1. Assess the apprentice's progress through formative and summative assessment methods as determined by the preceptor that directly reflect the demonstration of the learning outcomes set in the apprenticeship.
  - A. Documentation required: Five (5) actual scored assessments per each year of apprenticeship training that show correct and incorrect (corrected) answers/information. Each assessment/test/exam must reflect knowledge of a different competency, and increased level of knowledge.
2. Submit a final formal, written evaluation at the completion of the apprenticeship and summarize the information on the: *NCCAOM Apprentice Evaluation Form*.

### **Apprentice's Responsibilities:**

The apprentice is responsible for being self-directed in meeting all outlined learning outcomes. They will actively seek learning opportunities to meet these outcomes. The apprentice is accountable for their behavior and performance in the clinical setting.

The apprentice will:

1. Discuss clinical learning outcomes and negotiate an agreeable schedule with the preceptor prior to the start of training.
2. Demonstrate professional behavior at all times.



3. Take notes as able during training, which can be used for review and study purposes (**submit a sample of these typewritten notes as required documentation**).
4. Demonstrate accountability for thoroughness and timeliness in completing assigned responsibilities.
5. Maintain and submit the *NCCAOM Apprenticeship Daily Attendance and Training Tracking Log*, of clinical skills, activities, and educational experiences attended throughout the duration of the apprenticeship.
6. Demonstrate progressive independence and competency during the apprenticeship.
7. Work with the Preceptor to complete five (5) unique *NCCAOM New Patient Record Forms* with *NCCAOM Follow-up Patient Visit Forms* for each 1,000 contact hours (**Submit 5 for each year that reflect increasing level of knowledge, skills and independence**).
8. Work with the Preceptor to complete three (3) unique *NCCAOM Apprenticeship Case History Forms* (**must use templates and process provided**) for each 1,000 contact hours (**Submit 3 for each year that reflect increasing level of knowledge, skills and independence**). The patients used for the Case Histories must be different from the patients included in the *NCCAOM New Patient* with *NCCAOM Follow-up Visit* documentation as described above.
9. Actively seek input into the evaluation process and participate in self-evaluation of strengths and identified areas for professional growth with preceptor.
10. Provide feedback to the preceptor concerning teaching methods and clinical training.
11. **Complete and request** proof of completion of the Clean Needle Technique (CNT) course offered by the Council of Colleges for Acupuncture and Herbal Medicine (CCAHM) [www.ccahm.org](http://www.ccahm.org). The certificate of completion must be sent directly from the CCAHM to NCCAOM after the online *NCCAOM Application for Certification* has been completed and submitted.
12. **U.S. Applicants - Complete and request** a copy of your official transcript from your school. The official transcript must be sent directly from the school to the NCCAOM.
13. **International Applicants - Complete a credential evaluation** with ICD for any formal education completed and earned outside the U.S. See requirements under Route 2 in the NCCAOM® Certification Handbook.



## NCCAOM REQUIRED FORMS TO BE USED BY PRECEPTOR AND APPLICANT

Please request a Microsoft Word copy of each form template by emailing:  
[info@thenccaom.org](mailto:info@thenccaom.org)

*NCCAOM Curriculum Design and Tracking Form*

NCCAOM Apprenticeship Daily Attendance and Training Tracking Log

*NCCAOM Apprenticeship Preceptor Registration Form*

NCCAOM Apprenticeship Experience Outline Form

NCCAOM New Patient Record Form

NCCAOM Follow-Up Patient Visit Form

*NCCAOM Apprenticeship Case History Form*

NCCAOM Apprentice Evaluation Form

Apprenticeship Documentation Checklist



## NCCAOM Curriculum Design and Tracking Form (Overall Program)

Taught During the Period (Date Range)	Approx. # of Hours	Core Concept / Competency	Objectives / KSAs to be Achieved	Exam or Quiz Dates & Scores	Clinical demonstration (yes/no) Observed or Treating
		Chinese Medical Terminology/ Language	This course introduces the traditional Chinese medical terminology.		
		History of Acupuncture and Oriental Medicine	Covers the historical development of Traditional Chinese Medicine and introduces major texts and treatises.		
		Basic Theory and Philosophy of Oriental Medicine	This course examines the conceptual roots of TCM with special attention to the development of the following philosophies: Yin/Yang, Five Element and their specific relationships to human health.		

**Attestation:** I understand the above competencies must be assessed and achieved by the apprentice for a successful completion of this apprenticeship.

Company Name:

---

---

Preceptor Name, Title

---

Date

---

---

Notary Signature, Title

---

Date

Seal:



## NCCAOM Apprenticeship Daily Attendance and Training Tracking Log

Date	# of Hrs	Description of Core Concept/Competency Taught	Lecture Yes/ No	Clinic Yes/ No	Observation	Who is Treating	# of Patients Seen	Preceptor Initials
Date Range on this page:			Total Hours On this Page:					



NCCAOM Clinical Internship Form	CLINICAL WORK (# OF HOURS)		
	Apprentice's Name:		
	NCCAOM ID #:		Passed/ Failed
Clinical Observation I (Date - Date)	Students observe all aspects of history taking, examination, diagnosis, and treatment under the supervision of a licensed acupuncture physician.	# Hrs	Status
Clinical Observation II (Date - Date)	With an emphasis on medical record keeping, students continue to observe and discuss all aspects of clinical practice, including point location, needling and palpation techniques, moxibustion, and Tui-Na massage under the supervision of a licensed acupuncture physician.		
Clinical Internship III (Date - Date)	Again, with an emphasis on medical record keeping, students participate in advanced application of clinical procedures and patient treatment under the direction of the supervising acupuncture physician.		
Clinical Internship IV (Date - Date)	Students will continue assisting with all aspects of patient care, including conducting patient interviews and forming diagnosis and treatment plans that are approved or modified by the supervising acupuncture physician.		
Clinical Internship V (Date - Date)	Students focus on patient interview, diagnosis and prescription of appropriate herbal formulas (repeat of herbal study on previous page): raw herbs, patents and powders; dosing		
Clinical Internship VI (Date - Date)	This is the final phase of clinical practice in which the student practices as a senior intern. Interns are responsible for complete patient care with near total independence of practice. Competency is expected with regard to diagnosis, treatment, acupuncture prescription, selection of appropriate herbal formulas, and social interaction with the patient. Senior interns are expected to follow-up and monitor the patient's progress.		
Post Internship	The Apprentices should continue to see patients at the level of Clinical Internship VI until licensure is achieved at least 2 days/week for clinic		





## NCCAOM Apprenticeship Preceptor Registration Form

Applicant Name:	
Preceptor Name:	NCCAOM ID #:
Preceptor Practice Address:	Preceptor Email Address:
State License #:	Business License #:
Type of Practice (Circle): Clinic                      Hospital Private Practice        Other Integrative Setting Herbal Dispensary	Years in Practice:  # of Employees:
<b>Five (5) Consecutive Years Prior to Start of Apprenticeship</b>	
1. ____# of Unique Patients Treated ____# Treatments Administered (Client Visits)	Year ____ Or, Check if Over Lifetime ____
2. ____# of Unique Patients Treated ____# Treatments Administered (Client Visits)	Year ____ Or, Check if Over Lifetime ____
3. ____# of Unique Patients Treated ____# Treatments Administered (Client Visits)	Year ____ Or, Check if Over Lifetime ____
4. ____# of Unique Patients Treated ____# Treatments Administered (Client Visits)	Year ____ Or, Check if Over Lifetime ____
5. ____# of Unique Patients Treated ____# Treatments Administered (Client Visits)	Year ____ Or, Check if Over Lifetime ____
<b>During Years of Apprenticeship Training</b>	
1. ____# of Unique Patients Treated ____# Treatments Administered (Client Visits)	Year ____ Or, Check if Over Lifetime ____
2. ____# of Unique Patients Treated ____# Treatments Administered (Client Visits)	Year ____ Or, Check if Over Lifetime ____
# Apprentices Currently Training Under the Preceptor	
Brief Description of the Scope of Practice:	



Each patient will be informed that their case may be anonymously documented as part of the applicant's case studies for Certification with the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) in:

**Attestation:**

By submitting this *NCCAOM Apprenticeship Preceptor Registration Form* I hereby acknowledge and certify that the information provided therein, as well as any information submitted in support of this form is accurate, true and correct to the best of my knowledge and belief. I hereby authorize representatives of the NCCAOM<sup>®</sup> to verify the accuracy of any information provided or submitted in support of this Apprenticeship Preceptor Requirements Form by any person, persons or entities having knowledge of such information without prior notice that such verifications are being performed.

I acknowledge that approval as a Preceptor for the above-named applicant, who has applied to NCCAOM for certification, is based on the accuracy and veracity of the information provided or submitted in support of this document.

Company Name:

Preceptor Name & Title:

Date:

Notary Signature, Title

Date:

Seal:



## NCCAOM Apprenticeship Experience Outline Form

Applicant's Name:	NCCAOM ID #:
Preceptor Name:	NCCAOM ID #:

Type of Apprenticeship:		
Acupuncture Certification	Full Time:	Part Time:
Herbs (Conversion to OM)	Full Time:	Part Time:
Start Date:	End Date:	

Training: Days of the Week and Hours						
Mon:	Tues:	Wed:	Thurs:	Fri:	Sat:	Sun:
Hrs:	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:	Hrs:
Holidays:						
<p>List Breaks from Instruction. A break longer than one month requires further explanation (may use a separate sheet of paper).</p>						
Total Program Expected Hours:				# of Total Program Years:		
Is the apprentice also a paid employee?      Yes:                      No:						



## NCCAOM Apprenticeship Experience Outline Form

Pg. 2

### Attestation:

I hereby acknowledge and certify that the information provided in this *NCCAOM Apprenticeship Experience Outline Form*, as well as any information submitted in support of this form is accurate, true and correct to the best of my knowledge and belief. I hereby authorize representatives of the NCCAOM® to verify the accuracy of any information provided or submitted in support of this Form by any person, persons or entities having knowledge of such information without prior notice that such verifications are being performed.

The application submitted for approval of NCCAOM certification is based on the accuracy and veracity of the information provided or submitted in support of this document.

Applicant Name (Printed):	NCCAOM ID:
Applicant Signature:	Date:
Preceptor Company Name:	
Preceptor Name (Printed):	
Preceptor Signature:	Date:
Preceptor Title:	



## NCCAOM New Patient Record Form

Patient #:	Age:	Gender:
Chief Complaint:		
Duration:		
History of Present Illness:		
Personal Health History:		
Family Medical History:		
Summary of the main symptoms and signs:		
Diagnosis of the TCM disease:		
Differentiation of the syndromes:		
Analysis of the symptoms and signs:		
Treatment principles:		
Acupuncture points:		
Use for Conversion to Oriental Medicine Certification Only:		
Herbs used/recommended:		
Patents:		
Formulas:		

Supporting modalities to reinforce the treatment plan (i.e., electrical acupuncture, moxibustion, cupping, etc.):



## NCCAOM Follow-Up Patient Visit Form

Patient #:	Age:	Gender:
Original Complaint:		
Duration:		
Improvement(s) and/or changes after the previous treatment(s):		
Differentiation of the syndromes for the current condition (if changed):		
Treatment principles (if changed):		
Acupuncture Treatment:		
Use for Conversion to Oriental Medicine Certification Only:		
Herbal Prescriptions:		
Patents:		
Formulas:		

## Overview of a Case History Format (Global Advances Model)

### General Format

A case history is a narrative that tells a good story. Authors are encouraged to include a timeline with precise dates and times. The narrative of a case history usually includes (1) presenting concerns, history, timeline and diagnosis, (2) intervention(s) (3) intervention tolerability and unanticipated events, and (4) reasons for any potential causal links. Case histories usually have references and are at least 1500 words.

### Criteria for Submitting a Case History

Practitioners should seek case histories that are Valid, Original, Important, Credible, and Educational (VOICE). Consider these questions when submitting your case history:

- **Valid:** Is the content of your case history meaningful and presented in a systematic format?
- **Original:** Does your case history offer an original perspective on a topic?
- **Important:** Does your case history provide information that could help improve patient care?
- **Credible:** Does your case history adhere to ethical guidelines?
- **Educational:** Is your case history educational?

### Potential Topics for Case Histories

#### 1. Diagnosis:

- New or rare diseases or unusual presentation of common diseases
- Novel diagnostic procedures
- Discussion of differential diagnoses

#### 2. Treatment:

- New treatments or established treatments in new situations
- Treatment of rare diseases
- Unique technical procedures
- Unexpected outcomes or effects
- Adverse events or unanticipated events

#### 3. Special: Circumstances:

- Highly individualized treatments
- Complex situations
- Integration of multiple therapies
- Convergence of global healthcare systems and practices
- Unusual care settings
- Humanitarian work
- Ethical challenges
- Learning from errors

## Guidelines for the Format of a Case Report

**Title and Key Words:** The title should include the words “case history” as well as a description of the reported phenomenon (e.g., diagnosis, symptom, treatment, diagnostic test). Three to five key words should be provided.

**Abstract:** The abstract should contain the following information (where relevant):

- Rationale for this case history (what is new, different or unique)
- Presenting concern(s) (e.g., chief complaints, diagnosis)
- Intervention(s) (e.g., diagnostic, therapeutic, preventive)
- Outcomes
- Interpretation or implications

<b>NCCAOM Apprenticeship Case History Form</b>		
Case #: _____	Gender: _____	Age: _____
<b>Introduction</b>		
Briefly (in one paragraph) introduce the rationale for writing this case history including supporting information.		
<b>Patient Chief Complaint &amp; Your Initial Impressions</b>		
<b>A. PATIENT COMPLAINT</b> State the patient’s experience of their chief complaint / condition / illness in their own words.		
<b>B. INITIAL ENCOUNTER</b> Describe, the patient. This must include: age, gender, and ethnicity, apparent physical and emotional status, and <u>your own personal</u> initial response to the patient. You may also report any other variables that impacted your first impressions: the patient’s stature, weight, clothing, etc. Obtain an informed consent signed by the patient. Must be produced if requested.		

## Patient History, Objective, Assessment, Working Diagnosis, Treatment Plan, Description of Clinic Treatments

<b>Patient History</b>
<b>A. DESCRIPTION OF MAIN COMPLAINTS</b> Comprehensive description of main complaints, including: <ul style="list-style-type: none"> <li><input type="checkbox"/> Impact on activities of daily living (ADLs)</li> </ul>





- ☐ Past and concurrent medical care, including relevant diagnosis/es, selfcare, other therapies to include timeline with precise dates and times
- ☐ Smells: Body Odor, Breath, Discharges and Excretions

## B. HEALTH HISTORY

History of complaints include:

- ☐ Description of medical history (personal & family), genetic information
- ☐ All relevant physical, social, lifestyle and psychological factors.
- ☐ Comment on past History with acupuncture treatments included.
- ☐ If applicable, report medications/supplements, including associated conditions/purpose.

## C. 10 QUESTIONS

- ☐ Temperature – hot, cold, fever, chills
- ☐ Sweat
- ☐ Head & Face – headache, dizziness, eyes, ears
- ☐ Pain
- ☐ Urine & Stool
- ☐ Thirst, Appetite, Taste
- ☐ Sleep
- ☐ Thorax, Abdomen
- ☐ Gynecological
- ☐ Health History

## Objective – Patient Exam

### A. OBSERVATION

- ☐ Appearance / Facial Expression and Demeanor
- ☐ Shen / Spirit Clarity / Vitality
- ☐ Complexion / Luster to the Skin
- ☐ Body Type and Bearing
- ☐ Tongue
- ☐ Speech
- ☐ Breathing
- ☐ Types of Cough
- ☐ Smells: Body Odor, Breath, Discharges and Excretions



## B. PALPATION

- ☐ Meridians
- ☐ Acupoints
- ☐ Abdomen
- ☐ Trigger Points
- ☐ Pulse
- ☐ Other (i.e Physical Tests)

**Diagnostic Focus and Assessment.** The diagnostic focus and assessment section should describe:

- The reasoning that led to the diagnosis including differential diagnoses
- Diagnostic techniques used

## *Initial Assessment / Working Diagnosis*

### A. Clinical Signs & Symptoms

Bulleted list of signs & symptoms (based on the initial intake) with clearly stated corresponding TCM Diagnostic and Treatment Principles.

### B. Differentiation of Patterns (Signs And Symptoms)

- ☐ ZangFu
- ☐ Constitution
- ☐ 8 Principles
- ☐ Jingluo

### C. Etiology – How it came about

In this section discuss all the factors in the case that lead to or caused the health issues reported. This may include, but is not limited to:

- Six EPFs/Seven Emotions/ Miscellaneous (Life Events and Lifestyle Issues)
- Irregular Food and Drink
- Over-exertion
- Repetitive Strain
- Lack of Exercise
- Poor stress coping mechanisms
- Trauma or Injury



### D. Pathology

Discuss the specific patho-mechanisms relating to the patient's primary and secondary complaints. Be specific with regard to the language used within the style of treatment you are discussing. For example, if you are using a TCM filter, use TCM terminology and the mechanisms that lead to the symptoms; i.e. Fatigue caused by Spleen Qi deficiency and Liver Blood deficiency, the spleen is unable to transform and transport the essence properly and this was further seen in the inability for the liver to nourish the blood, etc.

This section is the place you explain your thinking from gathering symptoms to diagnosis, why did this patient present with these symptoms, what is the mechanism for the specific pattern you have identified.

### E. Biomedicine

Use appropriate biomedical references and write 1-2 brief paragraphs about the patient's main complaint as it is understood in terms of biomedicine. Be sure to include any potential red flags and patient management considerations associated with this condition and/or complaint. This should include a review of all medications the patient is taking, including side effects.

## Treatment Plan and Clinic Treatment History Grade

### A. Initial Treatment Plan

Describe the Acupuncture or Herbal Treatment Plan, as appropriate, including treatment style(s): Point Selection and Rationale; Needle Technique; Other Treatment Methods (tui na, cupping, guasha, moxibustion)

### B. Description of 4-5 Acupuncture or Herbal Treatments

Describe the clinic treatments provided for this patient. Was the initial plan accurate? Was it modified? If so why? Was it interrupted? If so why?

### C. Responses to Treatments / Follow-up

Describe the patient's reactions (tolerability) and responses during treatments and since the last treatment including unanticipated events and/or adverse events. Test results? Will the plan be maintained? How was this assessed?

### D. Patient Education

Describe any reframing, education, lifestyle counseling or other recommendations given to the patient for self-care.



## The Conclusion

Include in the Conclusion:

- Was the initial assessment accurate?
- How did your working diagnosis change?
- What were the key issues raised by this case for you as the practitioner?
- Did your initial impression and personal subjective reactions change throughout the clinical encounter?
- When possible include the patient's perspective on the case.
- Are there related reading materials that can put these findings in context.



## NCCAOM Apprentice Evaluation Form

Applicant Name:					NCCAOM ID #:	
Preceptor Name:						
Rating:      5 = Excellent; 4 = Very Good; 3 = Good; 2 = Fair; 1 = Poor						
General Work Ethic	5	4	3	2	1	Comments
Attendance						
Follows Instructions						
Attitude to Learn						
Focus on Task						
Hygiene						
Communication Skills						
Quality of Work						
Keeps Accurate Records						
Interaction with Patients						
Safety Habits						
Total Score      /50						
Theoretical Instruction/Observation (repeat as needed)						
Material Covered: <div style="margin-left: 40px;"> <p>Demonstrated Knowledge:</p> <p>Demonstrated Understanding:</p> <p>Demonstrated Ability:</p> </div>						



<b>Applicant Name and ID #:</b> Pg. 2
Theoretical Instruction/Observation (repeat as needed)
Material Covered:  Demonstrated Knowledge:  Demonstrated Understanding:  Demonstrated Ability:
Theoretical Instruction/Observation (repeat as needed)
Material Covered:  Demonstrated Knowledge:  Demonstrated Understanding:  Demonstrated Ability:
General Comments:          
Preceptor Name & Title:
Preceptor Signature:
Date:



## Apprenticeship Documentation Checklist

Completed	Date	Apprenticeship Documents Required
		1. Create your NCCAOM online account to obtain your NCCAOM ID #. DO NOT complete the online NCCAOM Application for Certification until the apprenticeship documents are ready to submit to the NCCAOM.
		2. <i>NCCAOM Preceptor Registration Form</i>
		3. Copy of: <ul style="list-style-type: none"> <li>a. the preceptor's current business license (private practice) OR</li> <li>b. Employment verification letter on the employer's letterhead and signed by the employer.</li> </ul>
		4. Copy of current State license or Country license to practice, discipline free
		5. Copy of Curriculum Vitae (CV) or Resume
1.		6. Two (2) Notarized affidavits from healthcare professionals: <ul style="list-style-type: none"> <li>a. Each affidavit must include written testimony based on the healthcare professional's personal knowledge of dates, volume, scope and type of practice of the preceptor.</li> </ul>
2.		
		7. <i>NCCAOM Apprenticeship Experience Outline Form</i>
		8. <i>NCCAOM Curriculum Design and Tracking Form</i>
		9. <i>NCCAOM Clinical Internship Tracking Form</i>
1.		10. <i>NCCAOM® Apprenticeship Daily Attendance and Training Tracking Log</i> Submit completed forms to NCCAOM in 6-month intervals
2.		
3.		
4.		
1.		11. <i>NCCAOM Apprentice Evaluation Form</i> . Submit one (1) completed form for each 6-months of training. And, submit a final <i>NCCAOM Apprentice Evaluation Form</i> for the overall apprenticeship experience.
2.		
3.		
4.		
Final		
		12. A minimum of five (5) assessments for each 1,000 contact hours. The assessments must be corrected, and scored (e.g. exams – multiple choice or essay; quizzes or written research assignments) passed by the apprentice, which demonstrate the apprentice's achievement of course objectives.
		13. Representative sample of the apprentice's notes (typewritten) demonstrating core concepts learned over the term of the apprenticeship training program.



Completed	Date	Apprenticeship Documents Required
		14. Five (5) each: <i>NCCAOM New Patient Record Forms</i> , and at least one (1) <i>NCCAOM Follow-up Patient Visit Form</i> , for every year (1,000 contact hours).
		15. Three (3) unique case histories for each 1,000 contact hours. The case histories must be of patients OTHER than the <u>new</u> patients already reported. <b>NOTE:</b> (Use layout of: <i>NCCAOM Apprenticeship Case History Template</i> ).
		16. Bibliography of all textbooks used during the apprenticeship training.
		17. Proof of completion of the Clean Needle Technique (CNT) program offered by the Council of Colleges for Acupuncture and Herbal Medicine (CCAHM). Go to <a href="http://www.ccaom.org">www.ccaom.org</a> to register for the program. After the program is completed and passed fill out the form to request CCAHM submit the CNT certificate of completion directly to the NCCAOM.
		18. Complete the online NCCAOM Application for Certification when the apprenticeship documents are ready to submit to NCCAOM.



---

---

## MEMORANDUM

---

**TO:** Acupuncture Advisory Committee, Oregon Medical Board  
**SUBJECT:** Needling through Clothing  
**DATE:** November 14, 2025

---

The attached request by a patient asks if acupuncture needles may be used through clothing.

In 2015-2016, the Oregon Medical Board considered adopting the rule referenced in the attached request to require licensed acupuncturists to follow clean needle technique standards. However, the rule was not adopted. Instead, meeting minutes indicate the Board agreed to work with the Oregon Association of Acupuncturists to establish clean needle technique as the standard of care through educational outreach. The issue being addressed during the 2015-2016 proposed rulemaking was single use needles.

The Council of Colleges of Acupuncture and Herbal Medicine's [Clean Needle Technique Manual January 2024 edition](#) (page 72), provides, "Acupuncture needles should be used only where the skin is clean and free of disease. Needles should never be inserted through clothing."

**Does the Acupuncture Advisory Committee recommend the Board find that acupuncture needles may be used through clothing?**

**If so, does the Committee have additional guidance, qualifications, or requirements specific to acupuncturists in this practice area?**



## Acupuncture Advisory Review Request Form

Revised 12/2023

Please complete the following form to request review of an acupuncture practice topic for the Oregon Medical Board's Acupuncture Advisory Committee. Your proposal will be reviewed by OMB staff with assistance by the Committee's chair. If we have questions concerning the requested review, we will follow up with you for additional information.

You will receive confirmation of your request and whether the request will be reviewed by the Acupuncture Advisory Committee. Please note the Acupuncture Advisory Committee meets the first week in June and December. Requests should be submitted at least one month prior to a meeting for consideration.

**Please provide as much information as you can to inform the review process, you may leave questions blank if not applicable or you do not know the answer.**

1. What topic would you like the Acupuncture Advisory Committee to review? Please note any [acupuncture rules](#) that you are proposing be reviewed.

OAR 847-070-0021 - Acupuncture Needles

2. Why is this review needed?

Current rules prohibit acupuncture needle insertion through clothing, which negatively impacts patient comfort and access in community acupuncture settings. This review is needed to consider if there can be flexibility allowing informed patients to consent to needle insertion through clothing to improve comfort and accessibility without compromising safety.

3. What are the advantages or benefits? Is there a patient benefit?

Allowing needle insertion through thin clothing can increase patient comfort, especially in colder climates and community settings where undressing is impractical. It supports greater accessibility for low-income patients relying on community acupuncture. Comfort can improve treatment efficacy by reducing physical and emotional stress.

4. What are the disadvantages or risks? Is there potential for harm?

The risks of inserting needles through clothing are minimal when using disposable, sterile needles and skilled practitioners. Potential concerns about precision and hygiene can be mitigated by proper training and patient consent, making this a safe, patient-centered option.

5. Who else might be affected by the review? How will they be affected?

Practitioners and patients in community and private settings would benefit from increased flexibility and improved treatment experiences. The Board would demonstrate responsiveness to patient needs and evolving clinical practices, strengthening public trust.

6. Who might oppose the topic being reviewed? Why might they oppose it?

Opposition may come from those prioritizing strict traditional standards fearing possible safety risks. However, evidence and clinical experience support that with proper protocols, needle insertion through clothing is safe and beneficial.



## Acupuncture Advisory Review Request Form

Revised 12/2023

7. Is this area currently being taught in acupuncture curriculum? Would an acupuncturist need additional training?

While traditional curricula emphasize bare skin insertion, minimal supplemental training could address fabric assessment and technique adjustments. This is feasible and ensures continued high standards.

8. What are the financial impacts?

There would be no financial burden. Increased patient comfort and accessibility may encourage more consistent treatment attendance, benefiting clinics financially and enhancing community health.

9. How do other state licensing boards view this topic?

Other states permit some discretion for needle insertion through clothing under certain conditions, especially in community acupuncture settings. Oregon can align with these progressive standards to enhance patient care.

10. What research or evidence is there on this topic? Include links or copies to research.

Clinical guidance and practitioner experience confirm that needle insertion through thin, clean clothing can be performed safely with sterile needles and proper technique. Relevant sources include:

Oregon Medical Board Acupuncture Rules: <https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=3898>

NCCAOM Clean Needle Technique Manual

### Request for review made by:

Kara Cooper

Full Name

E-mail

Phone

PDX Working Class Acupuncture Attendee

Organization (if applicable)

Street Address, City, State, Zip Code

E-mail request form to: [shayne.nylund@omb.oregon.gov](mailto:shayne.nylund@omb.oregon.gov) and [elizabeth.ross@omb.oregon.gov](mailto:elizabeth.ross@omb.oregon.gov)



## Acupuncture Advisory Review Request Form

Revised 12/2023

Please complete the following form to request review of an acupuncture practice topic for the Oregon Medical Board's Acupuncture Advisory Committee. Your proposal will be reviewed by OMB staff with assistance by the Committee's chair. If we have questions concerning the requested review, we will follow up with you for additional information.

You will receive confirmation of your request and whether the request will be reviewed by the Acupuncture Advisory Committee. Please note the Acupuncture Advisory Committee meets the first week in June and December. Requests should be submitted at least one month prior to a meeting for consideration.

**Please provide as much information as you can to inform the review process, you may leave questions blank if not applicable or you do not know the answer.**

1. What topic would you like the Acupuncture Advisory Committee to review? Please note any [acupuncture rules](#) that you are proposing be reviewed.

847-070-0017

Clinical Training

Board approved clinical supervisors, acupuncturists or physicians may supervise no more than two acupuncture students in an informal private clinical setting.

2. Why is this review needed?

I am proposing a formal training program for graduates of formal acupuncture programs, who will need less direct supervision. I respectfully request the opportunity to supervise 4 residents per shift, per site.

3. What are the advantages or benefits? Is there a patient benefit?

This is a benefit to patients who will have greater access to care. Patients will be seen for regular biomedical screenings, including blood pressure, heart rate, blood oxygenation, blood perfusion index, and blood glucose levels as well as pulse strength and other health checks as needed. Specialty clinics may include: pain clinics, physical rehabilitation, addictions rehabilitation support, mental health, respiratory health, digestive health, women's health, long COVID rehabilitation, general health care and immune support

4. What are the disadvantages or risks? Is there potential for harm?

There are few potential risks as candidates are fully trained graduates of formal Chinese Medical programs. They will have pending licensure while they are taking national board exams.

5. Who else might be affected by the review? How will they be affected?

This affects the number of candidates who are accepted into the program as well as the number of patients who are seeking their care.

6. Who might oppose the topic being reviewed? Why might they oppose it?

I can't imagine anyone opposing this review. What I am proposing is for OMB to recognize the Silver Pearl Acupuncture Residency and Mentorship Program as a "formal training program". With this recognition, I ask that OMB grants the supervisors of this program, including me, the right to supervise 4 licensed practitioners per shift, per site under my license and my malpractice insurance. This is something I am already doing as a clinical supervisor in teaching clinics with students who are less experienced and require far more supervision.



## Acupuncture Advisory Review Request Form

Revised 12/2023

7. Is this area currently being taught in acupuncture curriculum? Would an acupuncturist need additional training?

This is a community acupuncture clinical experience which requires no additional training.

8. What are the financial impacts?

This program would partner with local programs and health centers to reach marginalized populations and those affected by recent federal health and welfare program cutbacks.  
We are offering low-impact outreach health care visits and services, wherein we visit the patients in their local community center to reduce office visit costs. Community-style acupuncture keeps costs down for patients. Costs will be \$30 per 30-minute visit, comparable to insurance co-pay. Residents will earn 40% of each patient treatment.

9. How do other state licensing boards view this topic?

I am unaware of any other program quite like this one

10. What research or evidence is there on this topic? Include links or copies to research.

Chinese Medicine has empirically been well-suited to responding to and treating community health crises and community trauma.  
<https://acuwithoutborders.org/?srsltid=AfmBOorVXLdoyYeXvruUVCnEUDv5qBfxjVKbjn4x8EZXeS0axUUfZsTt>

### Request for review made by:

Patricia J Gallegos, DAOM, LAc

Full Name

E-mail

Phone

Silver Pearl Acupuncture Clinic, LLC

Organization (if applicable)

*Patricia J Gallegos*

Street Address, City, State, Zip Code

E-mail request form to: [shayne.nylund@omb.oregon.gov](mailto:shayne.nylund@omb.oregon.gov) and [elizabeth.ross@omb.oregon.gov](mailto:elizabeth.ross@omb.oregon.gov)

## ROSS Elizabeth \* OMB

---

**From:** Patricia J Gallegos <[REDACTED]>  
**Sent:** Monday, August 11, 2025 9:20 AM  
**To:** NYLUND Shayne \* OMB; ROSS Elizabeth \* OMB  
**Subject:** Acupuncture Advisory Review Request: Residency and Mentorship Program  
**Attachments:** Acupuncture Advisory Review Request Form.pdf

Dear Shayne and Elizabeth,

I am designing a Chinese Medicine Clinical Residency and Mentorship Program for recent graduates using a community acupuncture model. My goal is to partner with stakeholders, including local programs and health centers to reach marginalized populations and those most deeply affected by recent federal health and welfare program cutbacks.

In anticipation of candidate interest in the program, I am requesting a change to ORS 847-070-0017 regarding clinical training. Currently Board approved clinical supervisors, acupuncturists, or physicians may supervise no more than 2 acupuncture students in an informal clinical setting. I am proposing a formal Residency Program, wherein I can provide one supervisor for every 4 Residents with Pending Examination Licensure.

I am happy to answer any questions you have about the program and its design. I look forward to hearing from you soon.

Thank you for your time and consideration in this important matter.

Sincerely,

Patricia J. Gallegos, DAOM, LAc  
Doctor of Acupuncture & Oriental Medicine

---

---

## MEMORANDUM

---

**TO:** Acupuncture Advisory Committee, Oregon Medical Board  
**SUBJECT:** Manual Therapy Techniques  
**DATE:** November 14, 2025

---

The Oregon Medical Board received the following question:

*If an acupuncturist may perform intraoral work inside the mouth. The acupuncturist took a course on TMJ dysfunction and pain and learned about manual therapy techniques for the masseter and pterygoid muscles done intra-orally.*

As used in ORS 677.757 to 677.770:

(1)(a) “Acupuncture” means an Oriental health care practice used to promote health and to treat neurological, organic or functional disorders by the stimulation of specific points on the surface of the body by the insertion of needles. “Acupuncture” includes the treatment method of moxibustion, as well as the use of electrical, thermal, mechanical or magnetic devices, with or without needles, to stimulate acupuncture points and acupuncture meridians and to induce acupuncture anesthesia or analgesia.

(b) The practice of acupuncture also includes the following modalities as authorized by the Oregon Medical Board:

(A) Traditional and modern techniques of diagnosis and evaluation;

(B) Oriental massage, exercise and related therapeutic methods; and

(C) The use of Oriental pharmacopoeia, vitamins, minerals and dietary advice.

(2) “Oriental pharmacopoeia” means a list of herbs described in traditional Oriental texts commonly used in accredited schools of Oriental medicine if the texts are approved by the Oregon Medical Board.

**Does the Acupuncture Advisory Committee recommend the Board find that manual therapy techniques are within the acupuncture scope of practice in Oregon?**

**If so, does the Committee have additional guidance, qualifications, or requirements specific to acupuncturists in this practice area?**

---

---

## MEMORANDUM

---

**TO:** Acupuncture Advisory Committee, Oregon Medical Board  
**SUBJECT:** Cupping & Unlicensed Healthcare Personnel  
**DATE:** November 14, 2025

---

The Oregon Medical Board received the following question:

*If a licensed acupuncturist has marked specific areas of the body for cupping, may a properly trained assistant then perform the cupping procedure in those areas? What about electric moxa?*

In 2021, the Acupuncture Advisory Committee drafted, and the Oregon Medical Board adopted a Statement of Philosophy on **Use of Unlicensed Healthcare Personnel in Acupuncture**:

In providing safe, effective, and efficient care, an Oregon-licensed acupuncturist may be assisted by unlicensed healthcare personnel. Acupuncturists must use caution when employing unlicensed personnel, including ensuring adequate training and appropriate supervision and avoiding delegation of the practice of acupuncture.

An acupuncturist may not allow unlicensed healthcare personnel to practice acupuncture as defined in ORS 677.757. Unlicensed healthcare personnel may not diagnose, provide point location or needle insertion, perform manipulation, render advice to patients, or perform other procedures requiring a similar degree of judgment or skill.

Unlicensed healthcare personnel may perform administrative, clerical, and supportive services under adequate supervision by a licensed acupuncturist. Supportive services may include, but are not limited to, the operation of an e-stim machine after the acupuncturist has placed needles, attached leads, and set frequency. Operation in this context includes turning on the machine, adjusting intensity for patient comfort, turning off the machine, and unclipping the machine from needles so long as the unlicensed healthcare personnel is trained to do so. Unlicensed healthcare personnel may also remove needles after receiving appropriate training and supervision from a licensed acupuncturist.

Unlicensed healthcare personnel should clearly identify themselves to patients. This should include clear identification on badges as well as direct communication with patients.

In order to fulfill its mission to protect the health, safety, and wellbeing of Oregonians, the Oregon Medical Board asks Oregon-licensed acupuncturists to follow these guidelines and to be mindful of patient safety when using the assistance of unlicensed healthcare personnel.

*- Adopted July 1, 2021*

**Does the current Statement of Philosophy address this question?**

**If not, does the Committee have suggested edits to the Statement of Philosophy?**



---

---

## MEMORANDUM

---

**TO:** Acupuncture Advisory Committee, Oregon Medical Board  
**SUBJECT:** Therapeutic Ultrasound  
**DATE:** November 14, 2025

---

The Oregon Medical Board received the following question:

*If an acupuncturist may use therapeutic ultrasound, specifically for clogged breast ducts with breastfeeding.*

As used in ORS 677.757 to 677.770:

(1)(a) “Acupuncture” means an Oriental health care practice used to promote health and to treat neurological, organic or functional disorders by the stimulation of specific points on the surface of the body by the insertion of needles. “Acupuncture” includes the treatment method of moxibustion, as well as the use of electrical, thermal, mechanical or magnetic devices, with or without needles, to stimulate acupuncture points and acupuncture meridians and to induce acupuncture anesthesia or analgesia.

(b) The practice of acupuncture also includes the following modalities as authorized by the Oregon Medical Board:

(A) Traditional and modern techniques of diagnosis and evaluation;

(B) Oriental massage, exercise and related therapeutic methods; and

(C) The use of Oriental pharmacopoeia, vitamins, minerals and dietary advice.

(2) “Oriental pharmacopoeia” means a list of herbs described in traditional Oriental texts commonly used in accredited schools of Oriental medicine if the texts are approved by the Oregon Medical Board.

**Does the Acupuncture Advisory Committee recommend the Board find that therapeutic ultrasound is within the acupuncture scope of practice in Oregon?**

**If so, does the Committee have additional guidance, qualifications, or requirements specific to acupuncturists in this practice area?**



## Acupuncture Advisory Review Request Form

Revised 12/2023

Please complete the following form to request review of an acupuncture practice topic for the Oregon Medical Board's Acupuncture Advisory Committee. Your proposal will be reviewed by OMB staff with assistance by the Committee's chair. If we have questions concerning the requested review, we will follow up with you for additional information.

You will receive confirmation of your request and whether the request will be reviewed by the Acupuncture Advisory Committee. Please note the Acupuncture Advisory Committee meets the first week in June and December. Requests should be submitted at least one month prior to a meeting for consideration.

**Please provide as much information as you can to inform the review process, you may leave questions blank if not applicable or you do not know the answer.**

1. What topic would you like the Acupuncture Advisory Committee to review? Please note any [acupuncture rules](#) that you are proposing be reviewed.

Does 847-070-0005 (1)(a) include or make possible the practice of Extracorporeal Shockwave Therapy (ESWT)?

2. Why is this review needed?

As a licensed acupuncturist who has received benefit from ESWT, I am curious if I could offer it to patients, provided there was ample training & safety. Many acupuncture points exist over tendons and soft tissues that could be treated with ESWT similar to electroacupuncture, cupping, gua sha, or standard acupuncture.

3. What are the advantages or benefits? Is there a patient benefit?

Extracorporeal Shockwave Therapy (ESWT) offers patients a noninvasive, drug-free method to stimulate healing in chronic tendon and soft tissue injuries, especially when needle techniques have failed or can not be tolerated by the patient. By delivering focused mechanical pressure waves into tissue, ESWT increases local blood flow, stimulates cellular repair through mechanotransduction, breaks down scar tissue, and modulates pain signaling. Clinically, patients often experience reduced pain, improved mobility, and faster recovery with minimal downtime or side effects.

4. What are the disadvantages or risks? Is there potential for harm?

Please see the Mayo clinic page:  
<https://www.mayoclinic.org/medical-professionals/physical-medicine-rehabilitation/news/the-evolving-use-of-extracorporeal-shock-wave-therapy-in-managing-musculoskeletal-and-neurological-diagnoses/mac-20527246>

5. Who else might be affected by the review? How will they be affected?

Please see answer #6. It could affect the revenue stream of other professions, potentially.

6. Who might oppose the topic being reviewed? Why might they oppose it?

I'm assuming that Chiropractors, Physical Therapists, Naturopathic doctors, or any other health professional that is capable of providing ESWT would have some opinions on if acupuncturists were allowed to perform this procedure. They could potentially argue that the evidence base states that ESWT needs to be combined with physical rehab/therapy to reach its therapeutic effect. It's possible that ESWT provided by an acupuncturist who received training could also provide safe therapeutic East Asian therapy procedures such as Qigong to reach similar effects.



## Acupuncture Advisory Review Request Form

Revised 12/2023

7. Is this area currently being taught in acupuncture curriculum? Would an acupuncturist need additional training?

To my knowledge, ESWT is not being taught in acupuncture schools, as it's increasingly used in "regenerative medicine." I personally feel like acupuncturists have a solid anatomical basis to learn the technique and also have the training for red flags and referrals, but they would absolutely need to receive additional training in ESWT before offering it. How much? That's debatable. There are CEU courses for the other professions being listed above.

8. What are the financial impacts?

The clinic offering ESWT would need to pay for the cost of the equipment, which can range from 2.5-50-100K, and additional insurance. It's possible that this could represent an additional revenue stream for acupuncturists in OR who are already being threatened by physical therapists incursion into the world of needling. This itself creates an interesting argument for why we should be able to provide select modalities PT's offer as well, provided we have the ample training.

9. How do other state licensing boards view this topic?

In Oregon Board of Chiropractic Examiners (OBCE): They issued a formal policy stating that licensed chiropractic physicians who have been properly trained are permitted to perform ESWT for conditions within the scope of chiropractic practice. Certified chiropractic assistants may perform it under supervision

10. What research or evidence is there on this topic? Include links or copies to research.

<https://www.frontiersin.org/journals/medicine/articles/10.3389/fmed.2024.1435504/full>

<https://joser-online.biomedcentral.com/articles/10.1186/s13018-023-03943-x>

<https://www.mdpi.com/2227-9032/11/21/2830>

More provided upon request, this is a small sampling \*not\* a formal literature review.

### Request for review made by:

Zachary Krebs

zkrebs@gmail.com

541-708-1163

Full Name

E-mail

Phone

Fire Rabbit Acupuncture

Organization (if applicable)

1515 7th St, Oregon City, OR, 97045

Street Address, City, State, Zip Code

E-mail request form to: [shayne.nylund@omb.oregon.gov](mailto:shayne.nylund@omb.oregon.gov) and [elizabeth.ross@omb.oregon.gov](mailto:elizabeth.ross@omb.oregon.gov)



## OPEN ACCESS

## EDITED BY

Plamen Todorov Todorov,  
Plovdiv Medical University, Bulgaria

## REVIEWED BY

Vasil Hristov Karakostov,  
Medical University Sofia, Bulgaria  
Zlatka Kehayova,  
Physio Terra Private Clinic, Bulgaria

## \*CORRESPONDENCE

Dilyan Ferdinandov  
✉ ferdinandov@gmail.com

RECEIVED 20 May 2024

ACCEPTED 16 August 2024

PUBLISHED 29 August 2024

## CITATION

Ferdinandov D (2024) Focused extracorporeal shockwave therapy for the treatment of low back pain: a systematic review.  
*Front. Med.* 11:1435504.  
doi: 10.3389/fmed.2024.1435504

## COPYRIGHT

© 2024 Ferdinandov. This is an open-access article distributed under the terms of the [Creative Commons Attribution License \(CC BY\)](https://creativecommons.org/licenses/by/4.0/). The use, distribution or reproduction in other forums is permitted, provided the original author(s) and the copyright owner(s) are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.

# Focused extracorporeal shockwave therapy for the treatment of low back pain: a systematic review

Dilyan Ferdinandov<sup>1,2,3\*</sup>

<sup>1</sup>Department of Neurosurgery, Faculty of Medicine, Medical University - Sofia, Sofia, Bulgaria, <sup>2</sup>Clinic of Neurosurgery, St. Ivan Rilski University Hospital, Sofia, Bulgaria, <sup>3</sup>Vertebra Medical Center, Sofia, Bulgaria

**Introduction:** Low back pain (LBP) is a common condition affecting up to 84% of people in their lifetime, with a prevalence of 11.9% and a high recurrence rate within the first year. Furthermore, chronic low back pain syndrome has been described in up to 7%, making it a significant health and socioeconomic problem. Among nonoperative treatment options, the recently used focused extracorporeal shockwave therapy (ESWT) devices generate waves that converge at a precise depth in the body, thereby revealing the potential to affect pathology remotely from the contact surface. The article aims to present a systematic literature review with a critical discussion on treating low back pain using this modality.

**Methods:** A search for randomized controlled trials (RCT) of focused ESWT for low back pain published before April 1, 2024, in PubMed, Web of Science, Scopus, Google Scholar, and trial registries (WHO International Clinical Trials Registry Platform and ClinicaTrials.gov) was performed.

**Results:** Only three studies against conservative treatment comprising 94 patients met the selection criteria and were further analyzed. Comparative clinical studies regarding the effectiveness of radial and focused ESWT for low back pain were missing. The results revealed that all treated patients had significantly reduced pain and improved functional impairment immediately after the procedures and 1 month later. At the third month time point, the pain levels remained better in the experimental than in the control group without achieving statistical significance. None of the studies had a long-term follow-up.

**Conclusion:** Focused ESWT is a modern physiotherapeutic method that can potentially treat a broad spectrum of conditions responsible for low back pain. Despite the small number of low-evidence studies, there is sufficient data on the effectiveness and safety of this therapeutic modality. With future well-designed trials, the bias risks would be diminished, the indications for its use would expand, and the treatment protocols would be clarified.

## KEYWORDS

low back pain, treatment, focused shockwave therapy, randomized controlled trial, systematic review

## Introduction

Low back pain (LBP) is a common condition that affects up to 84% of people in their lifetime and has a prevalence of 11.9% (1). In most cases, the acute episode will resolve in 6 weeks, but between 25 and 78% of patients will have recurrence within the first year (2–4). Chronic low back pain syndrome has been described in up to 7% and is defined as symptoms



lasting more than 12 weeks, making it a significant health and socioeconomic problem (5).

LBP treatment requires an interdisciplinary approach that includes modalities ranging from bed rest, manual and kinesiotherapy, pharmacological treatment, physical methods, and a broad spectrum of minimally invasive interventions before open surgery (6, 7). However, only 31–47% of patients with chronic LBP will have relief within 1 year, which raises the need for new approaches (8).

Among nonoperative treatment modalities, extracorporeal shock wave therapy (ESWT) is a noninvasive procedure using acoustic waves generated outside the body and targeted in depth on the pathology. This type of energy has a described biological effect at the cellular, tissue, and organ levels. Still, the exact mechanisms of impact on the structures of the musculoskeletal system and the adjacent neural elements remain unclear. Low energy levels have mechanical stimuli and positive effects, leading to cell migration, proliferation, and differentiation. Reduced swelling and infiltration of inflammatory cells in the tissues were also found (9). High energy levels are believed to have shear stress and are destructive (10). Pain relief is thought to result from hyperstimulation of nerve endings (11). In addition to the above, given the importance of paravertebral muscle spasm in degenerative spine pathologies, ESWT has been found to reduce spasticity, decrease connective tissue stiffness, and stimulate nitric oxide synthesis, leading to improvement in neuromuscular transmission and vasodilation (12).

From a therapeutic point of view, radial and focused extracorporeal shock wave therapy (ESWT) is considered. The radial one produces pressure waves that diverge deep into the tissues, with low velocity and peak pressure, depleting away from the applicator (9). Thus, the effects are primarily superficial. The FDA approved the use of radial ESWT devices for the treatment of plantar fasciitis in 2000 and lateral epicondylitis in 2003 (13). The indications, therapeutic protocols, and results regarding musculoskeletal disorders are clear to date. In contrast, the newer focused ESWT generates waves that converge at a precise depth in the body, thereby revealing the potential to affect pathology that is remote from the contact surface (10). The main power generators used are piezoelectric, electromagnetic, and electrohydraulic (13). The physical effects of focused ESWT are related to the energy delivered to a specific cross-section, defined as energy flux density (EFD, mJ/mm<sup>2</sup>).

To date, many clinical studies have compared the effectiveness of the two types of ESWT for diverse indications. The results show the effectiveness of both therapies despite the different mechanisms on the tissues (14–17). Few studies have addressed the treatment of low back pain using focused ESWT. This work aims to present a systematic literature review with a critical discussion.

## Materials and methods

A search for randomized controlled trials (RCT) of focused ESWT for low back pain published before April 1, 2024, in PubMed, Web of Science, Scopus, Google Scholar, and trial registries (WHO International Clinical Trials Registry Platform and [ClinicaTrials.gov](https://www.clinicaltrials.gov))

was performed. The following keywords and phrases were used: focused extracorporeal shockwave therapy, ESWT, low back pain, lumbosacral pain, lumbar spine, sacroiliac joint, and facet joint syndrome. Relevant references from the identified articles were further retrieved and analyzed. The PRISMA guidelines were used in preparing this systematic review, and a corresponding diagram is presented here (Figure 1). No restrictions regarding the year of publication, country of origin, or language were applied.

## Results

Following the search strategy, 55 articles were initially identified. By refining the results, 19 clinical studies were extracted. Table 1 presents a list of randomized controlled trials for the treatment of low back pain (LBP) with extracorporeal shockwave therapy (ESWT), which were excluded from further analysis after a detailed review. All these studies report results with radial shockwave or vibrotherapy devices. Only 3 met the criteria for a randomized controlled trial of focused extracorporeal shockwave to treat low back pain. Comparative clinical studies regarding the effectiveness of radial against focused ESWT for low back pain are missing. Table 2 summarizes the basic demographic characteristics, symptoms' duration, clinical outcome assessment tools, and follow-up periods. Table 3 presents the treatment protocols of the selected studies. Tables 4, 5 summarize the results of the analyzed randomized clinical studies.

Moon et al. (18) published a prospective randomized, sham-controlled, single-center trial on 25 patients with sacroiliac joint pain. The inclusion criteria are clearly defined with symptoms duration of more than 6 months, at least 19 years of age, pain >4 on a 10-cm numeric rating scale localized in the SIJ region, and at least three of five provocation SIJ tests from Patrick's sign, Gaenslen test, compression test, thigh thrust test, and distraction test (19). Among the author's exclusion criteria were: ESWT administered to any other body lesion; a positive straight leg-raising test; radiologically confirmed lumbar or hip joint pathology; pregnancy; acute pelvic inflammation; and previous SIJ intervention (i.e., corticosteroid injection within the previous 12 months). Participants were instructed to refrain from any other conservative treatments, including medications for pain or physical therapy. Randomization was in blocks of six by a blinded physician using a computerized random number generator. The study protocol included a focused ESWT in a single treatment session comprising 2000 shocks at 3 Hz, though perpendicular to the area probe and energy level 0.09–0.25 mJ/mm<sup>2</sup>. The control group received a single session of sham intervention with a parallel-oriented probe and a noise at every sock, which was delivered with a minimal energy of 0.03 mJ/mm<sup>2</sup>. All patients were blindfolded. A 10-cm VAS type and the ODI were used for evaluations before and 1 and 4 weeks after treatment by a physician blinded to the other procedures. The authors found a significant improvement in the pain score in the fESWT group at week 4 post-treatment compared to the baseline, which was not observed in the control group. Although there was a trend toward improvement from baseline in the ODI regarding the intervened patients, statistical significance was not reached for both groups. Side effects of fESWT were not evident.

Taheri et al. (20) presented the results from a randomized controlled trial on 32 patients with chronic low back pain with a duration of more than 3 months who had never undergone surgery or

Abbreviations: LBP, Low back pain; SIJ, Sacroiliac joint; ODI, Oswestry Disability Index; LPS, Laitinen Pain Scale; fESWT, Focused extracorporeal shock wave therapy; MRI, Magnetic resonance imaging; EFD, Energy flux density; BMI, Body mass index; FUP, Follow-up.

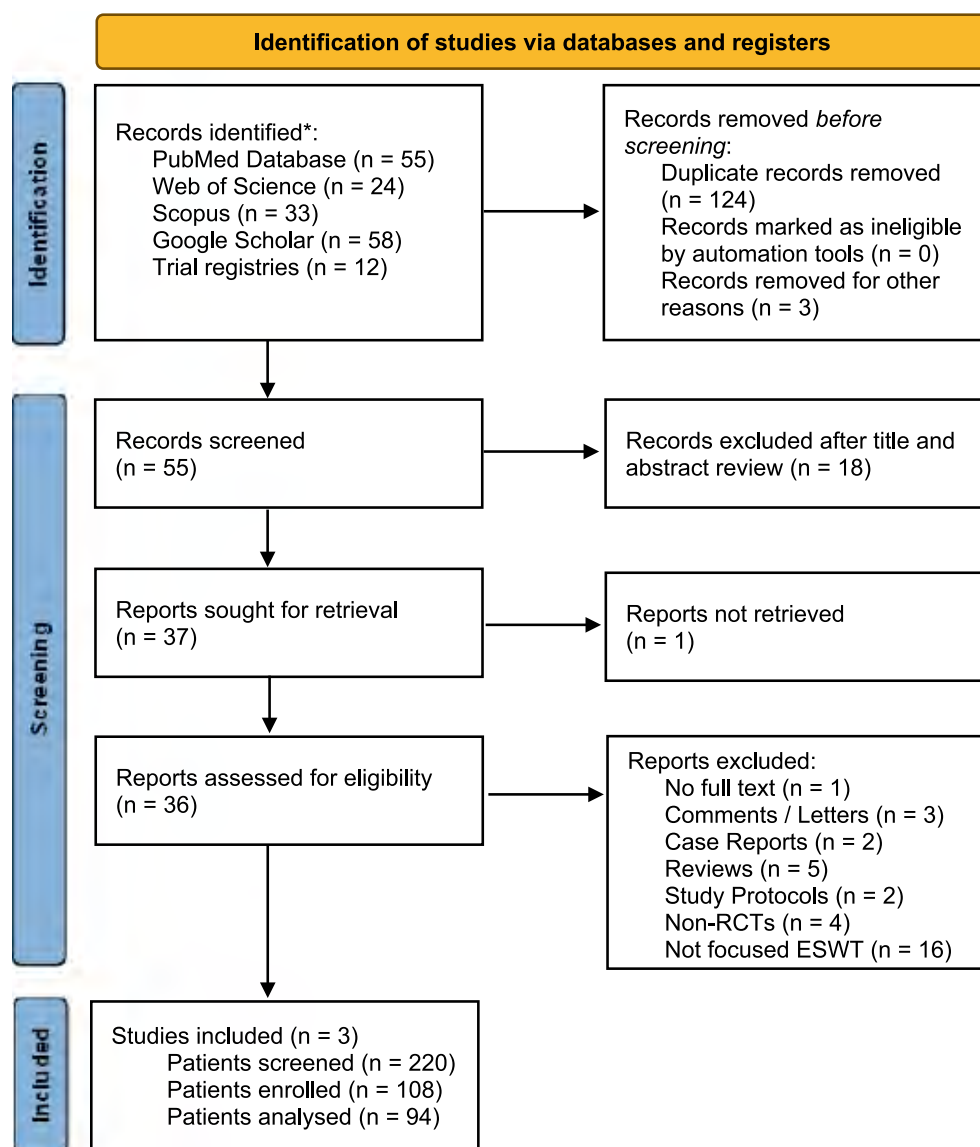


FIGURE 1

PRISMA diagram presenting the search for randomized controlled trials (RCT) of focused ESWT for low back pain published before April 1, 2024. \*No restrictions regarding the year of publication, country of origin, or language were applied.

any other treatment for the last month associated with their disease. Pregnant women and patients with mental or cognitive problems were not included. Among the exclusion criteria were cancer, fractures, infections, disc degeneration resulting from aging or trauma, an unstable medical condition, or uncontrolled systematic diseases. Thirty-eight patients were enrolled and randomly allocated equally to the focused ESWT or control group, nine were not eligible, and three refused. Six subjects were lost during the follow-up due to unwillingness to continue, and 32 study completers were analyzed—17 and 15 from the abovementioned groups, respectively. The protocol included focused ESWT or sham procedure, as well as oral medications and an exercise program for all. The pressure pulses were targeted on the surface trigger points through a contact lubricant, and 1,500 of them were delivered at 0.15 mJ/mm<sup>2</sup> energy density and 4 Hz frequency. The sessions were once weekly for 4 weeks. Patients in the control group had sham procedures with the same treatment regimen,

which had the same sound but without energy applied. All subjects received oral medications (meloxicam 15 mg/daily for 2 weeks and tizanidine 2 mg/daily for 10 days) and fulfilled an exercise program. ODI questionnaire was used to evaluate the degree of functional disability, and the visual analog scale was used to assess the pain at baseline and after 1 and 3 months. Appropriate statistical analysis was performed. The groups were comparable in terms of sex, age, body mass index, duration, and severity of complaints. The pain score decreased during the study period in both groups without statistically significant differences between them. ODI is observed to be the same but with a significantly lower score at 1 month in favor of the interventional arm and not at 3 months.

Rajfur et al. (21) conducted a prospective randomized, single-blind study with a 3-month follow-up regarding the efficacy of focused ESWT in patients with chronic low back pain. Subjects were assigned to real or sham treatments using a computer random

**TABLE 1** List of randomized controlled trials for the treatment of low back pain (LBP) with extracorporeal shockwave therapy (ESWT), which were excluded from further analysis after a detailed review.

Author	Year	Study	Reason for exclusion
Zheng et al. (26)	2013	ESWT vs. Thermomagnetic therapy in chronic LBP	Radial ESWT device—ShockMaster 500, Gymna, Belgium
Lee et al. (27)	2014	ESWT vs. Conservative physical therapy in chronic LBP	Radial ESWT device—JEST-2000, Joeun Medical, Korea
Han et al. (28)	2015	ESWT vs. Conservative physical therapy in chronic LBP	Radial ESWT device—VITERA, Comed, Korea
Hong et al. (29)	2017	EWST vs. Trigger point injection for the treatment of the quadratus lumborum myofascial pain syndrome	Dornier AR2 with smart focus technology (MedTech, Munchen, Germany)
Nahas et al. (30)	2018	ESWT and exercises vs. Exercises in postpartum LBP	Radial ESWT device—Unknown model, Storz Medical, Switzerland
Schneider et al. (24)	2018	ESWT and myofascial trigger therapy vs. myofascial trigger therapy in chronic LBP	Vibrotherapy—Cellconnect Impulse
Walewicz et al. (31)	2019	ESWT and stabilization training vs. Sham ESWT and stabilization training in chronic LBP	Radial ESWT device—Pro-Shock Waves Pneumatic, Cosmogamma, Indonesia
Çelik et al. (32)	2020	ESWT vs. Sham ESWT in chronic LBP	Electrohydraulic lithotripter—EMD, E1000, C-ARMOR, Turkey
Eftekharsadat et al. (23)	2020	ESWT and stretching exercises vs. Corticosteroid injections and stretching exercises in LBP	Radial ESWT device—enPulsPro, Zimmer MedizinSysteme, Germany
Notarnicola et al. (33)	2020	ESWT vs. Exercises in sacroiliac joint pain	Lithotripter—Minilith SL1, Storz Medical, Switzerland
Guo et al. (34)	2021	ESWT vs. ESWT and medication therapy vs. Medication therapy in chronic LBP	Radial ESWT device—Swiss DolorClast® EVO BLUE, Switzerland
Lange et al. (35)	2021	ESWT vs. Sham ESWT and medication therapy in acute LBP	Radial ESWT device—Swiss DolorClast® EVO BLUE, Switzerland
Elgendy et al. (36)	2022	ESWT and standard exercise program vs. standard exercise program in chronic LBP	Radial ESWT device—HC Shock Wave, Elettronica Paganis, Italy
Kong et al. (37)	2022	ESWT vs. Laser therapy in chronic LBP	Radial ESWT device—HK.ESWO-AJ, Shenzhen Huikang Medical Apparatus, China
Sun et al. (38)	2022	ESWT comparing different treatment protocols in chronic LBP	Radial ESWT device—enPuls, Zimmer MedizinSysteme, Germany
Wu et al. (39)	2023	ESWT vs. Thermomagnetic therapy in LBP	Radial ESWT device—BHSW Ballistic, Weihai Bohua Medical Equipment Co., China

All these studies report results with radial shockwave or vibrotherapy devices.

**TABLE 2** Summary of the randomized controlled trials regarding the basic demographic characteristics, duration of symptoms, assessment tools for the clinical outcome, and follow-up periods.

Author	Year	Study design	Group	Subjects enrolled	Subjects analyzed	Mean age, years	BMI	Symptoms duration, months	Assessment tools	FUP, months
Moon (18)	2017	Prospective, randomized, controller, single-center	ESWT	15	14	54.42 ± 19.05	NS	20.42 ± 11.81	VAS, ODI	1 and 4 weeks
			Sham	15	11	59.18 ± 15.30		17.70 ± 6.81		
Taheri (20)	2021	Prospective, randomized, controlled, single-center	ESWT	19	17	42.5 ± 10.1	27.1 ± 5.5	4.6 ± 1.2	VAS, ODI	1 and 3 months
			Sham	19	15	37.1 ± 11.8	26.8 ± 2.1	5.0 ± 1.2		
Rajfur (21)	2022	Prospective, randomized, controlled, single-blinded, single-center	ESWT	20	19	42.3 ± 13.1	24.3 ± 3.9	57.5 ± 50.9	VAS, LPS, ODI	After the end, 1 and 3 months
			Sham	20	18	45.4 ± 14.0	26.5 ± 3.0	61.8 ± 53.1		

ESWT, focused extracorporeal shockwave group (experimental arm); Sham, sham-intervened group (control arm); VAS, Visual Analogue Scale; ODI, Oswestry Disability Index; LPS, Laitinen Pain Scale; FUP, follow-up period.

TABLE 3 Treatment protocols of the randomized controlled trials.

Author	Year	ESWT	Control	Treatment regimen	Additional treatment	Device
Moon (18)	2017	2000 shocks, 3 Hz frequency, 0.09–0.25 mJ/mm <sup>2</sup> *	Sham procedure (0.03 mJ/mm <sup>2</sup> with parallel probe orientation)	Single session	Refrain from anti-inflammatory medication and other physical modalities	Aries, Dornier MedTech, Germany
Taheri (20)	2021	1,500 shocks, 4 Hz frequency, 0.15 mJ/mm <sup>2</sup> **	Sham procedure (sound without energy)	Once weekly for 4 weeks (4 sessions)	Exercise program with muscle stretching and strengthening; oral medications (meloxicam 15 mg/d for 2 weeks; tizanidine 2 mg/d for 10 days)	Aries2, Dornier MedTech, Germany
Rajfur (21)	2022	1,000 shocks, 4 Hz frequency, 0.15 mJ/mm <sup>2</sup> **	Sham procedure (absorbing insert)	Twice weekly for 5 weeks (10 sessions)	Stabilization training (45 min, once a day, 5 days a week) with myofascial relaxation, dynamic postural exercises	Duolith SD1, Storz Medical, Switzerland

The additional treatments are described in detail. ESWT, focused extracorporeal shockwave group (experimental arm); Control, sham-intervened group (control arm).

\*Energy flux density (EFD) was set to the maximum tolerated by the patient.

\*\*EFD was fixed.

TABLE 4 Baseline characteristics and clinical results for pain (VAS).

Author	Year		Baseline	After treatment	Month 1	Month 3
Moon (18)	2017	ESWT	6.42 (5.19–7.66)	not given	3.64 (2.29–4.99)*,†	
		Sham	Not given	Not given	6.18 (5.34–7.02)*	
Taheri (20)	2021	ESWT	6.6 ± 1.8		3.0 ± 2.3*	1.8 ± 2.8**
		Sham	6.8 ± 1.9		4.6 ± 1.8*	1.1 ± 1.5**
Rajfur (21)	2022	ESWT	7.2 ± 1.9	1.5 ± 0.6*,†	1.7 ± 1.1*,†	2.0 ± 1.2*
		Sham	7.3 ± 1.7	2.9 ± 1.3*,†	3.1 ± 1.7*,†	3.3 ± 1.9*

Data is expressed as mean ± SD except for the study of Moon et al., where the 95% confidence interval is presented in brackets.

\*Statistically significant difference within groups at the corresponding follow-up time points compared to baseline.

\*\*Statistically significant difference within groups at month 3 compared to month 1.

†Statistically significant difference between groups at each time point.

TABLE 5 Baseline characteristics and clinical results regarding the quality of life because of pain (ODI).

Author	Year	Group	Baseline	After treatment	Month 1	Month 3
Moon (18)	2017	ESWT	17.80 (13.08–22.63)	12.92 (9.19–16.67)	11.28 (7.30–15.28)	
		Sham	Not given	Not given	Not given	
Taheri (20)	2021	ESWT	41.1 ± 21.2		11.9 ± 6.6*,†	7.1 ± 5.7**
		Sham	40.5 ± 19.1		22.9 ± 9.4*,†	8.9 ± 5.7**
Rajfur (21)	2022	ESWT	33.4 ± 6.3	18.3 ± 7.5*	17.3 ± 7.1*	18.3 ± 6.8*
		Sham	32.5 ± 8.6	19.5 ± 6.5*	18.7 ± 6.6*	19.9 ± 7.4*

Data is expressed as mean ± SD except for the study of Moon et al., where the 95% confidence interval is presented in brackets.

\*Statistically significant difference within groups at the corresponding follow-up time points compared to baseline.

\*\*Statistically significant difference within groups at month 3 compared to month 1.

†Statistically significant difference between groups at each time point.

number generator. Both groups performed basic exercises to stabilize the spine. The same therapist performed all tests and surveys, and the same physiotherapist performed all treatments and exercises. Patients with MRI-confirmed L5-S1 discopathy (Modic type 3 changes), chronic pain lasting at least 12 weeks, and no spinal surgical interventions were enrolled. Among the exclusion criteria were discopathy beyond the L5-S1 level (Modic type 1 and 2), reduced segmental mobility, other spinal conditions, neurologic deficit, blood coagulation disorders, metal implants at

the treatment site, sensory disturbances, mental disorders, cancer, local skin lesions, and infections. The study involved 40 subjects equally allocated in the two homogenous and comparable groups. Three patients were excluded from the statistical analysis—one was lost in the follow-up period from the treatment group and two from the sham procedure group because of taking painkillers. According to the authors, each procedure was performed using the contact method at the lower back, where the most severe pain is localized.



The energy flux density was  $0.15 \text{ mJ/mm}^2$  in 1000 pulses with a frequency of 4 Hz. Treatments were performed twice a week for 5 weeks under ultrasound guidance. Patients from the control group received a sham procedure using a polyethylene-absorbing insert on the top of the applicator with the same audible signals and technical parameters. Identical stabilization training with myofascial relaxation and dynamic postural exercises were performed in both groups 5 days a week. The assessment was done using a visual analog scale (VAS), Laitinen Pain Scale (LPS), and Oswestry Disability Index (ODI) before and after treatment and during follow-up at 1 and 3 months. Appropriate statistical analysis was performed. The groups were comparable in terms of demographic and clinical characteristics. The authors found a significantly greater improvement for the focused ESWT compared to the sham group immediately after treatment and 1 month later but not in the 3-month follow-up in VAS and LPS. This was not evident regarding the ODI scores. Still, the patients in the experimental group had greater improvement.

## Discussion

Considering the available clinical studies, several problems in future designs should be addressed. First of all, the differences in the inclusion and exclusion criteria for subjects in the known series are significant. Many of them are controversial and prone to selection bias. At the same time, if we strictly adhere to them, major patient populations are not covered. Second, uniform treatment parameters have not been established to date. The applied therapeutic protocols are not based on theoretical statements, experimental findings, and practical experience. Lastly, there is a need for objective assessment and reproducible tools regarding the clinical outcome. Thus, even the few low-quality studies are not comparable.

Notably, in the study of Moon et al. (18), 98 patients were assessed for eligibility, of which 39 did not meet the inclusion criteria, and 27 declined participation. From the allocated 30 subjects, 15 in the focused ESWT and 15 in the sham-intervened group, there was one loss for follow-up from each one. Another three patients from the controls were drop-outs due to pain medication intake. Thus, only 25 patients, 14 from the experimental and 11 from the sham-stimulation groups, achieved analysis. The abovementioned poses a significant risk of selection bias. Several points of this study also remain disputable. For example, focused ESWT in another body part is irrelevant to the local procedure in the current area of interest, and such patients might not be excluded. Furthermore, cases with facet joint syndrome encompass a large proportion of the low back pain population. This is an important group, where it is sometimes difficult to differentiate from the pain of sacroiliac joint origin, even with negative imaging findings, and it contributes further to the selection bias.

The study of Taheri et al. (20) has several limitations, including the small number of subjects, as noted by the authors. Out of 50 patients, 12 were excluded, and another six were lost during the follow-up, which implies observational bias. Disc degeneration is stated to be an exclusion criterion, but this is the anatomical substrate of low back pain in most cases. Thus, this point is disputable and unclear. In addition, it is difficult to differentiate the effect of the focused ESWT because of the routinely administered drug therapy in all patients.

The randomized controlled trial of Rajfur et al. (21) also has several drawbacks and limitations that have not been discussed by the

authors. Some exclusion criteria remain disputable, like implanted cardiac pacemakers. For the study examiners, it is difficult to control the intake of painkillers and anti-inflammatory drugs in patients with pain syndrome. Reduced mobility in the lumbosacral segment is nonsense as an exclusion criterion. In the same context, a discopathy beyond the L5-S1 Modic type 1 and 2 changes remains unclear. Furthermore, ovulation in healthy women included in this study is expected to occur every 4 weeks, which confronts the protocol, and this population of patients should not be included.

Evaluation of the treatment effect in patients with pain syndrome is difficult and, in many cases, subjective. To address this problem, Elgendy et al. (22) published a randomized controlled trial of radial ESWT in chronic low back patients. Therefore, this study is not part of the current analysis. However, the authors evaluated the electromyographic (EMG) activity of trunk muscles (lumbar multifidus and lumbar erector spinae) in the form of root mean square. After electrode placement, the protocol included the application of an appropriate resistance at the scapular region to maintain the maximum isometric muscular contraction three times. Then, the patient was asked to gradually increase the force to reach an absolute maximum and to hold it for 8–10 s. Three maximal isometric extension efforts were performed. Approximately 30 s of rest were given between contractions. EMG sampling frequency in their protocol was 1,000 Hz, and the sensitivity was  $500 \mu\text{s}$ . The total root mean square of the recorded signals was obtained. The authors found that their increase correlates with lower VAS scores for pain. This approach needs to be replicated in further studies.

In a single-blind randomized clinical trial, Eftekharsadat et al. (23) investigated the effect of radial ESWT on patients with low back pain, which is also not included in this analysis. However, the authors present a pressure-pain threshold assessment using a commercially available digital algometer for the myofascial trigger points on quadratus lumborum muscles. Larger values indicate higher pain thresholds. The device has a  $1.0 \text{ cm}^2$  circular flat tip, which was slowly pushed upright to the skin over the trigger points. The exerted pressure was increased gradually until the pain was perceived. The measurements were implemented thrice with 40 s intervals, and the mean value was considered.

Addressing the primary end-point, which is the pain intensity, all future studies for LBP treatment should rely not only on the widely accepted visual analog type of scales. A more detailed assessment could be achieved with the Oswestry Disability Index and the Short Form 36 health survey for quality of life. However, both require active patient participation and, in some cases, the need for assistance from a third party, which may contribute to bias. For example, Schneider et al. used a very simple pain measurement instrument, the 7-point-Likert-Scale, with anchors: no pain, very low, low, moderate, strong, very strong, and unbearable (24). However, the use of uncommon evaluation tools makes it difficult to compare results between studies.

Notably, in all analyzed studies, pain decreased over time in treatment and control groups (18, 20, 21). Complaints in degenerative diseases of the spine generally have a chronically relapsing course with periods of exacerbation, then improvement. The latter can be accelerated with the help of medication, physiotherapy, manual therapy, and exercises. Similarly, focused ESWT significantly reduced pain and improved functional impairment immediately after the procedures and 1 month later. At the 3-month follow-up, the results remained better in the experimental compared to the control groups, despite minimal pain levels in both. None of the studies followed the

TABLE 6 Systematic review with meta-analyses of randomized controlled trials of ESWT.

Author	Year	Study	Limitations
Yue et al. (40)	2021	Systematic review and meta-analysis of RCTs	8 radial ESWT/1 focused ESWT/1 vibrotherapy
Li et al. (41)	2022	Systematic review and meta-analysis of RCTs	11 radial ESWT/2 focused ESWT/1 vibrotherapy
Ma et al. (42)	2022	Systematic review and meta-analysis of RCTs	12 radial ESWT/1 focused ESWT/1 vibrotherapy
Wu et al. (43)	2023	Systematic review and meta-analysis of non-RCT and RCTs	18 radial ESWT/3 focused ESWT/1 vibrotherapy
Liu et al. (44)	2023	Systematic review and meta-analysis of RCTs	9 radial ESWT/2 focused ESWT/1 vibrotherapy

treated patients long-term, and this is precisely where the focused shockwave has the potential for a significantly better outcome.

Patients who are not indicated for surgery but are still unresponsive to conservative treatment may benefit from focused ESWT to relieve pain. As an alternative to corticosteroid infiltrations, this approach dismisses the possibility of complications such as infection, hematoma, vessel injury, intravascular drug administration, hypertension, glucose intolerance, and osteoporosis development (25). The focused ESWT could also be combined with medical therapy and exercises (20). Despite the differences between these few studies, the findings show a significant reduction in low back pain and disability. However, none have a high level of evidence, treatment protocols are still not established, and sample sizes are small.

Several systematic reviews with meta-analyses of randomized controlled trials for ESWT of low back pain have been published (Table 6). None of them reliably confirm the effectiveness of the therapeutic approach despite the good results evident in each clinical trial. It is important to note that these reviews do not analyze separately or compare the radial against focused modality. Contrary to the results with radial ESWT, the focused devices are more promising in the context of the precise targeting and dosing of energy deep within the human body to the pathological process. However, only a few studies with a small number of patients and varying treatment protocols exist to make an unambiguous conclusion about the effectiveness of the therapy and the risk of complications. All future trials necessitate approving objective methods for assessment and establishing uniform treatment parameters.

## Conclusion

Focused ESWT is a modern physiotherapeutic method that can potentially treat a broad spectrum of conditions responsible for low back pain. Despite the small number of low-evidence studies, there is sufficient data on the effectiveness and safety of this therapeutic modality. With future well-designed trials, the bias risks would be diminished, the indications for its use would expand, and the treatment protocols would be clarified.

## References

1. Hoy D, Bain C, Williams G, March L, Brooks P, Blyth F, et al. A systematic review of the global prevalence of low back pain. *Arthritis Rheum.* (2012) 64:2028–37. doi: 10.1002/art.34347

2. Walker BF. The prevalence of low back pain: a systematic review of the literature from 1966 to 1998. *J Spinal Disord.* (2000) 13:205–17. doi: 10.1097/00002517-200006000-00003

3. Meucci RD, Fassa AG, Faria NMX. Prevalence of chronic low back pain: systematic review. *Rev Saude Publica.* (2015) 49:1. doi: 10.1590/S0034-8910.2015049005874

4. Freburger JK, Holmes GM, Agans RP, Jackman AM, Darter JD, Wallace AS, et al. The rising prevalence of chronic low back pain. *Arch Intern Med.* (2009) 169:251–8. doi: 10.1001/archinternmed.2008.543

## Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

## Author contributions

DF: Conceptualization, Formal analysis, Investigation, Methodology, Visualization, Writing – original draft, Writing – review & editing.

## Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

## Conflict of interest

The author declares the absence of any commercial or financial relationships that could be construed as a conflict of interest.

The reviewer VK declared a shared affiliation, with no collaboration, with the author to the handling editor at the time of the review.

## Publisher’s note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

5. Stanton TR, Henschke N, Maher CG, Refshauge KM, Latimer J, McAuley JH. After an episode of acute low back pain, recurrence is unpredictable and not as common as previously thought. *Spine.* (2008) 33:2923–8. doi: 10.1097/BRS.0b013e31818a3167

6. Morlion B. Chronic low back pain: pharmacological, interventional and surgical strategies. *Nat Rev Neurol.* (2013) 9:462–73. doi: 10.1038/nrneurol.2013.130

7. Kreiner DS, Matz P, Bono CM, Cho CH, Easa JE, Ghiselli G, et al. Guideline summary review: an evidence-based clinical guideline for the diagnosis and treatment of low back pain. *Spine J Off J North Am Spine Soc.* (2020) 20:998–1024. doi: 10.1016/j.spinee.2020.04.006

8. da Silva T, Mills K, Brown BT, Pocovi N, de Campos T, Maher C, et al. Recurrence of low back pain is common: a prospective inception cohort study. *J Phys.* (2019) 65:159–65. doi: 10.1016/j.jphys.2019.04.010
9. Crevenna R, Mickel M, Keilani M. Extracorporeal shock wave therapy in the supportive care and rehabilitation of cancer patients. *Support Care Cancer Off J Multinat Assoc Support Care Cancer.* (2019) 27:4039–41. doi: 10.1007/s00520-019-05046-y
10. van der Worp H, van den Akker-Scheek I, van Schie H, Zwerver J. ESWT for tendinopathy: technology and clinical implications. *Knee Surg Sports Traumatol Arthrosc Off J ESSKA.* (2013) 21:1451–8. doi: 10.1007/s00167-012-2009-3
11. Klonschinski T, Ament SJ, Schlereth T, Rompe JD, Birklein F. Application of local anesthesia inhibits effects of low-energy extracorporeal shock wave treatment (ESWT) on nociceptors. *Pain Med Malden Mass.* (2011) 12:1532–7. doi: 10.1111/j.1526-4637.2011.01229.x
12. Mihai EE, Popescu MN, Iliescu AN, Berteanu M. A systematic review on extracorporeal shock wave therapy and botulinum toxin for spasticity treatment: a comparison on efficacy. *Eur J Phys Rehabil Med.* (2022) 58:565–74. doi: 10.23736/S1973-9087.22.017136-2
13. Wang CJ. Extracorporeal shockwave therapy in musculoskeletal disorders. *J Orthop Surg.* (2012) 7:11. doi: 10.1186/1749-799X-7-11
14. Wu YT, Chang CN, Chen YM, Hu GC. Comparison of the effect of focused and radial extracorporeal shock waves on spastic equinus in patients with stroke: a randomized controlled trial. *Eur J Phys Rehabil Med.* (2018) 54:518–25. doi: 10.23736/S1973-9087.17.04801-8
15. Wang YC, Chen SJ, Huang PJ, Huang HT, Cheng YM, Shih CL. Efficacy of different energy levels used in focused and radial extracorporeal shockwave therapy in the treatment of plantar fasciitis: a meta-analysis of randomized placebo-controlled trials. *J Clin Med.* (2019) 8:1497. doi: 10.3390/jcm8091497
16. Li C, Li Z, Shi L, Wang P, Gao F, Sun W. Effectiveness of focused shockwave therapy versus radial shockwave therapy for noncalcific rotator cuff tendinopathies: a randomized clinical trial. *Biomed Res Int.* (2021) 2021:6687094–9. doi: 10.1155/2021/6687094
17. Lohrer H, Nauck T, Dorn-Lange NV, Schöll J, Vester JC. Comparison of radial versus focused extracorporeal shock waves in plantar fasciitis using functional measures. *Foot Ankle Int.* (2010) 31:1–9. doi: 10.3113/FAI.2010.0001
18. Moon YE, Seok H, Kim SH, Lee SY, Yeo JH. Extracorporeal shock wave therapy for sacroiliac joint pain: a prospective, randomized, sham-controlled short-term trial. *J Back Musculoskelet Rehabil.* (2017) 30:779–84. doi: 10.3233/BMR-150405
19. Szadek KM, van der Wurff P, van Tulder MW, Zuurmond WW, Perez RSGM. Diagnostic validity of criteria for sacroiliac joint pain: a systematic review. *J Pain.* (2009) 10:354–68. doi: 10.1016/j.jpain.2008.09.014
20. Taheri P, Khosrawi S, Ramezani M. Extracorporeal shock wave therapy combined with oral medication and exercise for chronic low back pain: a randomized controlled trial. *Arch Phys Med Rehabil.* (2021) 102:1294–9. doi: 10.1016/j.apmr.2020.12.008
21. Rajfur K, Rajfur J, Matusz T, Walewicz K, Dymarek R, Ptazkowski K, et al. Efficacy of focused extracorporeal shock wave therapy in chronic low Back pain: a prospective randomized 3-month follow-up study. *Med Sci Monit Int Med J Exp Clin Res.* (2022) 28:e936614. doi: 10.12659/MSM.936614
22. Elgendy M, Mohamed M, Hussien H. Effect of extracorporeal shock wave on electromyographic activity of trunk muscles in non-specific chronic low back pain: a randomized controlled trial. *Eurasian J Biosci.* (2020) 14:6955–62.
23. Eftekharsadat B, Fasaie N, Golalizadeh D, Babaei-Ghazani A, Jahanjou F, Eslampoor Y, et al. Comparison of efficacy of corticosteroid injection versus extracorporeal shock wave therapy on inferior trigger points in the quadratus lumborum muscle: a randomized clinical trial. *BMC Musculoskelet Disord.* (2020) 21:695. doi: 10.1186/s12891-020-03714-3
24. Schneider R. Effectiveness of myofascial trigger point therapy in chronic back pain patients is considerably increased when combined with a new, integrated, low-frequency shock wave vibrotherapy (Cellconnect impulse): a two-armed, measurement repeated, randomized, controlled pragmatic trial. *J Back Musculoskelet Rehabil.* (2018) 31:57–64. doi: 10.3233/BMR-169662
25. Cohen SP, Huang JHY, Brummett C. Facet joint pain--advances in patient selection and treatment. *Nat Rev Rheumatol.* (2013) 9:101–16. doi: 10.1038/nrrheum.2012.198
26. Zheng Z, Gao Q, Wang J. Effect of pneumatically ballistic extracorporeal shockwave on chronic nonspecific low back Ppain. *Chin J Rehabil Theory Pract.* (2013) 19:666–8.
27. Lee S, Lee D, Park J. Effects of extracorporeal shockwave therapy on patients with chronic low back pain and their dynamic balance ability. *J Phys Ther Sci.* (2014) 26:7–10. doi: 10.1589/jpts.26.7
28. Han H, Lee D, Lee S, Jeon C, Kim T. The effects of extracorporeal shock wave therapy on pain, disability, and depression of chronic low back pain patients. *J Phys Ther Sci.* (2015) 27:397–9. doi: 10.1589/jpts.27.397
29. Hong JO, Park JS, Jeon DG, Yoon WH, Park JH. Extracorporeal shock wave therapy versus trigger point injection in the treatment of myofascial pain syndrome in the Quadratus Lumborum. *Ann Rehabil Med.* (2017) 41:582–8. doi: 10.5535/arm.2017.41.4.582
30. Engy M, Nahas , DShA , Magda S, Morsy , FFES . Effect of shock wave therapy on postpartum low back pain. *Med J Cairo Univ.* (2018) 86:893–901. doi: 10.21608/mjcu.2018.55581
31. Walewicz K, Taradaj J, Rajfur K, Ptazkowski K, Kuszewski MT, Sopel M, et al. The effectiveness of radial extracorporeal shock wave therapy in patients with chronic low back pain: a prospective, randomized, single-blinded pilot study. *Clin Interv Aging.* (2019) 14:1859–69. doi: 10.2147/CIA.S224001
32. Çelik A, Altan L, Ökmen BM. The effects of extracorporeal shock wave therapy on pain, disability and life quality of chronic low back pain patients. *Altern Ther Health Med.* (2020) 26:54–60.
33. Notarnicola A, Maccagnano G, Moretti L, Salvemini M, Bianchi FP, Covelli I, et al. Conservative treatment of sacroiliac joint pain with extracorporeal shockwave therapy. *J Biol Regul Homeost Agents.* (2020) 34:697–703. doi: 10.23812/19-378-L-68
34. Guo X, Li L, Yan Z, Li Y, Peng Z, Yang Y, et al. Efficacy and safety of treating chronic nonspecific low back pain with radial extracorporeal shock wave therapy (rESWT), rESWT combined with celecoxib and eperisone (C+E) or C+E alone: a prospective, randomized trial. *J Orthop Surg.* (2021) 16:705. doi: 10.1186/s13018-021-02848-x
35. Lange T, Deventer N, Gosheger G, Lampe LP, Bockholt S, Schulze Boevingloh A, et al. Effectiveness of radial extracorporeal shockwave therapy in patients with acute low Back pain-randomized controlled trial. *J Clin Med.* (2021) 10:5569. doi: 10.3390/jcm10235569
36. Elgendy MH, Mohamed M, Hussein HM. A single-blind randomized controlled trial investigating changes in electrical muscle activity, pain, and function after shockwave therapy in chronic non-specific low back pain: pilot study. *Ortop Traumatol Rehabil.* (2022) 24:87–94. doi: 10.5604/01.3001.0015.8266
37. Kong L, Tian X, Yao X. Effects of extracorporeal shock wave therapy on chronic low back pain and quality of life. *Minerva Surg.* (2023) 78:305–6. doi: 10.23736/S2724-5691.22.09537-5
38. Sun H, Chen H, Mu G, Fu H, Yue L. Comparison of different treatment regimens of extracorporeal shockwave therapy in chronic low-back pain: a randomized controlled trial. *Pain Physician.* (2022) 25:E1211–8.
39. Wu T, Wang D, Zhang X, Li J, Yuan B. Comparison of pain relief and limb function improvement after extracorporeal shock wave therapy and thermomagnetic therapy in the treatment of low back pain. *Pak J Med Sci.* (2023) 39:268–73. doi: 10.12669/pjms.39.1.6668
40. Yue L, Sun MS, Chen H, Mu GZ, Sun HL. Extracorporeal shockwave therapy for treating chronic low back pain: a systematic review and meta-analysis of randomized controlled trials. *Biomed Res Int.* (2021) 2021:5937250–17. doi: 10.1155/2021/5937250
41. Li C, Xiao Z, Chen L, Pan S. Efficacy and safety of extracorporeal shock wave on low back pain: a systematic review and meta-analysis. *Medicine (Baltimore).* (2022) 101:e32053. doi: 10.1097/MD.00000000000032053
42. Ma J, Yan Y, Wang B, Sun W, Yue D, Wang W. Effectiveness and safety of extracorporeal shock wave treatment for low back pain: a systematic review and meta-analysis of RCTs. *Int J Osteopath Med.* (2022) 43:39–48. doi: 10.1016/j.ijosm.2022.03.004
43. Wu Z, Zhou T, Ai S. Extracorporeal shock wave therapy for low back pain: a systematic review and meta-analysis. *Medicine (Baltimore).* (2023) 102:e36596. doi: 10.1097/MD.00000000000036596
44. Liu K, Zhang Q, Chen L, Zhang H, Xu X, Yuan Z, et al. Efficacy and safety of extracorporeal shockwave therapy in chronic low back pain: a systematic review and meta-analysis of 632 patients. *J Orthop Surg.* (2023) 18:455. doi: 10.1186/s13018-023-03943-x

SYSTEMATIC REVIEW

Open Access



# Efficacy and safety of extracorporeal shockwave therapy in chronic low back pain: a systematic review and meta-analysis of 632 patients

Kun Liu<sup>1†</sup>, Qingyu Zhang<sup>2†</sup>, Lili Chen<sup>1</sup>, Haoran Zhang<sup>2</sup>, Xiqiang Xu<sup>2</sup>, Zenong Yuan<sup>2</sup> and Jun Dong<sup>2\*</sup>

## Abstract

**Background** Extracorporeal shock wave therapy (ESWT) has been widely used for pain control in musculoskeletal disorders. Whether ESWT can relieve chronic low back pain (CLBP) and improve lumbar function is still unclear. Therefore, we conducted a meta-analysis of relevant studies to comprehensively analyse and determine the efficacy and safety of ESWT for chronic low back pain.

**Methods** Four databases were systematically searched for randomized controlled trials (RCTs) on ESWT for CLBP. The quality of the included studies was evaluated according to Cochrane systematic review criteria, relevant data were extracted, and meta-analysis was performed using RevMan 5.4 software. The primary outcomes were pain intensity, disability status, and mental health. The data were expressed as standardized mean differences (SMD) or weighted mean difference (WMD) and 95% confidence intervals (CI). Heterogeneity was assessed using the  $I^2$  statistic. If  $I^2 \geq 50\%$ , a random effects model was applied; otherwise, a fixed effects model was used.

**Results** Twelve RCTs involving 632 patients were included in this meta-analysis. The ESWT group reported significantly more pain relief than the control group at 4 weeks (WMD =  $-1.04$ ; 95% CI =  $-1.44$  to  $-0.65$ ;  $P < 0.001$ ) and 12 weeks (WMD =  $-0.85$ ; 95% CI =  $-1.30$  to  $-0.41$ ;  $P < 0.001$ ). Regarding the dysfunction index, ESWT led to significant improvement in lumbar dysfunction compared with the control group at 4 weeks (WMD =  $-4.22$ ; 95% CI =  $-7.55$  to  $-0.89$ ;  $P < 0.001$ ) and 12 weeks (WMD =  $-4.51$ ; 95% CI =  $-8.58$  to  $-0.44$ ;  $P = 0.03$ ). For mental health, there was no significant difference between the ESWT group and the control group after 4 weeks of intervention (SMD =  $1.17$ ; 95% CI =  $-0.10$  to  $2.45$ ;  $P = 0.07$ ).

**Conclusion** This systematic review and meta-analysis found that ESWT provided better pain relief and improved lumbar dysfunction compared with the other interventions included, and no serious adverse effects were found. There was no significant effect of ESWT on the mental health of patients, but we hope to obtain more RCTs for further analysis in the future. Based on the pooled results, we suggest that ESWT is effective and safe for treating chronic low back pain.

**Keywords** Chronic low back pain, Dysfunction, ESWT, Mental health, Meta-analysis

<sup>†</sup>Kun Liu and Qingyu Zhang contributed equally to this article.

\*Correspondence:

Jun Dong

tungjun@163.com

Full list of author information is available at the end of the article



© The Author(s) 2023. **Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>. The Creative Commons Public Domain Dedication waiver (<http://creativecommons.org/publicdomain/zero/1.0/>) applies to the data made available in this article, unless otherwise stated in a credit line to the data.



## Introduction

CLBP refers to pain that lasts for at least 12 weeks and occurs in the area below the margin of the low ribs, above the transverse hip line and between the bilateral midaxillary line; this pain is usually accompanied by pain symptoms in one or both lower limbs [1]. The global prevalence rate of CLBP is 13.1~20.3%, and it has been increasing in the past decade, with the number of affected patients rising from 370 million in 1990 to 570 million in 2017 [2]. CLBP has become a global public health problem due to its high incidence, long course and easy recurrence, which seriously affects the quality of life of patients and even causes adverse psychological effects [3]. Pain and limitation of movement are its most basic symptoms. Pain alters the contraction pattern of the trunk muscles, resulting in spasm, increased tone and even atrophy of the low back muscles, thereby significantly reducing the ability of the muscles to engage and destabilize the spine and vertebral balance [4, 5]. In addition, prolonged poor posture in the low back can lead to fatigue of the low back muscles and oedema of the surrounding soft tissues, exudation of inflammatory cells, accumulation of metabolic products and degeneration of muscle fibres, resulting in local adhesions, chronic hypoxia of the muscles and pain; all of these symptoms can contribute to recurrent episodes of CLBP [6, 7].

At present, CLBP is mainly treated conservatively (e.g. physical exercise, physiotherapy, drugs and other non-surgical therapy) with the purposes of relieving pain and restoring physical function [8–10]. However, as a self-exercise therapy, physical exercise has shortcomings such as lack of standard posture and poor adherence; physiotherapy has difficulty achieving a long-term analgesic effect, while drug treatment may be accompanied by nausea, constipation, fatigue and other side effects [11, 12]. Most guidelines advocate the use of non-steroidal anti-inflammatory drugs (NSAIDs) in CLBP, but their long-term efficacy is unknown and the effectiveness of NSAIDs may be overestimated [13, 14]. Recently, mesenchymal stem cells appear to have shown good results in relieving degenerative discogenic pain, but its scope of application is still limited and safety needs further confirmation [15]. In addition, despite the availability of various interventions, more than two-thirds of patients with low back pain relapse within 12 months of recovery [16]. Therefore, it is particularly important to seek other safe and effective treatment strategies.

As an emerging therapeutic method, ESWT is a series of single sound pulses characterized by a high pressure peak and short-term rapid pressure rises and has achieved significant results in the treatment of musculoskeletal system diseases such as osteonecrosis of the femoral head and myofascitis [17, 18]. However, the use of

ESWT in the treatment of CLBP is still controversial, and some clinical guidelines do not recommend it as a routine choice [19]. In recent years, some RCTs have focused on the use of ESWT in the treatment of CLBP. Therefore, an updated meta-analysis is needed to synthesize the literature. The main purpose of this meta-analysis was to evaluate the efficacy and safety of ESWT in reducing pain, improving lumbar function, and promoting mental health in patients with CLBP compared with other treatment methods, such as physical exercise, physiotherapy, and drugs.

## Methods

### Design

This systematic review and meta-analysis was based on the Cochrane Handbook of Systematic Reviews on Interventions [20] and strictly followed the recommended reporting items for the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement guidelines [21]. The review protocol was registered in the PROSPERO database (registration number: CRD42023421589).

### Search strategy

The PubMed, Embase, Web of Science, and Cochrane Library databases were systematically searched from the initial release of the relevant database until April 25, 2023, to identify studies related to the use of ESWT for CLBP. The following search terms were used in the initial literature search: (Extracorporeal Shock Wave Therapy or ESWT) and (Chronic Low Back Pain or low back pain). Two researchers (KL and LLC) independently reviewed the selected studies, and any disagreements were resolved through discussion with a third senior investigator (DJ). In addition, the reference lists of these articles were manually checked to identify other publications that might be relevant.

### Inclusion criteria

The inclusion criteria were as follows: (1) Adult patients (aged  $\geq 18$  years): clinically diagnosed with CLBP of mechanical origin; (2) Experimental group: ESWT or ESWT combined with other intervention methods; (3) Control group: physical exercise, physiotherapy, medicine or other similar interventions; (4) Results: Visual analogue scale (VAS), Oswestry Disability Index (ODI), mental health and other functional parameters; (5) Study design: Randomized controlled trial (RCT).

### Exclusion criteria

The exclusion criteria were as follows: (1) nonhuman research or animal experiments; (2) studies that included participants with post-spinal surgery, pregnancy, or other

spinal conditions (fractures, tumours, spondylolisthesis, ankylosing spondylitis, severe osteoporosis, cauda equina syndrome); (3) articles such as abstracts, letters, editorials, expert opinions, comments, and case reports; (4) non-English studies; and (5) studies without suitable data for analysis.

#### Data extraction

The demographic characteristics extracted included first author, year of publication, study design, sample size of each study, mean age of patients, sex ratio, and follow-up. The main outcome measures of the treatment effect in this study included the VAS pain score, ODI dysfunction index and patients' mental health score. The main mental health scales include the 36-Item Short Form Health Survey (SF-36), Patient Health Questionnaire 9 (PHQ-9) and Beck Depression Index (BDI). If scores were recorded at different follow-up times, we chose the time points closest to 4 weeks and 12 weeks to predict efficacy. In addition, adverse events were recorded.

#### Bias assessment and quality classification

The quality of the included studies was assessed by the version 2 of the Risk of Bias tool of the Cochrane Library (RoB 2) [22]. Seven domains of bias, including selection bias, performance bias, detection bias, attribution bias, reporting bias, and other sources of bias, were evaluated. Judgements were presented as "high risk," "low risk," or "risk ambiguous," and the quality assessment numbers were generated by RevMan version 5.4. Two independent reviewers (QYZ and XQX) assessed the risk of bias, and a third senior investigator (DJ) resolved cases of disagreement between the former. The GRADE (Grading of Recommendations, Assessment, Development, and Evaluation) method was used to evaluate the overall quality of the evidence based on risk of bias, indirectness, inconsistency, publication bias, imprecision, and other factors. The GRADE method, depending on estimated effects, classifies the quality of evidence as high, moderate, low, or very low [23].

#### Statistical analyses

Meta-analysis was performed using RevMan5.4 software provided by the Cochrane Collaboration network, and forest maps were used to display the results. Since the measured data were continuous variables, the SMD or WMD and 95% CI were selected as the main effect parameters according to the differences in the measurement methods of the indicators. Heterogeneity was tested by the P value of  $Chi^2$  and  $I^2$ . When statistical heterogeneity was significant ( $P < 0.10$  or  $I^2 > 50\%$ ), the random effects model was chosen. When statistical heterogeneity was not significant ( $P \geq 0.10$  or  $I^2 \leq 50\%$ ), the fixed effects

model was adopted. Furthermore, the source of heterogeneity can be explored by sensitivity analysis and subgroup analysis. Subgroup analyses were performed according to follow-up time and intervention method. According to Egger et al. [24] and with more than ten included studies, we assessed the publication bias between the included studies by visual inspection of the funnel plot.

## Results

#### Selection of studies

In the initial literature search, 186 papers were retrieved. We detected and removed 80 duplicate articles using Endnote X9 software. Additionally, 84 studies were excluded after reviewing the titles and abstracts. Then, after a full text review, we excluded ten articles that did not meet the inclusion criteria. Finally, 12 RCTs involving a total of 632 patients (318 in the ESWT group and 314 in the control group) were included in this study. The selection process is presented in the PRISMA flowchart (Fig. 1).

#### Study characteristics and risk of bias

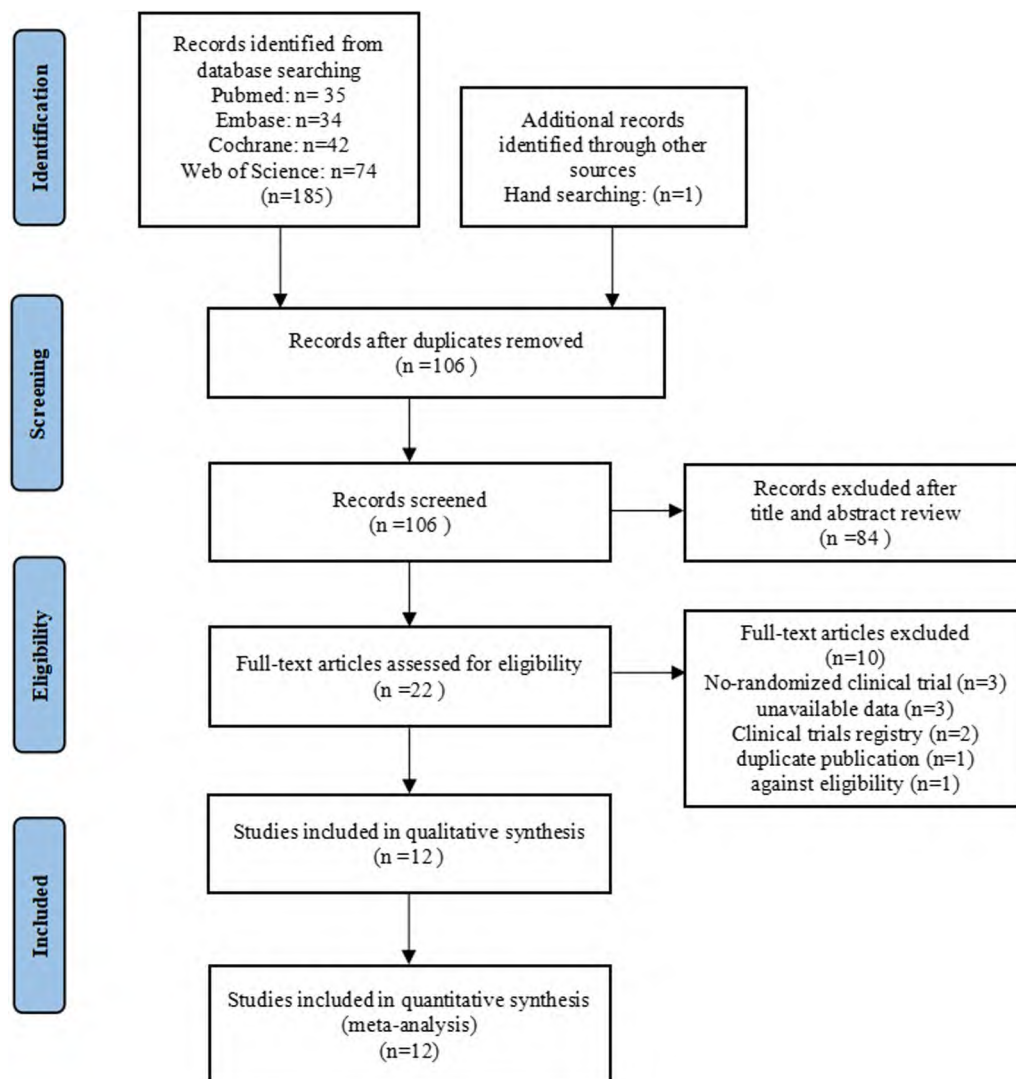
These studies are characterized in Table 1. All articles were published in English between 2014 and 2022. Sample sizes range from 28 to 200. All the experimental groups received ESWT treatment, while the control group received different conservative treatments, including exercise therapy [25–28], physiotherapy [29–31], drug injection [32, 33], oral medication [34, 35], and manual therapy [36]. The items for risk of bias included in each study are shown in Fig. 2. The quality level assessment of the relevant studies is shown in Additional file 1: Table S2.

#### Pain score at 4 weeks

Twelve articles included in our study compared pain scores at 4 weeks between the ESWT group and the control group. There was significant heterogeneity ( $I^2 = 86\%$ ,  $P < 0.001$ ), so we conducted subgroup analysis according to the intervention methods of the control group using the random effects model. The results showed that the trigger drug injection group had high heterogeneity ( $I^2 = 94\%$ ,  $P < 0.001$ ), but there was no significant difference between this group and ESWT, so the overall results were still consistent. The present meta-analysis demonstrated that ESWT was associated with a significant reduction in pain score at 4 weeks (WMD =  $-1.04$ ; 95% CI =  $-1.44$  to  $-0.65$ ;  $P < 0.00001$ , Fig. 3).

#### Pain score at 12 weeks

A total of five studies reported pain scores at 12 weeks. There was significant heterogeneity, and a random effects model was used ( $I^2 = 87\%$ ,  $P < 0.001$ ). This meta-analysis



**Fig. 1** The selection process of this meta-analysis

showed that the pain score of the ESWT group was significantly lower than that of the control group at 12 weeks (WMD =  $-0.85$ ; 95% CI =  $-1.30$  to  $-0.41$ ;  $P=0.0001$ , Fig. 4).

#### ODI score at 4 weeks

A total of ten articles compared ODI scores at 4 weeks between the ESWT and control groups. The difference was significant ( $I^2=96\%$ ,  $P=0.01$ ). Subgroup analysis was conducted according to the intervention methods of the control group, and a random effects model was selected. The physiotherapy group was the main source of heterogeneity ( $I^2=83\%$ ,  $P=0.02$ ), but there was no significant difference between the control group and

the ESWT group, so the overall results were consistent and reliable. In the present meta-analysis, ESWT was associated with a significant increase in ODI scores at 4 weeks (WMD =  $-4.22$ ; 95% CI =  $-7.55$  to  $-0.89$ ;  $P=0.01$ , Fig. 5).

#### ODI score at 12 weeks

ODI scores at 12 weeks were obtained from four studies with significant heterogeneity ( $I^2=56\%$ ,  $P=0.08$ ), and a random effects model was used. The combined results showed a significant difference between the groups (WMD =  $-4.51$ ; 95% CI =  $-8.58$  to  $-0.44$ ;  $P=0.03$ , Fig. 6).

**Table 1** Characteristics of the included RCTs

References	Study design	Sample size		Gender (male)		Age (mean ± SD)		Intervention	Follow-up
		ESWT	Control	ESWT	Control	ESWT	Control		
Notarnicola et al. [26]	RCT	15	15	–	–	62.6 ± 11.8	(range: 43.0–82.0)	ESWT: Shock-waves of 2000 pulses in total were applied at 0.03 mJ/mm <sup>2</sup> and a frequency of 4 Hz/s, once per week for three sessions Control: Bridging exercise, adductor ball squeeze exercise, abdominal marching exercise and reverse curl-ups exercise (50 min), twice a week for 4 weeks	12 weeks
Kong et al. [31]	RCT	100	100	60	60	44.45 ± 8.27	44.53 ± 8.19	ESWT: The impulse voltage is set as 7.0–9.0 kV, the impulse energy is 0.1–0.2 mJ/mm <sup>2</sup> , and the times of shocks are set as 1200. ESWT was conducted usually for 1–2 courses, 5 times as 1 course Control: Laser therapeutic, once a week, with a total of 4 times	1 year



**Table 1** (continued)

References	Study design	Sample size		Gender (male)		Age (mean ± SD)		Intervention	Follow-up
		ESWT	Control	ESWT	Control	ESWT	Control		
Jin et al. (2017)	RCT	15	15	8	9	55.46 ± 15.09	53.13 ± 19.62	ESWT: With 2000 shock waves applied at each session at an intensity of 0.085–0.148 mJ/mm <sup>2</sup> . We repeated this procedure a total of three times, at 3-day intervals Control: Trigger point injection	4 weeks
Eftekharsadat et al. [33]	RCT	27	27	20	17	44.74 ± 9.34	45.04 ± 11.86	ESWT: Shock waves of 1500 pulses with an energy flux density of 0.1 mJ/mm <sup>2</sup> /min, energy level of 2–4, a frequency of 10–16 Hz, and pulse rate of 160/min in total, once a week for 5 weeks. Physio- cal exercise: stretching exercises Control: Trigger point injection, muscle injection of 40 mg triamci- nolone + 2 mL lidocaine 2%, one session. Physical exer- cise: stretching exercises	4 weeks

**Table 1** (continued)

References	Study design	Sample size		Gender (male)		Age (mean ± SD)		Intervention	Follow-up
		ESWT	Control	ESWT	Control	ESWT	Control		
Han et al. [30]	RCT	15	15	9		49.7 ± 8.3	46.0 ± 8.9	ESWT: Each patient assumed a prone position, and 1000 shock waves (7 times per sec) were applied at 2.5 Hz at low energy flux densities of 0.01–0.16 mJ/mm <sup>2</sup> using a 17 mm head. The treatment was conducted at the quadratus lumborum muscle and the sacroiliac joint, where the patients complained of pain Control: Bridging exercise, adductor ball squeeze exercise, abdominal marching exercise and reverse curl-ups exercise (50 min), twice a week for 4 weeks	6 weeks

**Table 1** (continued)

References	Study design	Sample size		Gender (male)		Age (mean ± SD)		Intervention	Follow-up
		ESWT	Control	ESWT	Control	ESWT	Control		
Walewicz et al. [25]	RCT	20	20	6	5	51.1 ± 8.4	55.8 ± 9.3	ESWT: Shock waves of 2000 pulses with the pressure of 2.5 bars (corresponding to an energy flux density of 0.1 mJ/mm <sup>2</sup> ), 5 Hz frequency, and treatment time of seven minutes; Physio- cal exercise Control: Sham shockwaves therapy, Physio- cal exercise	12 weeks
Rajfur et al. [27]	RCT	19	18	10	10	43.0 ± 13.1	45.4 ± 14.0	ESWT: Shock waves of 1000 pulses with an energy flux density of 0.15 mJ/mm <sup>2</sup> /min, frequency 4 Hz, twice a week for 5 weeks. Physio- cal exercise Control: Sham shockwaves therapy. Physio- cal exercise	12 weeks

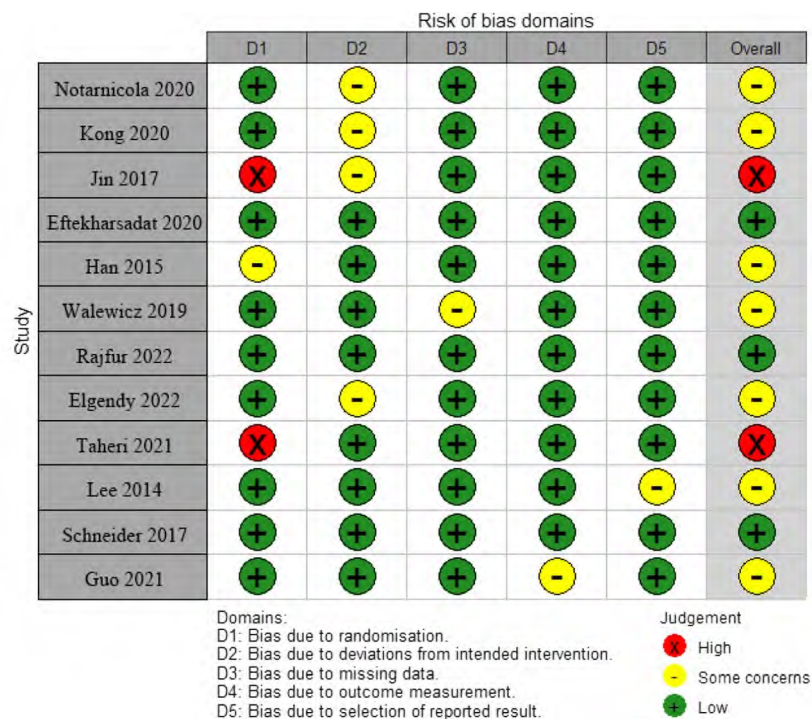
**Table 1** (continued)

References	Study design	Sample size		Gender (male)		Age (mean ± SD)		Intervention	Follow-up
		ESWT	Control	ESWT	Control	ESWT	Control		
Elgendy et al. [28]	RCT	15	15	10	10	32.73 ± 6.73	33.26 ± 5.48	ESWT: 2000 shocks, 0.10 mJ/mm <sup>2</sup> energy, 5 Hz frequency, using a 17 mm head were administered, twice a week for 6 weeks. Stretching exercises were performed for the hamstrings, iliopectors, and back extensors Control: Stretching exercises were performed for the hamstrings, iliopectors, and back extensors	6 weeks
Taheri et al. [34]	RCT	17	15	6	9	42.5 ± 10.1	37.1 ± 11.8	ESWT: Shock waves of 1500 pulses in total were applied at 0.15 mJ/mm <sup>2</sup> and a frequency of 4 Hz/s, once a week for 4 weeks. Oral medications; stretching exercises Control: Sham shockwaves therapy; Oral medications; stretching exercises	12 weeks

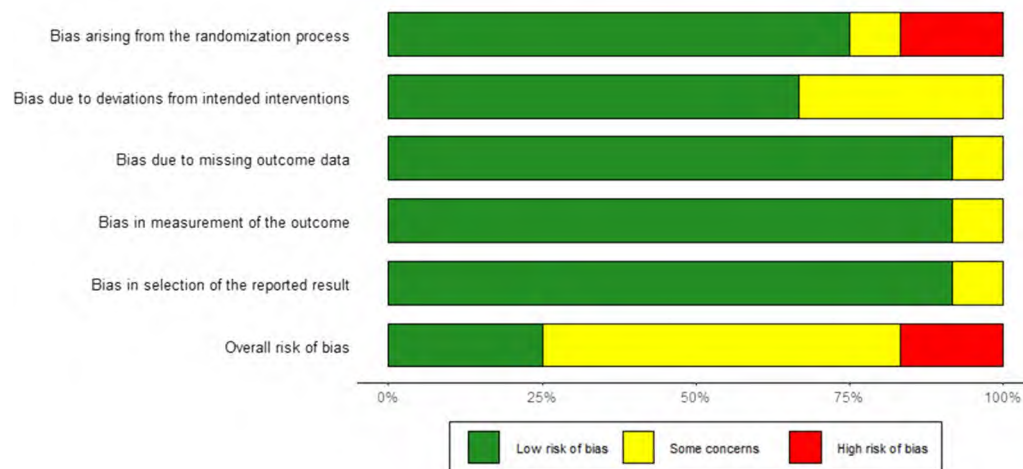
Table 1 (continued)

References	Study design	Sample size		Gender (male)		Age (mean ± SD)		Intervention	Follow-up
		ESWT	Control	ESWT	Control	ESWT	Control		
Lee et al. [29]	RCT	13	15	9		53.92 ± 10.38	54.33 ± 13.16	ESWT: Shock waves of 2000 pulses in total were applied at 0.10 mj/mm <sup>2</sup> and a frequency of 5 Hz/s, twice a week for 6 weeks; Williams' exercises and McKenzie's exercise Control: Hot packs, and ultrasound and electrotherapy; Williams' exercises and McKenzie's exercise	6 weeks
Schneider [36]	RCT	15	15	-	-		43.2 (range: 23–65)	ESWT: Impulse parameters: 15–42 Hz; Myofascial trigger therapy, twice a week for 3 weeks Control: Myofascial trigger therapy, twice a week for 3 weeks	12 weeks
Guo et al. [35]	RCT	47	44	22	25	34.9 ± 8.7	36.0 ± 11.2	ESWT: 4000 pulses, 15 Hz, once a week for 4 weeks Control: Medication: celecoxib and eperisone	12 weeks

ESWT extracorporeal shock wave therapy, SD standard deviation



a



b

**Fig. 2** a Judgement plots for risk of bias items for each RCT. b Weighted summary plot of overall bias type in RCTs

### Mental health score at 4 weeks

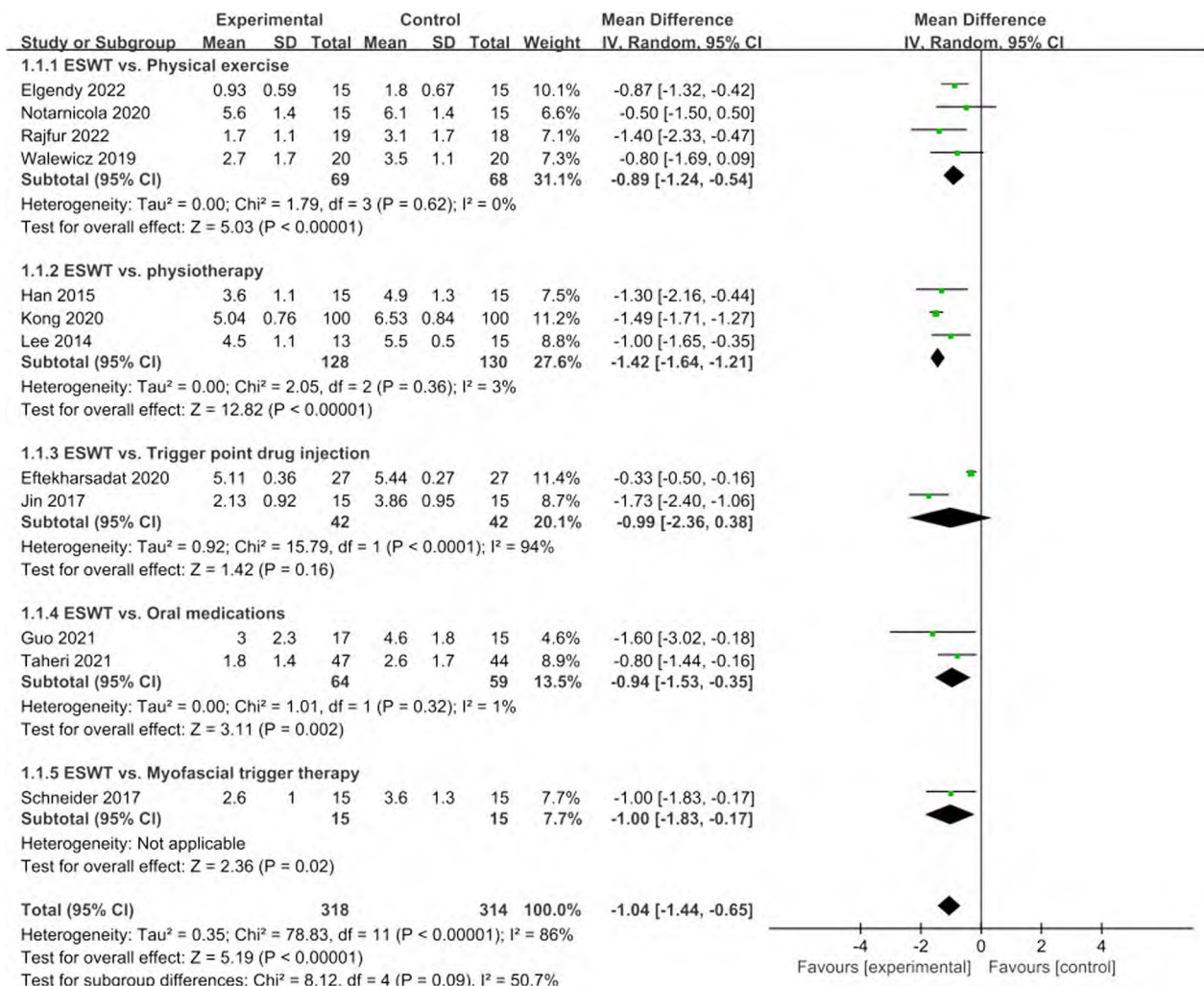
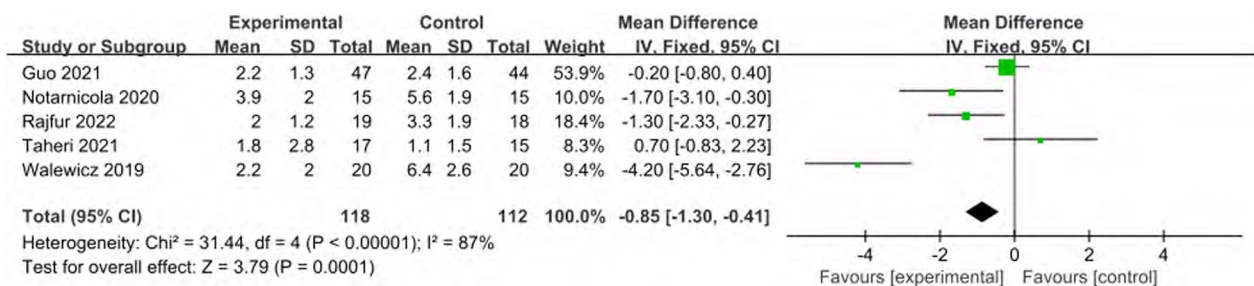
A total of five studies reported mental health scores at 4 weeks, with significant heterogeneity ( $I^2=96\%$ ,  $P<0.001$ ). The questionnaires used for mental health scores were inconsistent, so SMD was selected for meta-analysis. The results showed no specific significant difference in mental health score between the control group and ESWT group at 4 weeks (SMD=1.17; 95% CI= -0.10 to 2.45;  $P=0.07$ , Fig. 7).

### Adverse events

No serious adverse reactions were reported in any of the 12 studies; seven studies specifically reported that adverse reactions did not occur, and five studies did not record adverse reactions at all.

### Qualitative analysis

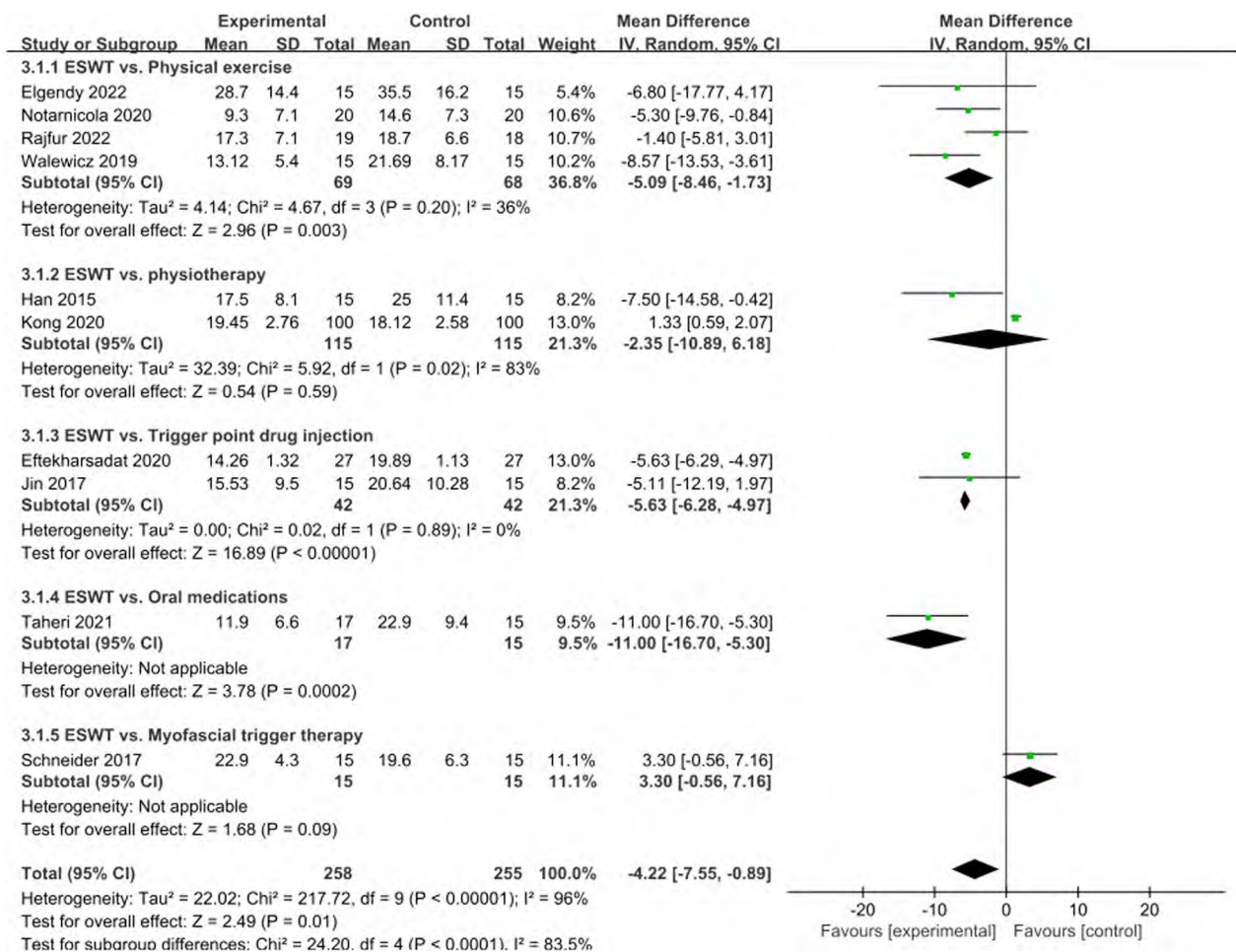
The studies included in this meta-analysis involved both radial extracorporeal shockwave (r-ESWT) and

**Fig. 3** Forest plot of pain score at 4 weeks**Fig. 4** Forest plot of pain score at 12 weeks

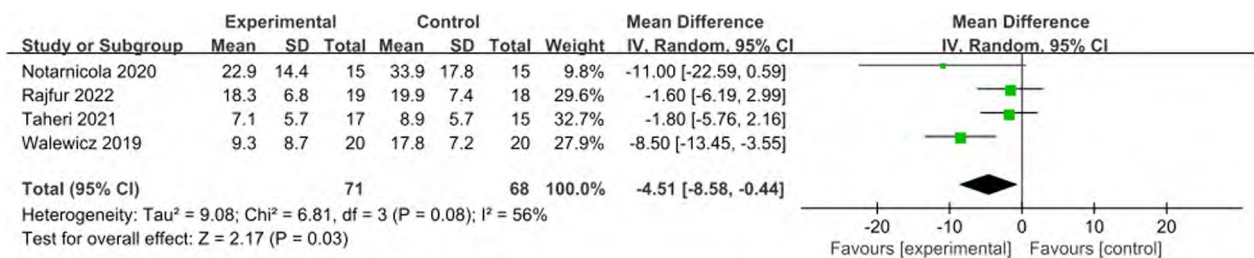
focused extracorporeal shockwave (f-ESWT), so it is of interest to analyse which type of ESWT is more effective for CLBP. Based on the data available in this study, although it is not possible to directly quantify which device and type had a superiority in the treatment, we

have obtained some valuable information from other relevant studies. A study of non-calcific rotator cuff tendinopathies showed that f-ESWT was significantly more effective than r-ESWT at long-term follow-up of





**Fig. 5** Forest plot of ODI score at 4 weeks



**Fig. 6** Forest plot of ODI score at 12 weeks

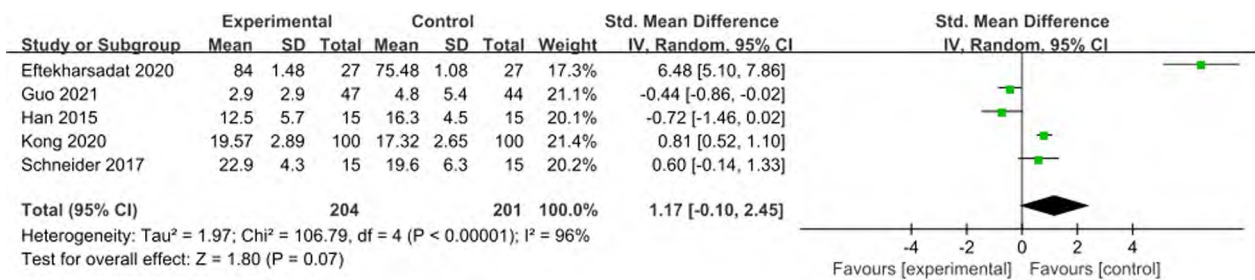
more than 24 weeks [37]. Another study on knee osteoarthritis also showed the same results [38]. However, DeLuca et al. [39] reported that no significant difference was found between f-ESWT and r-ESWT in terms of efficacy in plantar fasciitis and that most patients could achieve functional gains with either form of

shockwave. Which type of ESWT is more advantageous for CLBP still needs further verification.

### Sensitivity analysis

When comparing the effects of ESWT on pain at 12 weeks and mental health at 4 weeks, we performed a sensitivity analysis due to considerable heterogeneity. A





**Fig. 7** Forest plot of mental health score at 4 weeks

single study was excluded each time to assess the impact of individual data on the overall outcome. The results showed that the merger effect was robust, and no significant deviation from the overall results was found in our study (Fig. 8).

### Publication bias

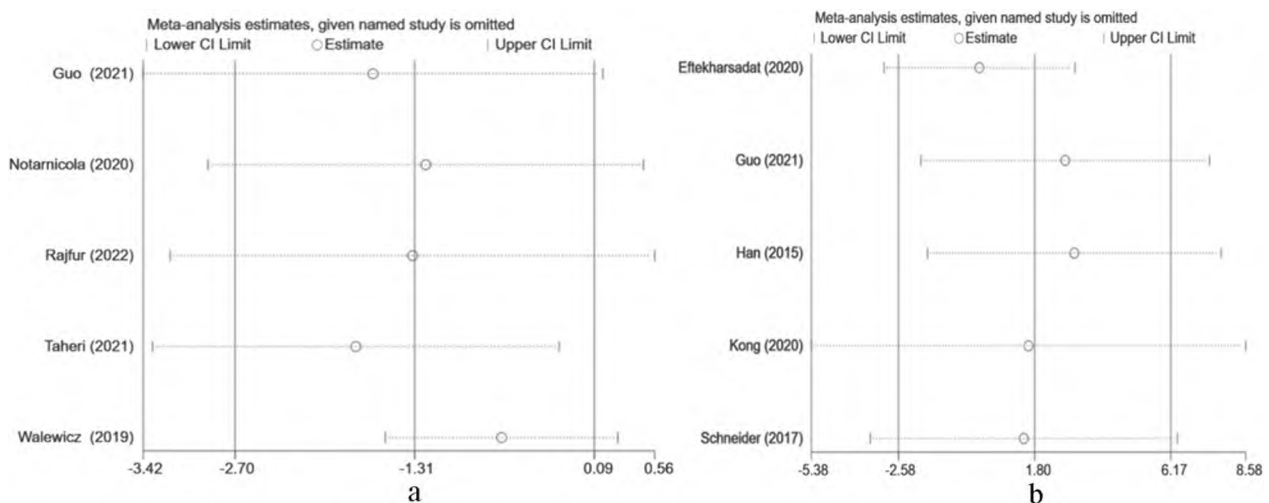
Stata 15.0 software was used to conduct funnel plot analysis of the included literature on ESWT for 4-week pain and ODI outcome indices. The funnel plot showed a basically symmetrical scatter point, indicating that there was no significant publication bias in the included literature, and the results of the meta-analysis were credible (Fig. 9).

### Discussion

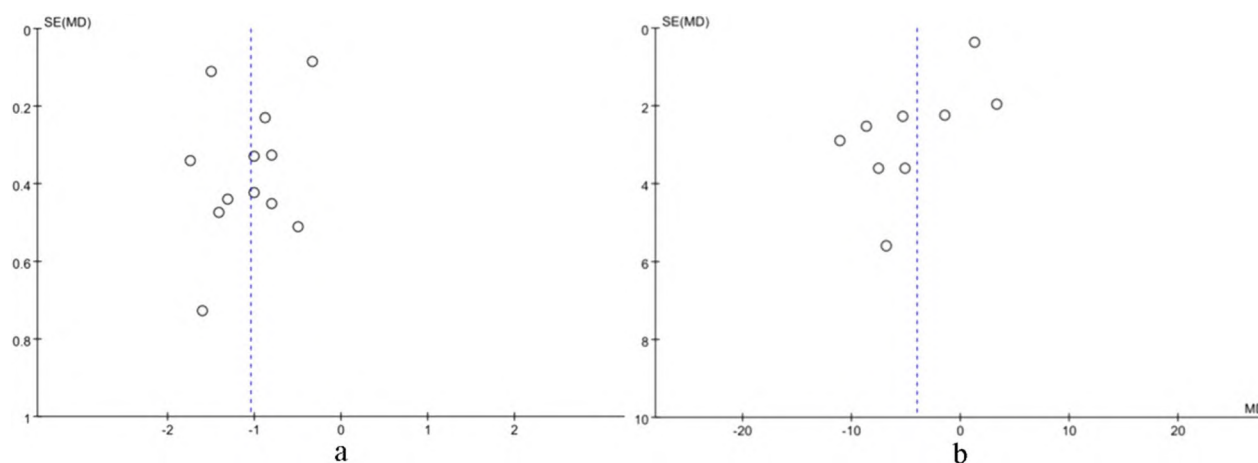
The effectiveness of ESWT on the pain, function and mental health of patients with CLBP was systematically reviewed. The results of this meta-analysis showed that ESWT, either as stand-alone or adjuvant treatment for CLBP, significantly reduced VAS scores at week 4 and week 12 compared to the control group, with a “moderate” recommended level based on GRADE [23].

Furthermore, “low” quality evidence showed significant improvement in ODI scores at week 4 and week 12 for ESWT compared to other conservative treatments. However, with regard to mental health scores at week 4, we did not find significant differences between the two groups. In addition, no ESWT-related adverse events were found (not recorded or did not occur) in any of the 12 RCTs included in the study.

According to our information, there was only one previous meta-analysis about the application of ESWT in CLBP, but we found that this study had high heterogeneity in both pain and dysfunction index analyses, and no subgroup analysis or sensitivity analysis was conducted [40]. This previous study found a nonsignificant effect of ESWT on pain relief in CLBP at 3 months, but our meta-analysis still found better long-term efficacy at 12 weeks after the inclusion of more studies. In addition, we found that this previous meta-analysis included an unpublished master’s thesis and a study of participants with postpartum low back pain. These studies may have affected the reliability of the results, excluding them from our study. Finally, we included 12 RCTs with a total of 632 patients



**Fig. 8** **a** Results of sensitivity analysis for VAS after omitting each study one at a time. CI: confidence interval. **b** Results of sensitivity analysis for the mental health score after omitting each study one at a time. CI: confidence interval



**Fig. 9** Funnel plot for the comparison of ESWT vs. Control at week 4. **(a)** Left figure: pain outcome as measured on a VAS. **(b)** Right figure: ODI outcome

and explored the sources of the associated heterogeneity. Moreover, studies have shown that the occurrence of CLBP is rarely caused by a single factor but by a variety of physical and psychological mechanisms [41]. Holmes et al. [42] believed that limitations or disabilities in patients' daily lives would lead to psychosocial problems, which would further damage their quality of life. Therefore, we conducted the first meta-analysis of mental health scores in CLBP patients.

CLBP is treated with a variety of clinical approaches, including conservative treatment and surgical treatment. In its initial clinical use, ESWT was used by German medical scientists to save patients from surgical pain treatment [43]. With the passage of time, ESWT technology has gradually matured, and its clinical application is also increasing. Many clinical trials have shown that ESWT treatment can significantly reduce pain and complications in patients with CLBP [25, 32]. ESWT mainly treats chronic low back pain through the direct mechanical action of shock waves and indirectly causes mechanical action through cavitation [44]. First, when shock waves enter the human body, different mechanical effects will be generated at the interface of different tissues due to different contact media, such as fat, tendon, ligament and bone tissue, and finally, different forces will be generated on cells [45]. In these forces, tensile stress can relax tissues. It promotes microcirculation, while compressive stress can change the elasticity of cells and increase their ability to absorb oxygen for therapeutic purposes [46, 47]. Second, ESWT causes a large number of tiny bubbles to be created in the tissue, which rapidly expand and burst under the action of the shock wave, producing a high-speed fluid microjet and a shock effect [48]. This cavitation effect is particularly effective in reopening occluded

microvasculature and releasing soft tissue adhesions at the joint [49, 50]. The exact mechanism of the pain-relieving and functional properties of ESWT is not fully understood, and several studies have attempted to elucidate the mechanisms of shock waves from basic science and clinical studies. Studies have shown that the energy released by ESWT is able to stimulate pain receptors located in skin, muscle, connective tissue, bone and joints and activate unmyelinated C and A delta fibres to initiate the "gated" pain control system and block nerve transmission, resulting in analgesic effects [51, 52]. In addition, ESWT has been shown to significantly downregulate the levels of IL-1, TNF- $\alpha$  and MMPs in degenerated joint tissues, thereby reducing the local inflammatory response [53, 54]. Additionally, ESWT also promotes the secretion of pain-reducing chemicals (e.g. endorphins), inhibits the release of pain factors such as substance P and calcitonin gene-related peptides, reduces peripheral nerve sensitivity and increases pain threshold levels [55, 56].

It is well known that adverse reactions are a major concern when evaluating the efficacy of ESWT. Therefore, the higher the risk of adverse reactions, the lower the clinical value of ESWT. In our study, no serious adverse reactions were reported in any of the 12 studies. Therefore, based on the current meta-analysis, ESWT did not increase the risk of local reactions. However, considering the small sample size included in the study, the safety of ESWT needs to be further discussed.

### Limitations

Some limitations of this study should be noted. First, there are differences in aetiology, pain duration, and related parameters used by ESWT in each study, which may lead to heterogeneity in the combination of results

and limited evidence. Second, there are inevitably heterogeneous factors among the included patients, such as age, gender, and racial differences. Next, different biases, including selection bias, language bias, data provision bias and publication bias, may reduce the accuracy of the results. Last but not least, the pain, function and mental health scores included in this meta-analysis were all obtained through questionnaires, and the outcome indicators may be subjective. If there are enough articles with objective observation indicators in the future, relevant studies can be improved. Therefore, more RCTs need to be included in the future to further investigate the efficacy and safety of ESWT.

## Conclusion

ESWT is effective in reducing pain and dysfunction in CLBP patients without increasing the risk of adverse reactions, but it should be performed with caution. However, no significant effect was found on the improvement in mental health. More RCTs are needed to verify the findings in the current study.

## Abbreviations

ESWT	Extracorporeal shock wave therapy
RCT	Randomized controlled trials
CLBP	Chronic low back pain
VAS	Visual analogue scale
ODI	Oswestry Disability Index
WMD	Weighted mean difference
SMD	Standardized mean difference
SD	Standard deviation

## Supplementary Information

The online version contains supplementary material available at <https://doi.org/10.1186/s13018-023-03943-x>.

**Additional file 1:** Quality of evidence assessment by GRADE of the included studies.

## Acknowledgements

Not applicable.

## Author contributions

JD, KL, and QYZ conceived and designed the study. KL, LLC, and HRZ searched and selected relevant studies. QYZ, XQX extracted and interpreted data. KL, JD, and ZNY analysed the data. KL and QYZ wrote the paper. JD and XQX revised the manuscript. All authors read and approved the final manuscript.

## Funding

This work was partially supported by the Young Scholars Program of Shandong Provincial Hospital, the Young Taishan Scholars Program of Shandong Province (Grant number tsqn201909183), the Academic Promotion Program of Shandong First Medical University (Grant number 2020RC008), and the Natural Science Foundation of Shandong Province (Grant numbers ZR2020QH072 and ZR2020MH098).

## Availability of data and materials

The datasets used and analysed during the current study are available from the corresponding author on reasonable request.

## Declarations

### Ethics approval and consent to participate

Not applicable.

### Consent for publication

Not applicable.

### Competing interests

The authors declare that they have no competing interests.

### Author details

<sup>1</sup>Shandong Sport University, No.10600, Road Century, Jinan 250102, Shandong, China. <sup>2</sup>Department of Orthopedics, Shandong Provincial Hospital Affiliated to Shandong First Medical University, No.324, Road Jing Wu Wei Qi, Jinan 250021, Shandong, China.

Received: 15 February 2023 Accepted: 19 June 2023

Published online: 24 June 2023

## References

- Clark S, Horton R. Low back pain: a major global challenge. *Lancet*. 2018;391(10137):2302.
- Wu A, March L, Zheng X, Huang J, Wang X, Zhao J, Blyth FM, Smith E, Buchbinder R, Hoy D. Global low back pain prevalence and years lived with disability from 1990 to 2017: estimates from the Global Burden of Disease Study 2017. *Ann Transl Med*. 2020;8(6):299.
- Katz JN. Lumbar disc disorders and low-back pain: socioeconomic factors and consequences. *J Bone Joint Surg Am*. 2006;88(Suppl 2):21–4.
- Goubert D, De Pauw R, Meeus M, Willems T, Cagnie B, Schouppe S, Van Oosterwijck J, Dhondt E, Danneels L. Lumbar muscle structure and function in chronic versus recurrent low back pain: a cross-sectional study. *Spine J*. 2017;17(9):1285–96.
- Russo M, Deckers K, Eldabe S, Kiesel K, Gilligan C, Viecei J, Crosby P. Muscle control and non-specific chronic low back pain. *Neuromodulation*. 2018;21(1):1–9.
- Goubert D, Oosterwijck JV, Meeus M, Danneels L. Structural changes of lumbar muscles in non-specific low back pain: a systematic review. *Pain Phys*. 2016;19(7):E985–1000.
- Purushotham S, Stephenson RS, Sanderson A, Abichandani D, Greig C, Gardner A, Falla D. Microscopic changes in the spinal extensor musculature in people with chronic spinal pain: a systematic review. *Spine J*. 2022;22(7):1205–21.
- Qaseem A, Wilt TJ, Mclean RM, Forciea MA, Denberg TD, Barry MJ, Boyd C, Chow RD, Fitterman N, Harris RP, et al. Noninvasive treatments for acute, subacute, and chronic low back pain: a clinical practice guideline from the American College of Physicians. *Ann Intern Med*. 2017;166(7):514–30.
- George SZ, Fritz JM, Silfies SP, Schneider MJ, Beneciuk JM, Lentz TA, Gilliam JR, Hendren S, Norman KS. Interventions for the management of acute and chronic low back pain: revision 2021. *J Orthop Sport Phys*. 2021;51(11):G1–60.
- Baroncini A, Maffulli N, Eschweiler J, Molsberger F, Klimuch A, Migliorini F. Acupuncture in chronic aspecific low back pain: a Bayesian network meta-analysis. *J Orthop Surg Res*. 2022;17(1):319.
- Deyo RA, Von Korff M, Dohrkoop D. Opioids for low back pain. *BMJ Br Med J*. 2015;350:g6380.
- Migliorini F, Maffulli N, Eschweiler J, Betsch M, Catalano G, Driessen A, Tingart M, Baroncini A. The pharmacological management of chronic lower back pain. *Expert Opin Pharmacother*. 2021;22(1):109–19.
- Migliorini F, Maffulli N. Choosing the appropriate pharmacotherapy for nonspecific chronic low back pain. *J Orthop Surg Res*. 2022;17(1):556.
- Migliorini F, Maffulli N, Eschweiler J, Tingart M, Baroncini A. Non-steroidal anti-inflammatory drugs and gabapentinoids for chronic lumbar pain: a Bayesian network meta-analysis of randomized controlled trials. *Br Med Bull*. 2021;138(1):85–95.
- Miranda L, Quaranta M, Oliva F, Maffulli N. Stem cells and discogenic back pain. *Br Med Bull*. 2023;146(1):73–87.

16. Da ST, Mills K, Brown BT, Pocovi N, de Campos T, Maher C, Hancock MJ. Recurrence of low back pain is common: a prospective inception cohort study. *J Physiother*. 2019;65(3):159–65.
17. Wang CJ. Extracorporeal shockwave therapy in musculoskeletal disorders. *J Orthop Surg Res*. 2012;7:11.
18. Ioppolo F, Rompe JD, Furia JP, Cacchio A. Clinical application of shock wave therapy (SWT) in musculoskeletal disorders. *Eur J Phys Rehab Med*. 2014;50(2):217–30.
19. Kreiner DS, Matz P, Bono CM, Cho CH, Easa JE, Ghiselli G, Ghogawala Z, Reitman CA, Resnick DK, Watters WR, et al. Guideline summary review: an evidence-based clinical guideline for the diagnosis and treatment of low back pain. *Spine J*. 2020;20(7):998–1024.
20. Shamseer L, Moher D, Clarke M, Ghersi D, Liberati A, Petticrew M, Shekelle P, Stewart LA. Preferred reporting items for systematic review and meta-analysis protocols (PRISMA-P) 2015: elaboration and explanation. *BMJ Br Med J*. 2015;350:g7647.
21. Furlan AD, Malmivaara A, Chou R, Maher CG, Deyo RA, Schoene M, Bronfort G, van Tulder MW. 2015 updated method guideline for systematic reviews in the Cochrane Back and Neck Group. *Spine*. 2015;40(21):1660–73.
22. Sterne JAC, Savovic J, Page MJ, Elbers RG, Blencowe NS, Boutron I, et al. RoB 2: a revised tool for assessing risk of bias in randomised trials. *BMJ*. 2019;366:l4898.
23. Guyatt G, Oxman AD, Akl EA, Kunz R, Vist G, Brozek J, Norris S, Falck-Ytter Y, Glasziou P, DeBeer H, Jaeschke R, Rind D, Meerpohl J, Dahm P, Schünemann HJ. GRADE guidelines: 1. Introduction-GRADE evidence profiles and summary of findings tables. *J Clin Epidemiol*. 2011;64(4):383–94.
24. Egger M, Davey Smith G, Schneider M, Minder C. Bias in meta-analysis detected by a simple, graphical test. *BMJ*. 1997;315(7109):629–34.
25. Walewicz K, Taradaj J, Rajfur K, Ptaszkowski K, Kuszewski MT, Sopel M, Dymarek R. The effectiveness of radial extracorporeal shock wave therapy in patients with chronic low back pain: a prospective, randomized, single-blinded pilot study. *Clin Interv Aging*. 2019;14:1859–69.
26. Notarnicola A, Maccagnano G, Moretti L, Salvemini M, Bianchi FP, Covelli I, Tafuri S, Moretti B. Conservative treatment of sacroiliac joint pain with extracorporeal shockwave therapy. *J Biol Reg Homeos Ag*. 2020;34(2):697–703.
27. Rajfur K, Rajfur J, Matusz T, Walewicz K, Dymarek R, Ptaszkowski K, Taradaj J. Efficacy of focused extracorporeal shock wave therapy in chronic low back pain: a prospective randomized 3-month follow-up study. *Med Sci Monitor*. 2022;28:e936614.
28. Elgendy MH, Mohamed M, Hussein HM. A single-blind randomized controlled trial investigating changes in electrical muscle activity, pain, and function after shockwave therapy in chronic non-specific low back pain: pilot study. *Ortop Traumatol Rehabil*. 2022;24(2):87–94.
29. Lee S, Lee D, Park J. Effects of extracorporeal shockwave therapy on patients with chronic low back pain and their dynamic balance ability. *J Phys Ther Sci*. 2014;26(1):7–10.
30. Han H, Lee D, Lee S, Jeon C, Kim T. The effects of extracorporeal shock wave therapy on pain, disability, and depression of chronic low back pain patients. *J Phys Ther Sci*. 2015;27(2):397–9.
31. Kong L, Tian X, Yao X. Effects of extracorporeal shock wave therapy on chronic low back pain and quality of life. *Minerva Surg*. 2022;29(4):883.
32. Kong L, Tian X, Yao X. Effects of extracorporeal shock wave therapy on chronic low back pain and quality of life. *Minerva Surg*. 2023;78(3):305–6.
33. Eftekharsadat B, Fasaie N, Gholizadeh D, Babaei-Ghazani A, Jahanjou F, Eslampoor Y, Dolatkhan N. Comparison of efficacy of corticosteroid injection versus extracorporeal shock wave therapy on inferior trigger points in the quadratus lumborum muscle: a randomized clinical trial. *BMC Musculoskel Dis*. 2020;21(1):695.
34. Taheri P, Khosrawi S, Ramezani M. Extracorporeal shock wave therapy combined with oral medication and exercise for chronic low back pain: a randomized controlled trial. *Arch Phys Med Rehab*. 2021;102(7):1294–9.
35. Guo X, Li L, Yan Z, Li Y, Peng Z, Yang Y, Zhang Y, Schmitz C, Feng Z. Efficacy and safety of treating chronic nonspecific low back pain with radial extracorporeal shock wave therapy (rESWT), rESWT combined with celecoxib and eperisone (C + E) or C + E alone: a prospective, randomized trial. *J Orthop Surg Res*. 2021;16(1):705.
36. Schneider R. Effectiveness of myofascial trigger point therapy in chronic back pain patients is considerably increased when combined with a new, integrated, low-frequency shock wave vibrotherapy (Cellconnect Impulse): a two-armed, measurement repeated, randomized, controlled pragmatic trial. *J Back Musculoskel*. 2018;31(1):57–64.
37. Li C, Li Z, Shi L, Wang P, Gao F, Sun W. Effectiveness of focused shockwave therapy versus radial shockwave therapy for noncalcific rotator cuff tendinopathies: a randomized clinical trial. *Biomed Res Int*. 2021;9(2021):6687094.
38. Ko NY, Chang CN, Cheng CH, Yu HK, Hu GC. Comparative effectiveness of focused extracorporeal versus radial extracorporeal shockwave therapy for knee osteoarthritis-randomized controlled study. *Int J Environ Res Public Health*. 2022;19(15):9001.
39. DeLuca S, Robinson DM, Yun PH, Rosenberg C, Tan CO, Tenforde AS. Similar functional gains using radial versus combined shockwave therapy in management of plantar fasciitis. *J Foot Ankle Surg*. 2021;60(6):1098–102.
40. Yue L, Sun MS, Chen H, Mu GZ, Sun HL. Extracorporeal shockwave therapy for treating chronic low back pain: a systematic review and meta-analysis of randomized controlled trials. *Biomed Res Int*. 2021;2021:5937250.
41. La Touche R, Perez-Fernandez M, Barrera-Marchessi I, Lopez-De-Urvalde-Villanueva I, Villafane JH, Prieto-Aldana M, Suso-Marti L, Paris-Aleman A. Psychological and physical factors related to disability in chronic low back pain. *J Back Musculoskel*. 2019;32(4):603–11.
42. Holmes S. Research. Pursuit of happiness. *Nurs Mirror*. 1985;161(13):43–5.
43. Bierkens AF, Hendriks AJ, De La Rosette JJ, Stultjens GN, Beerlage HP, Arends AJ, Debruyne FM. Treatment of mid- and lower ureteric calculi: extracorporeal shock-wave lithotripsy vs laser ureteroscopy. A comparison of costs, morbidity and effectiveness. *Br J Urol*. 1998;81(1):31–5.
44. Simplicio CL, Purita J, Murrell W, Santos GS, Dos SR, Lana J. Extracorporeal shock wave therapy mechanisms in musculoskeletal regenerative medicine. *J Clin Orthop Trauma*. 2020;11(Suppl 3):S309–18.
45. Schroeder AN, Tenforde AS, Jelsing EJ. Extracorporeal shockwave therapy in the management of sports medicine injuries. *Curr Sport Med Rep*. 2021;20(6):298–305.
46. Romeo P, Lavanga V, Pagani D, Sansone V. Extracorporeal shock wave therapy in musculoskeletal disorders: a review. *Med Prin Pract*. 2014;23(1):7–13.
47. Alvarez L. Extracorporeal shockwave therapy for musculoskeletal pathologies. *Vet Clin N Am-Small*. 2022;52(4):1033–42.
48. Gerdemeyer L, Wagenpfeil S, Haake M, Maier M, Loew M, Wortler K, Lampe R, Seil R, Handle G, Gassel S, et al. Extracorporeal shock wave therapy for the treatment of chronic calcifying tendonitis of the rotator cuff: a randomized controlled trial. *JAMA J Am Med Assoc*. 2003;290(19):2573–80.
49. Giordano L, Murrell WD, Maffulli N. Prolotherapy for chronic low back pain: a review of literature. *Br Med Bull*. 2021;138(1):96–111.
50. Ashghani M, Hashemi SE, Hollisaz MT, Roumizade P, Hosseini SM, Ghanjal A. Dextrose prolotherapy versus radial extracorporeal shock wave therapy in the treatment of chronic plantar fasciitis: A randomized, controlled clinical trial. *Foot Ankle Surg*. 2021;27(6):643–9.
51. Ludwig J, Lauber S, Lauber HJ, Dreisilker U, Raedel R, Hotzinger H. High-energy shock wave treatment of femoral head necrosis in adults. *Clin Orthop Relat R*. 2001;387:119–26.
52. Luh JJ, Huang WT, Lin KH, Huang YY, Kuo PL, Chen WS. Effects of extracorporeal shock wave-mediated transdermal local anesthetic drug delivery on rat caudal nerves. *Ultrasound Med Biol*. 2018;44(1):214–22.
53. Peng BG. Pathophysiology, diagnosis, and treatment of discogenic low back pain. *World J Orthop*. 2013;4(2):42–52.
54. Liu H, Li H, Jin X, Yu S, Xi L, Zhao Z, Tian W. Effect of extracorporeal shock wave on the expression of IL-1 $\beta$ , TNF- $\alpha$  and MMP-13 in the joint fluid of patients with early to mid-stage osteoarthritis of the knee. *Orthopedic Journal of China*. 2016;24(19):1807–10.
55. Hausdorf J, Lemmens MA, Kaplan S, Marangoz C, Milz S, Odaci E, Korr H, Schmitz C, Maier M. Extracorporeal shockwave application to the distal femur of rabbits diminishes the number of neurons immunoreactive for substance P in dorsal root ganglia L5. *Brain Res*. 2008;1207:96–101.
56. Wang CJ, Sun YC, Wong T, Hsu SL, Chou WY, Chang HW. Extracorporeal shockwave therapy shows time-dependent chondroprotective effects in osteoarthritis of the knee in rats. *J Surg Res*. 2012;178(1):196–205.

## Publisher's Note

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

## Review

# Extracorporeal Shock Wave Therapy for the Treatment of Musculoskeletal Pain: A Narrative Review

Hortensia De la Corte-Rodríguez <sup>1,2,\*</sup> , Juan M. Román-Belmonte <sup>3,4</sup> , Beatriz A. Rodríguez-Damiani <sup>3,4</sup> , Aránzazu Vázquez-Sasot <sup>3,4</sup>  and Emérito Carlos Rodríguez-Merchán <sup>5,6</sup> 

<sup>1</sup> Department of Physical Medicine and Rehabilitation, La Paz University Hospital, Paseo de la Castellana 261, 28046 Madrid, Spain

<sup>2</sup> IdiPAZ Institute for Health Research, 28046 Madrid, Spain

<sup>3</sup> Department of Physical Medicine and Rehabilitation, Cruz Roja San José y Santa Adela University Hospital, 28003 Madrid, Spain; juanmaromanbelmonte@gmail.com (J.M.R.-B.)

<sup>4</sup> Medical School, Alfonso X El Sabio University, 28691 Madrid, Spain

<sup>5</sup> Department of Orthopedic Surgery, La Paz University Hospital, 28046 Madrid, Spain

<sup>6</sup> Osteoarticular Surgery Research, Hospital La Paz Institute for Health Research—IdiPAZ (La Paz University Hospital—Medical School, Autonomous University of Madrid), 28046 Madrid, Spain

\* Correspondence: hortensiadelacorterodriguez@yahoo.es

**Abstract:** Extracorporeal shock waves are high-intensity mechanical waves (500–1000 bar) of a microsecond duration with a morphology characterized by a rapid positive phase followed by a negative phase. **Background:** Extracorporeal shock waves have been used for pain treatment for various sub-acute and chronic musculoskeletal (MSK) problems since 2000. The aim of this article is to update information on the role of extracorporeal shock wave therapy (ESWT) in the treatment of various pathologies that cause MSK pain. **Methods:** Given that in the last two years, articles of interest (including systematic reviews and meta-analyses) have been published on less known indications, such as low back pain, nerve entrapments, osteoarthritis and bone vascular diseases, a literature search was conducted in PubMed, the Cochrane Database, EMBASE, CINAHL and PEDro, with the aim of developing a narrative review of the current literature on this topic. The purposes of the review were to review possible new mechanisms of action, update the level of evidence for known indications and assess possible new indications that have emerged in recent years. **Results:** Although extracorporeal shock waves have mechanical effects, their main mechanism of action is biological, through a phenomenon called mechanotransduction. There is solid evidence that supports their use to improve pain in many MSK pathologies, such as different tendinopathies (epicondylar, trochanteric, patellar, Achilles or calcific shoulder), plantar fasciitis, axial pain (myofascial, lumbar or coccygodynia), osteoarthritis and bone lesions (delayed union, osteonecrosis of the femoral head, Kienbock's disease, bone marrow edema syndrome of the hip, pubis osteitis or carpal tunnel syndrome). Of the clinical indications mentioned in this review, five have a level of evidence of 1+, eight have a level of evidence of 1–, one indication has a level of evidence of 2– and two indications have a level of evidence of 3. **Conclusions:** The current literature shows that ESWT is a safe treatment, with hardly any adverse effects reported. Furthermore, it can be used alone or in conjunction with other physical therapies such as eccentric strengthening exercises or static stretching, which can enhance its therapeutic effect.

**Keywords:** extracorporeal shock wave therapy; musculoskeletal conditions; musculoskeletal pain



**Citation:** De la Corte-Rodríguez, H.; Román-Belmonte, J.M.; Rodríguez-Damiani, B.A.; Vázquez-Sasot, A.; Rodríguez-Merchán, E.C.

Extracorporeal Shock Wave Therapy for the Treatment of Musculoskeletal Pain: A Narrative Review. *Healthcare* **2023**, *11*, 2830. <https://doi.org/10.3390/healthcare11212830>

Academic Editor: Gianluigi Pasta

Received: 31 August 2023

Revised: 15 October 2023

Accepted: 24 October 2023

Published: 26 October 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

Shock wave therapy is a non-invasive therapeutic procedure in which a single-impulse transient acoustic wave of 1 microsecond duration is applied to different target body regions to produce analgesia and facilitate healing through a mechanism called mechanotransduction [1]. Shock waves are considered an effective, non-invasive and cost- and time-efficient treatment [2].



Extracorporeal shock wave therapy (ESWT) was first used in 1980, and its indications were extended from lithotripsy to the treatment of delayed bone healing to chronic pain management in 2000 [3]. Plantar fasciitis was the first orthopedic disease to obtain FDA (Food and Drug Administration) approval for shock wave management [4], with many other indications subsequently being added.

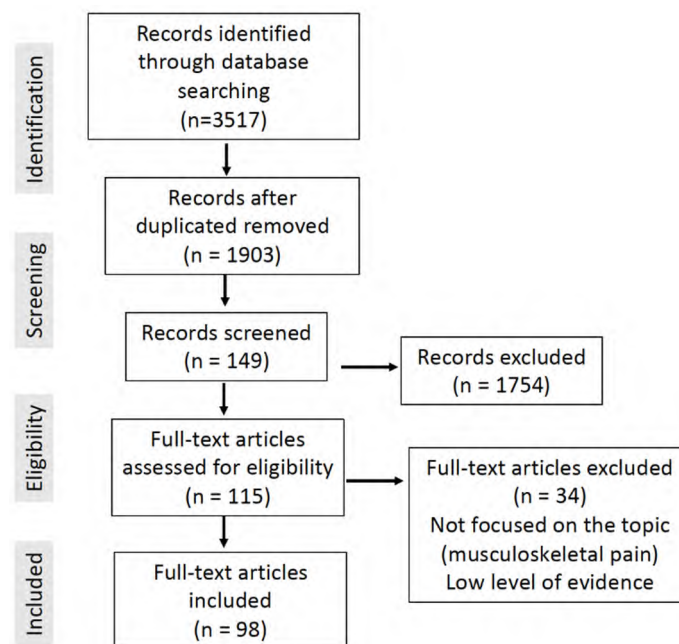
Although the physiological mechanisms of its therapeutic effect are not fully understood, shock wave therapy produces a biological effect (mechanotransduction) in its passage through the tissues, achieving an analgesic, osteogenic, neovascular and tissue repair effect. Among the beneficial effects they produce, it is worth highlighting that they produce analgesia, facilitate protein synthesis, increase vascularization, improve cell proliferation, produce calcium destruction in tissue and have a protective effect on cartilage and bone [5]. This has led to their use in numerous pathologies that cause chronic pain such as chronic tendinopathies, myofascial pain, osteoarthritis, nonunion fracture, bone vascular diseases and entrapment neuropathies. In the last two years, 12 articles of interest (including systematic reviews and meta-analyses) have been published on less known indications such as low back pain, nerve entrapment, osteoarthritis or bone vascular diseases. This has made it advisable to update the recommendations and effectiveness of shock waves in these indications.

The aim of this article is to update information on the role of ESWT in the treatment of various pathologies that cause musculoskeletal (MSK) pain, such as tendinopathies, low back pain, osteoarthritis, osteonecrosis, bone vascular diseases and nerve entrapments.

## 2. Materials and Methods

A literature search was conducted on 11 August 2023 in PubMed, the Cochrane Database, EMBASE, CINAHL and PEDro, using the keywords “extracorporeal shock wave therapy musculoskeletal pain”, with the aim of developing a narrative review of the current literature on this topic. Due to the large number of references published on the topic (3517), a selection was made in the literature to provide a synthesis based on the strength of the evidence. In those pathologies where there were papers with different levels of evidence, those with high levels of evidence (meta-analyses, systematic reviews and high-quality randomized clinical trials) were selected over those with lower levels of evidence (non-randomized trials, cohort studies, case-control studies, case series or expert opinions). In those pathologies for which no high-evidence studies had been published, low-evidence studies were included to provide a synthesis of the available clinical information. A total of 1745 articles were found in PubMed, 1461 in EMBASE, 195 in CINAHL, 115 in PEDro and 1 in the Cochrane Database, making a total of 3517 articles identified. After identifying duplicate articles, 149 records were screened.

A total of 115 articles were considered of interest because they were closely related to the topic of this article, and 98 articles were finally included in this review. The following articles were included: (1) articles with a high level of evidence, including meta-analyses, systematic reviews and randomized clinical trials; (2) articles published within the last five years and able to provide recent information that was not included in other papers in the literature; (3) articles that deal with less frequent indications of shock waves such as nerve entrapment or bone vascular diseases; (4) articles that detail the protocol of the application of shock waves and that could be used to offer homogeneous clinical recommendations. The remaining articles (34) were excluded (Figure 1). Articles using shock waves in non-musculoskeletal pathologies, such as erectile dysfunction or lymphoedema, were excluded. Articles with a low level of evidence were also excluded when there were references with a high level of evidence (meta-analyses, systematic reviews and randomized clinical trials) on the same clinical indication.



**Figure 1.** Flowchart diagram of the literature review for this article and terms “extracorporeal shock wave therapy pain”.

Of the authors who contributed to this paper, HDLC-R and JMR-B conducted the initial literature search and wrote the first draft of the article. ECR-M, BAR-D and AV-S reviewed the draft and contributed to the final manuscript.

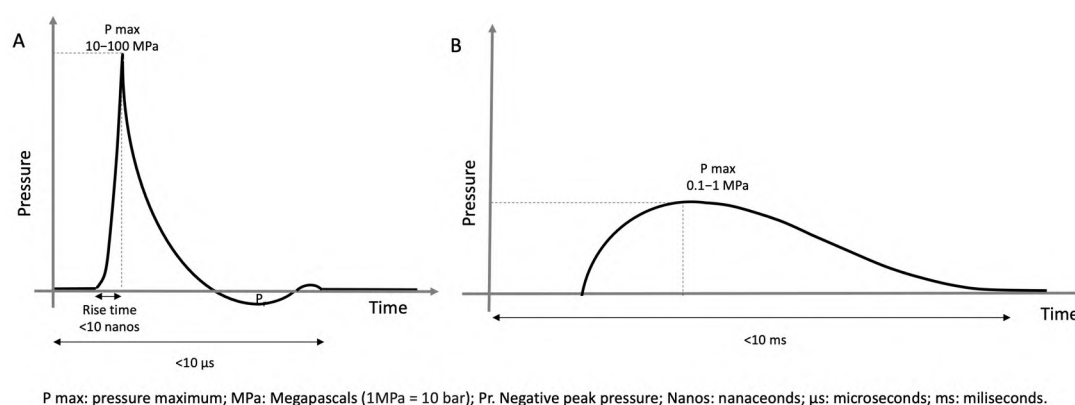
### 3. Results and Discussion

The results and critical discussion of the studies included in the narrative review are presented below. The following paragraphs refer to the mechanism of action of shock waves, their method of application and their effect on pain in different MSK processes.

#### 3.1. Mechanism of Action

Shock waves are rapidly generated pressure waves that travel faster than the speed of sound in the same medium through which the wave propagates. The mechanism of action by which shock waves produce their therapeutic effects is not yet fully understood [6].

The shock wave has two phases, an initial phase of rapid rise (<10 ns) with focus pressures of 50 to 80 MPa, followed by a relatively slow phase (milliseconds) of negative pressure of up to 10 MPa [7]. The curve generated by a shock wave is reflected in Figure 2. The shock wave produces a phenomenon called acoustic cavitation that could be largely responsible for its biological effects [6].



**Figure 2.** Parameters of different shock waves. (A) Focused shock waves. (B) Radial pressure waves.

There are two types of shock waves. Focal shock waves, produced by electrohydraulic, piezoelectric or electromagnetic generators, consist of a negative phase and achieve much higher intensity on a target deep in the tissue to be treated. So-called radial waves are lower-intensity pressure waves generated via a pneumatic mechanism, without a negative phase, and whose highest intensity point is produced on the surface of the applicator [8]. When applied, the waves dissipate energy as they pass through tissues with different acoustic impedances, causing a release of kinetic energy that can activate tissue-reparative processes. The therapeutic effects include analgesic, osteogenic and tissue-reparative effects mediated by different mechanisms, as shown in Table 1 [9–23].

**Table 1.** Main therapeutic effects of extracorporeal shock wave therapy.

Therapeutic Effects	Biological Effects
Analgesic effect	Decreased substance P in the area of application [9]
	Selective loss of unmyelinated nerve fibers [10]
	Decreased expression of calcitonin-related peptide in dorsal root ganglia [11]
	Activation of the serotonergic system [12]
Tissue repair effect	Proliferation of tenocytes [13]
	Activation of catabolic processes leading to the elimination of damaged matrix constituents [14]
	Microdisruption of avascular or poorly vascularized tissues [15]
	Increased tissue neovascularization [16]
	Enhanced collagen synthesis, maturation and characteristics [17]
Osteogenic effect	Regulation in proliferation, activation and differentiation of keratinocytes originating from scar tissue (antifibrosis) [18]
	Osteoblast growth through osteogenic transcription factors such as vascular endothelial growth factor-A (VEGF-A) and hypoxia-inducible factor-1 $\alpha$ [19]
	Regulation and stimulation of chondrogenesis and bone regeneration through mesenchymal stem cell metabolism [20]
	Enhancement of Pdia-3 expression involved in the 1 $\alpha$ ,25-Dihydroxyvitamin D 3 Rapid Membrane Signaling Pathway, related to calcium homeostasis [21]
	Stimulation of the periosteum with decreased osteoclast activity [22]
	Osteoblast proliferation and differentiation through regulation of nitric oxide (NO), protein kinase B (PKB), bone morphogenetic protein-2 (BMP-2) and transforming growth factor-beta 1 (TGF- $\beta$ 1) levels [23]

In summary, shock waves produce a decrease in pain, facilitate tissue repair and promote bone healing. However, the physiological mechanism by which they produce their therapeutic effect is not fully understood. Furthermore, there are numerous application protocols in the literature that make it very difficult to know the number of sessions, their interval or the intensity at which shock waves should be applied. This is why more work is needed to present clear methodologies and results and to help standardize the guidelines for the application of the technique.

### 3.2. Method of Application

Shock waves should be applied to the affected region. Palpatory techniques or ultrasound localization can be used to localize the segment to be treated. Both options appear to be equally beneficial [24].

Application protocols may vary according to the studies reviewed [25]. Table 2 provides guidance on recommended the intensities, pulses and number of sessions for the main indications. The intensity of the shock waves at the focal point is measured in energy flux density (EFD; mJ/mm<sup>2</sup>) per pulse and plays a role in the therapeutic effect of



the technique [26]. In routine clinical practice, energy flux density levels vary from 0.001 to 0.5 mJ/mm<sup>2</sup> [27]. To facilitate the regenerative effect on tissues, an EFD < 0.2 mJ/mm<sup>2</sup> is recommended [28]. Most protocols use three shock wave sessions with a one-week break in between. The number of pulses per session usually ranges from 800 to 3000 [9]. In general, tendinopathies and osteoarthritis can be treated every two weeks, with 2000 pulses per session and four sessions in total; trapezius myofascial syndrome and low back pain with six sessions and two sessions per week and 1000 pulses per session; and delayed bone healing and avascular necrosis of the hip with two sessions in total, one every two weeks, and 4000 pulses.

**Table 2.** Summary of the main indications of shock waves and their recommended applications.

Pathology	Intensity	Sessions	Pulses	Comments
Calcific tendinopathy of the shoulder	High	3–4 (every 1–2 weeks)	1500–2000	Locate calcification. Patient in supine position with shoulder in extension and internal rotation
Lateral epicondylitis	Low	3 (every 1–2 weeks)	1500–2000	Apply to point of maximum pain
Greater trochanteric pain syndrome	Low	3 (every 1–2 weeks)	2000	Apply to point of maximum pain
Patellar tendinopathy	Low	3 (every 1–2 weeks)	1500–2000	Apply to point of maximum pain
Achilles tendinopathy	Low	4 (every 1–2 weeks)	2000	Apply to point of maximum pain
Plantar fasciitis	Low	3 (every 1–2 weeks)	2000	Apply to point of maximum pain
Trapezius myofascial syndrome	Low	4–8 (1–2 per week)	1000	Apply to point of maximum pain
Low back pain	Low	6–10 (1–2 per week)	1000	Apply to point of maximum pain
Delayed bone healing	High	1–4 (every 1–2 weeks)	2000–4000	Localize the area using radiology
Avascular necrosis of the hip	High	1–2 (every 1–2 weeks)	4000–6000	Locate the area using radiology
Osteoarthritis	Low	4 (every 1–2 weeks)	2000	Apply to point of maximum pain
Carpal tunnel syndrome	Low	3 (every 1–2 weeks)	1000–1500	Apply to point of maximum pain

It seems that in order to achieve their analgesic effect, shock wave treatment protocols should last longer than one month. In addition, it appears that shock waves, depending on the pathology, may have a greater analgesic effect when applied as monotherapy versus when applied in conjunction with other interventions [29].

Shock waves induce a tissue repair response, so they require time to achieve their clinical effect [30]. Clinical improvement from shock wave therapy has been reported to occur within 3–12 weeks after treatment, with benefits persisting for up to two years compared to a placebo [31]. Haake et al. found that shock waves applied under local anesthesia had no more effect than a placebo at 12 weeks [32]. Other studies, such as that of Furia et al., show similar results [33]. Therefore, although it is an uncomfortable procedure, it is recommended that shock waves are applied without local anesthesia.

It is recommended that the effectiveness of the technique be assessed at least four months after treatment, as one of its advantages is that its therapeutic effect is prolonged in the long term, more so than other types of therapy [34]. For example, the work of Ozturan

et al. studied patients with epicondylitis of more than six months' duration who were infiltrated with corticosteroids or autologous blood or received shock wave therapy. At four weeks, the corticosteroid-infiltration had the greatest effect, while at 52 weeks, the greatest effect was achieved with shock waves (89%), followed by autologous blood (83%) and, finally, corticosteroid injection (50%) [35].

It appears that the best results with shock wave therapy are achieved in patients younger than 60 years and with a symptom duration of less than 12 months [36]. When assessing the clinical involvement and treatment outcomes of MSK injuries, the two most important aspects are pain and function, as these are the most important elements for patients and are considered to be disease-specific [37].

In addition to clinical monitoring, ultrasound can be used to assess changes in tendon morphology and thickness, calcification or neovascularization. However, there may be a discrepancy between clinical and ultrasonographic findings [38]. The effectiveness of shock wave therapy for the following pathologies will be discussed below: tendinopathies, plantar fasciitis, axial pain, osteoarthritis, bone disease and entrapment neuropathies. In addition, Table 3 classifies the different conditions presented by the strength of evidence supporting the effectiveness of shock wave therapy.

**Table 3.** Effectiveness of shock wave therapy for the following pathologies presented by level of evidence.

Pathologies	Level of Evidence
Calcific tendinopathy of the shoulder	1+
Lateral epicondylitis	1+
Greater trochanteric pain syndrome	1+
Plantar fasciitis	1+
Delayed bone healing	1+
Patellar tendinopathy	1–
Achilles tendinopathy	1–
Trapezius myofascial syndrome	1–
Low back pain	1–
Avascular necrosis of the hip	1–
Osteoarthritis	1–
Femoral head osteonecrosis	1–
Pubis osteitis	1–
Carpal tunnel syndrome	1–
Bone marrow edema syndrome of the hip	2–
Coccigodynia	3
Kienbock's disease	3

### 3.3. Role of ESWT in Tendinopathies

Complete recovery from chronic tendinopathy is estimated to be around 80% [17]. Ischemia is an important etiological factor in tendinopathies, as tendons are hypovascular at the proximal insertion site, and this poor vascularization can lead to hypoxic degenerative changes when overuse occurs [39]. In addition, tendon degeneration causes fibers to become disorganized and type I collagen to be replaced by weaker type III collagen, resulting in pain and reduced tendon strength [40]. Repeated stress on the tendon results in cumulative micro-trauma. When the repair capacity of the tendon is exceeded, the sheath can be affected, causing it to degenerate [41].

Histologically, tendinopathy is characterized by the absence of inflammatory cells, intra-tendon collagenous degeneration, the thinning and disorientation of collagen fibers, neovascularization and hypercellularity with high concentrations of glycosaminoglycans and proteoglycans [17]. Using 2D ultrasonography, it has been observed that shock waves provoke reactions in fibroblasts that repair tendon cracks [42].

The tendinopathies for which ESWTs have shown efficacy are described below.

### 3.3.1. Calcific Tendinopathy of the Shoulder

Calcium deposition in the tendons of the shoulder is a common finding that can occur in up to 7.8% to 13.6% of asymptomatic patients and in 33.3% to 42.5% of symptomatic patients [43]. Calcifying tendinopathy of the shoulder requires imaging findings of tendon calcification and compatible clinical findings: pain near the greater shoulder tuberosity, limited mobility and nocturnal discomfort [44]. High-intensity shock wave therapy is recommended for the treatment of calcific tendinopathy of the shoulder [45,46]. In this case, shock wave treatments where the calcification is localized via radiology seem to be more effective [47]. In addition, the supine position with the shoulder to be treated in hyperextension and internal rotation is recommended because it appears to be more beneficial than the neutral position [48].

A systematic review analyzing 18 articles (more than 1600 patients) reported an improvement in pain and function with shock waves versus a placebo and other conservative treatments such as TENS (transcutaneous electric nerve stimulation) or physical exercise at three and six months. Intervention with ultrasound-guided percutaneous irrigation appeared to offer better results in the pain and radiological progression of calcification at 1 year [46]. In a clinical trial of 42 patients with calcific tendinopathy of the shoulder, shock wave therapy was compared with the conservative treatment of physiotherapy. Greater benefit in terms of pain, function, quality of life and ultrasonography was reported in the shock wave group at 6 and 12 weeks after intervention [49]. For rotator cuff disease with or without calcification, a systematic review concluded that the wide clinical diversity and different treatment protocols precluded any potential benefit. It would be desirable to establish a standard dose and treatment protocol before further research [25].

### 3.3.2. Lateral Epicondylitis

Lateral epicondylitis is a very common musculoskeletal pathology due to repeated microtrauma to the lateral epicondylar area of the elbow, usually due to overuse [50]. In addition to pain, grip strength is a measure that indicates the severity of the disease and its functional impact. In a meta-analysis including 13 articles with a total of 1035 patients, patients who received shock wave therapy had an improvement in pain and grip strength and recovered earlier compared to those who received a placebo and other conservative treatments such as cryo-ultrasound or laser [51].

### 3.3.3. Greater Trochanteric Pain Syndrome

Greater Trochanteric Pain Syndrome is a syndrome characterized by pain in the lateral aspect of the hip that worsens with walking and lateral decubitus on the affected side. It can be caused by tendinopathy at the level of the gluteus medius or gluteus minimus, trochanteric bursitis or external coxa saltans, and is usually self-limiting or improves with conservative treatment in 90% of cases [52].

Shock wave therapy is reserved for cases where conservative treatment has not improved the clinical picture. A meta-analysis including 13 randomized clinical trials (1034 patients) found that both platelet-rich plasma and shock wave therapy produced a short-term pain benefit (one to three months). Physical therapy with a structured exercise program produced a short-term (one to three months) functional improvement [53]. Heaver et al. also reported the benefits of shock wave therapy in a randomized clinical trial in which 104 patients were treated in two groups: one group receiving extracorporeal shock wave therapy and the other group receiving ultrasound-guided corticosteroid injection therapy.

At 12 months, the group receiving shock wave treatment had a greater improvement in pain (visual analog scale (VAS) 37.1 versus 55.0) and function [54].

### 3.3.4. Patellar Tendinopathy

Knee soft tissue injuries are often due to tendinopathy or ligament injuries, causing pain and functional limitation that affect gait, running and even quality of life [55]. Knee injuries account for 35% of overuse-related sports injuries [56].

A review involving 19 randomized clinical trials found moderate evidence that shock waves significantly reduced pain by an average of 1.49 points on the visual analogue scale compared to different control groups. This effect applied both when shock waves were applied at high energy and at low energy [28]. In a recently published systematic review and meta-analysis, it was seen that shock wave treatment has little short-term effect compared to a placebo or a placebo and eccentric exercises. However, it does seem that shock waves have a significant effect on pain compared to conservative treatment [57].

Shock waves also seem to have an effect on parameters related to sports performance in the case of patellar tendinopathy. Shock wave treatment could increase vertical jump distance compared to placebo treatment [58].

### 3.3.5. Achilles Tendinopathy

Achilles tendinopathy is characterized by a clinical picture of pain, inflammation and functional limitation, and occurs more frequently in men, probably due to their higher levels of physical activity [59]. It is classified as insertional (usually affecting the region of the posterosuperior protuberance of the calcaneus) or non-insertional (referring to symptoms 2–6 cm proximal to the insertion on the calcaneus) [60].

Numerous conservative treatments are used for Achilles tendinopathies such as ultrasound, electrotherapy, laser, orthoses and exercises. These treatments can be combined with shock waves with good results. For example, it seems that the combination of shock waves and eccentric exercises produces better results than eccentric exercises alone [61]. Also, dietary supplementation (arginine-L-alpha-ketoglutarate and hydrolyzed collagen type I) in combination with shock wave treatment produces better results than shock waves alone [62]. A recent systematic review and meta-analysis showed that shock waves may have a small effect on pain and function in the short term compared with conservative treatments such as eccentric exercises, low-laser therapy or corticosteroid injection. Furthermore, compared with shock waves, a placebo could improve some results in function but not pain [57].

## 3.4. Role of ESWT in Plantar Fasciitis

Plantar fasciitis is a clinical diagnosis that involves pain in the heel, which may affect the inner or outer area of the heel and increases with standing and walking [63]. Its pathophysiological mechanism is usually repeated micro-tears in the plantar fascia that exceed the reparative capacity of the tissues, and it usually manifests at the level of the calcaneal fat pad, calcaneal bursa, plantar aponeurosis or calcaneal hypertension [64]. It most commonly affects men in a 2:1 ratio, and healing time usually ranges from 6 to 18 months [65]. A meta-analysis analyzing 13 articles (1185 patients) found that patients treated with shock wave therapy had greater pain reduction and functional improvement and shorter return-to-work times than different control groups [66].

## 3.5. Role of ESWT in Axial Pain

Shock waves have been shown to be useful in the following problems that cause axial pain.

### 3.5.1. Myofascial Pain Syndrome of the Trapezius

Myofascial pain syndrome is defined as a picture of regional pain with the presence of painful trigger points or taut bands with selective pain on palpation [67]. Some works

try to explain the biological effect that shock waves have on myofascial syndrome. For instance, in a study in which tissue samples were collected from the fascia lata of three volunteers and subjected to 100 shock wave pulses at  $0.05 \text{ mJ/mm}^2$ , the authors found that shock waves immediately produced hyaluronan-rich vesicles, collagen-I and collagen-III, increasing after four hours and maintaining it after 24 h, so they concluded that it could have a role in the regulation of the extracellular matrix [68].

A meta-analysis including 10 randomized clinical trials (477 patients) reported that shock waves had a greater effect on pain than a placebo or ultrasound, with similar effectiveness to other techniques, such as laser, dry needling or trigger point infiltration, on pain or functional improvement [69].

### 3.5.2. Low Back Pain

In a three-month prospective randomized study (40 patients), shock wave therapy was compared with a placebo (both patients performed a 45 min exercise program five days a week). It was found that the use of shock waves together with an exercise program appeared to be effective in improving pain in patients with chronic low back pain, although it did not achieve functional improvement [70].

### 3.5.3. Coccydynia

Coccydynia is characterized by pain in the coccyx and/or coccygeal joints that worsens with prolonged sitting and occurs most frequently after trauma [71]. In a case series of 34 patients (29 women, 5 men) with coccygodynia who underwent shock wave therapy, a statistically significant improvement in pain (from VAS  $9.6 \pm 0.5$  on average to VAS  $3 \pm 3.2$ ) was found at 6 months [72]. Another study in which four shock wave sessions were performed in 10 patients with chronic coccygodynia found an improvement in pain at four weeks and two months, but no benefit was found seven months after the last session compared to the baseline [73].

### 3.6. Role of ESWT in Knee Osteoarthritis

Degenerative osteoarthritis is the most common MSK disease. Its pathophysiology involves a series of cellular reactions involving inflammatory mediators, cytokines and matrix degradation. This results in damage to cartilage, the synovial membrane, subchondral bone, ligaments and joint muscles, leading to pain, joint limitation and functional restriction [74].

A meta-analysis involving 32 randomized clinical trials (2408 patients) found that shock waves achieved a greater reduction in pain and function than a placebo, oral medication, ultrasound, hyaluronic acid (although with heterogeneous studies), intra-articular corticosteroids and platelet-rich plasma (although with no difference in function) [75]. In a randomized clinical trial of 125 patients with knee osteoarthritis undergoing shock wave therapy, it was reported that moderate intensity EFD ( $0.12$  to  $0.25 \text{ mJ/mm}^2$ ) seems to have better results in terms of pain and function, with no difference found between receiving 2000 and 4000 pulses per session [76].

### 3.7. Role of ESWT in Bone Diseases

Shock waves have been shown to be useful in the following bone conditions.

#### 3.7.1. Fracture Nonunion

The effects of shock waves at the level of consolidation became known when in 1988, it was shown that patients treated with shock waves during lithotripsy had an increased pelvic osteogenic response. It is now used successfully, and radiological guidance is recommended to localize the application site [77]. In a randomized clinical trial with 126 long-bone nonunion patients, three groups were assigned: group one received extracorporeal shock wave treatment with an EFD of  $0.40 \text{ mJ/mm}^2$ ; group two received extracorporeal shock wave treatment with an EFD of  $0.70 \text{ mJ/mm}^2$ ; and group three received surgical

treatment. The clinical and radiographic outcomes were assessed for up to 24 months, and all three treatment groups were found to have similar results [78]. The positive results of shock waves in the treatment of consolidation delays are also evidenced by a meta-analysis of 1737 patients with symptoms including nonunions and consolidation delays of both the long bones and small bones of the hands and feet, in which success rates of 62% to 83% are reported with ESWT [79].

It appears that the effectiveness of shock waves in the treatment of bone consolidation problems depends on the type of nonunion. Hypertrophic long bone nonunions have an improvement rate of 80% to 100% with shock waves, while atrophic nonunions have a lower response rate estimated to be around 23% to 27% [80].

### 3.7.2. Femoral Head Osteonecrosis

Femoral head osteonecrosis is a disease with an unknown pathogenesis that can occur in different body regions and is characterized by a pathological increase in interstitial fluid, probably secondary to a vascular reaction to an internal or external process [81]. In some cases, such as osteonecrosis of the femoral head, if left untreated, it can progress to joint collapse requiring total hip arthroplasty [82]. In this regard, it appears that shock wave therapy in the early stages may help to prevent the progression of the area of avascular necrosis [83].

A meta-analysis including six randomized clinical trials (256 patients) reported that shock wave therapy appears to produce an improvement in pain and function in osteonecrosis of the femoral head, especially in the early stages (ARCO stage I and ARCO stage II), and the clinical benefits are maintained in the long term. Adding treatment with prostaglandin inhibitors or bisphosphonates does not seem to improve outcomes [84]. However, Sconza et al., in a systematic review including five studies (199 patients), did observe that the combined use of bisphosphonates with extracorporeal shock waves in the treatment of osteonecrosis had a synergistic effect, although they reported low validity of their results due to the low quality of the studies analyzed [85].

### 3.7.3. Kienbock's Disease

In a case series with 22 patients, shock wave therapy was found to offer an improvement in pain, mobility and magnetic resonance imaging (MRI) after 60 days [86].

### 3.7.4. Pubis Osteitis

In a study involving 44 athletes (all of whom received intensive rehabilitation treatment), shock wave therapy was found to improve pain and function at one and three months compared to a placebo. In addition, the treatment group was able to resume sporting activity (football) earlier (73.2 days versus 102.6 days) [87].

### 3.7.5. Bone Marrow Edema Syndrome of the Hip

In a retrospective study of 46 patients who had received conservative treatment, surgical core decompression or shock wave treatment was assigned. All patients recovered clinically at 12 weeks with no pathological findings on MRI at six months, but the shock wave treatment group had a greater improvement in pain and resumed daily activities earlier [88]. Another retrospective study with 20 patients also reported functional and MRI improvements at two months that increased up to six months [81].

## 3.8. Role of ESWT in Carpal Tunnel Syndrome

Surgical intervention of the median nerve in the carpal tunnel by releasing the flexor retinaculum is the definitive treatment for carpal tunnel syndrome and is effective in the medium and long term [89].

A systematic review analyzing 10 studies involving 433 patients (501 wrists) found that shock waves would be effective in improving pain, other symptoms and function in patients with carpal tunnel syndrome. Radial shock waves would have better results



than focal shock waves [90]. A meta-analysis including five randomized clinical trials (204 patients) compared shock wave therapy and local corticosteroid infiltration therapy. Both interventions were reported to have similar effects in terms of improving pain, function and electrophysiological nerve parameters [91]. Another meta-analysis of seven clinical trials (376 patients) reported that adding shock wave therapy to a conservative treatment intervention such as a nocturnal wrist splint produced a transient improvement in pain and functional benefit for only four weeks [92].

### 3.9. Strengths and Weaknesses of the Studies

Although the evidence supporting the effectiveness of shock waves seems clearly favorable, there are some limitations in the studies that should be improved. As mentioned previously, there is a lack of unified protocols to apply to the same clinical indications and to be able to draw solid conclusions. Furthermore, many studies compare shock waves with different conservative treatments. Due to the variability in the conservative treatments used in different studies (laser, ultrasound, TENS, different exercise programs, etc.) it is difficult to establish the role of shock waves compared to other therapies [45,48,50,64,69,75]. Furthermore, there are few studies that have included the combined effect of conservative treatments with shock waves [61], so their role cannot be adequately evaluated. Regarding interventional treatment, there is also variability. Shock waves have been compared with infiltration with corticosteroids, hyaluronic acid or platelet-rich plasma, without clear studies comparing all these techniques in different pathologies [52,53,75]. It would also be interesting to have more studies comparing shock waves with surgical treatment, as in many cases, it is the most common clinical option when shock wave treatment fails [79,84,90].

In general, shock wave therapy has been widely studied and there are numerous high-evidence studies such as systematic reviews and meta-analyses. However, there is great heterogeneity in the application protocols and great variability in the conservative and interventional treatment techniques with which the effectiveness of the technique is compared. Furthermore, in many cases, the exact parameters of the intervention are not detailed (dose, method of application, model of shock wave generator, etc.), nor are the therapies received by the control group (ultrasound doses or repetitions, resistances and types of the exercises performed). Furthermore, given that the biological mechanisms by which shock waves produce their therapeutic effect are not yet known in depth, the quality of the evidence generated for this technique must continue to be improved.

### 3.10. Adverse Effects and Contraindications

Among the usual contraindications of shock wave treatment are anticoagulant treatment or disorders that favors bleeding (since a high-intensity shock wave can produce bleeding). Other contraindications include acute infection, pregnancy or direct application to the growth plate. Nerve tracts and large vessels should be avoided during application [93]. The vast majority of studies have found no significant adverse effects during or after shock wave application [42,45,50,52,61,66,69,70,73,75,78,84,92].

It is convenient to apply shock waves over a number of sessions and at a suitable intensity, and performing the technique with an excessive dose can increase the risk of adverse effects occurring [94] and that the treatment will be ineffective [95]. Shock wave treatments that are applied with high intensity have an increased risk of bruising [96]. Cancer itself is not a contraindication to perform shock wave treatment, although it is contraindicated in the case of metastasis, malignant tumors, multiple myeloma and lymphoma and when the area being dealt with contains oncological tissue [2].

The contraindication for tendon ruptures is not well established. In general, shock wave therapy is not recommended when there is a complete tendon rupture, but the treatment of extensive tendon injuries (>6 mm or >50%) has been performed without significant adverse effects [97]. One study reported a rupture of the Achilles tendon two weeks after a first shock wave session, although the authors did not consider this to be a

consequence of this treatment. Nevertheless, imaging tests are recommended, especially in patients over 60 years of age, before shock wave treatment [98].

A summary of contraindications for shock wave therapy is shown in Table 4.

**Table 4.** Contraindications to extracorporeal shock wave therapy (ESWT) [93–97].

Patients with poorly controlled coagulopathies.
Acute infection
Pregnancy
Direct application on growth plate
Oncological tissue in the area to be treated
Tumor metastases
Multiple myeloma
Lymphoma
Complete tendon rupture

#### 4. Limitations of the Study

This is a narrative review in which the articles selected were chosen as the most important in relation to the title of this article, prioritizing the studies with the most scientific evidence (meta-analyses, systematic reviews and randomized studies).

Although there are many mechanisms of action described for shock waves, the complete mechanism is not yet fully understood, nor are the most effective application protocols. In fact, there is great heterogeneity in application protocols, which makes comparison between studies difficult.

There are still aspects that have not been sufficiently investigated in the literature and that could help to better understand the role of shock waves in the management of musculoskeletal diseases. Although the effect of shock waves seems clear, the physiological mechanisms by which it acts are not yet fully understood. Furthermore, at a clinical level, it is necessary to have more articles that unify the application protocols to be able to carry out homogeneous studies. On the other hand, it is advisable to better understand the role of shock waves when combined with other conservative therapies. There is still a lack of high-quality articles on certain less frequent indications, and it is important to better study the safety of shock waves when there are tendon ruptures.

Further evidence on the efficacy of shock wave therapy in the treatment of musculoskeletal pathologies that cause pain is desirable in the future. It is also essential to have more data on the best treatment protocols to help apply the technique optimally. Due to the numerous mechanisms of action of shock waves, it is expected that new clinical indications in musculoskeletal pathologies will continue to emerge.

#### 5. Conclusions

Extracorporeal shock waves are a non-invasive, safe and effective treatment that can be applied to a large number of MSK pathologies in which the usual conservative treatment has failed. Of the clinical indications, calcific tendinopathy of the shoulder, lateral epicondylitis, greater trochanteric pain syndrome, plantar fasciitis and delayed bone healing present a level of evidence of 1+. Patellar tendinopathy, Achilles tendinopathy, trapezius myofascial syndrome, low back pain, avascular necrosis of the hip, osteoarthritis, femoral head osteonecrosis, pubis osteitis and carpal tunnel syndrome present a level of evidence of 1–. Although their mechanism of action is not completely known, their biological effects at analgesic, osteogenic and tissue-reparative levels achieve an improvement in pain and function that can be maintained in the long term. There is still no consensus on the application protocols for the different MSK conditions, so there is some variability in the recommended number of pulses, intensity, number of sessions and frequency. It is desirable



to have more articles studying the role of shock waves in MSK medicine, and for them to be carried out with a more homogeneous methodology in order to obtain more solid clinical conclusions.

**Author Contributions:** All authors participated equally in all tasks: conceptualization; methodology; writing—original draft preparation; and writing—review and editing. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** Not applicable.

**Informed Consent Statement:** Not applicable.

**Data Availability Statement:** Not applicable.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Wong, C.W.-Y.; Ng, E.Y.-L.; Fung, P.-W.; Mok, K.-M.; Yung, P.S.-H.; Chan, K.-M. Comparison of treatment effects on lateral epicondylitis between acupuncture and extracorporeal shockwave therapy. *Asia-Pac. J. Sports Med. Arthrosc. Rehabil. Technol.* **2016**, *7*, 21–26. [\[CrossRef\]](#)
- Crevenna, R.; Mickel, M.; Keilani, M. Extracorporeal shock wave therapy in the supportive care and rehabilitation of cancer patients. *Support. Care Cancer* **2019**, *27*, 4039–4041. [\[CrossRef\]](#) [\[PubMed\]](#)
- Dizon, J.N.C.; Gonzalez-Suarez, C.; Zamora, M.T.G.; Gambito, E.D. Effectiveness of extracorporeal shock wave therapy in chronic plantar fasciitis: A meta-analysis. *Am. J. Phys. Med. Rehabil.* **2013**, *92*, 606–620. [\[CrossRef\]](#) [\[PubMed\]](#)
- Konjen, N.; Napnark, T.; Janchai, S. A comparison of the effectiveness of radial extracorporeal shock wave therapy and ultrasound therapy in the treatment of chronic plantar fasciitis: A randomized controlled trial. *J. Med. Assoc. Thail.* **2015**, *98* (Suppl. 1), S49–S56.
- Simplicio, C.L.; Purita, J.; Murrell, W.; Santos, G.S.; Dos Santos, R.G.; Lana, J.F.S.D. Extracorporeal shock wave therapy mechanisms in musculoskeletal regenerative medicine. *J. Clin. Orthop. Trauma* **2020**, *11* (Suppl. 3), S309–S318. [\[CrossRef\]](#) [\[PubMed\]](#)
- Notarnicola, A.; Moretti, B. The biological effects of extracorporeal shock wave therapy (eswt) on tendon tissue. *Muscles Ligaments Tendons J.* **2012**, *2*, 33–37.
- Smallcomb, M.; Khandare, S.M.; Vidt, M.E.; Simon, J.C. Therapeutic Ultrasound and Shockwave Therapy for Tendinopathy: A Narrative Review. *Am. J. Phys. Med. Rehabil.* **2022**, *101*, 801–807. [\[CrossRef\]](#)
- Ji, Q.; Wang, P.; He, C. Extracorporeal shockwave therapy as a novel and potential treatment for degenerative cartilage and bone disease: Osteoarthritis. A qualitative analysis of the literature. *Prog. Biophys. Mol. Biol.* **2016**, *121*, 255–265. [\[CrossRef\]](#)
- Stania, M.; Juras, G.; Chmielewska, D.; Polak, A.; Kucio, C.; Król, P. Extracorporeal Shock Wave Therapy for Achilles Tendinopathy. *BioMed Res. Int.* **2019**, *2019*, 3086910. [\[CrossRef\]](#)
- Hausdorf, J.; Lemmens, M.A.M.; Heck, K.D.W.; Grolms, N.; Korrr, H.; Kertschanska, S.; Steinbusch, H.W.M.; Schmitz, C.; Maier, M. Selective loss of unmyelinated nerve fibers after extracorporeal shockwave application to the musculoskeletal system. *Neuroscience* **2008**, *155*, 138–144. [\[CrossRef\]](#)
- Takahashi, N.; Wada, Y.; Ohtori, S.; Saisu, T.; Moriya, H. Application of shock waves to rat skin decreases calcitonin gene-related peptide immunoreactivity in dorsal root ganglion neurons. *Auton. Neurosci.* **2003**, *107*, 81–84. [\[CrossRef\]](#) [\[PubMed\]](#)
- Rompe, J.D.; Hopf, C.; Küllmer, K.; Heine, J.; Bürger, R.; Nafe, B. Low-energy extracorporeal shock wave therapy for persistent tennis elbow. *Int. Orthop.* **1996**, *20*, 23–27. [\[CrossRef\]](#) [\[PubMed\]](#)
- Chao, Y.-H.; Tsuang, Y.-H.; Sun, J.-S.; Chen, L.-T.; Chiang, Y.-F.; Wang, C.-C.; Chen, M.-H. Effects of shock waves on tenocyte proliferation and extracellular matrix metabolism. *Ultrasound Med. Biol.* **2008**, *34*, 841–852. [\[CrossRef\]](#) [\[PubMed\]](#)
- Waugh, C.M.; Morrissey, D.; Jones, E.; Riley, G.P.; Langberg, H.; Screen, H.R. In vivo biological response to extracorporeal shockwave therapy in human tendinopathy. *Eur. Cells Mater.* **2015**, *29*, 268–280. [\[CrossRef\]](#)
- Thiel, M. Application of shock waves in medicine. *Clin. Orthop. Relat. Res.* **2001**, *387*, 18–21. [\[CrossRef\]](#)
- Wang, C.J. Extracorporeal shockwave therapy in musculoskeletal disorders. *J. Orthop. Surg. Res.* **2012**, *7*, 11. [\[CrossRef\]](#)
- Khan, K.M.; Cook, J.L.; Taunton, J.E.; Bonar, F. Overuse tendinosis, not tendinitis part 1: A new paradigm for a difficult clinical problem. *Physician Sportsmed.* **2000**, *28*, 38–48. [\[CrossRef\]](#) [\[PubMed\]](#)
- Cui, H.S.; Joo, S.Y.; Cho, Y.S.; Park, J.H.; Ro, Y.M.; Kim, J.-B.; Seo, C.H. Effect of extracorporeal shock wave therapy on keratinocytes derived from human hypertrophic scars. *Sci. Rep.* **2021**, *11*, 17296. [\[CrossRef\]](#)
- Wang, F.-S.; Wang, C.-J.; Chen, Y.-J.; Chang, P.-R.; Huang, Y.-T.; Sun, Y.-C.; Huang, H.-C.; Yang, Y.-J.; Yang, K.D. Ras induction of superoxide activates ERK-dependent angiogenic transcription factor HIF-1 $\alpha$  and VEGF-A expression in shock wave-stimulated osteoblasts. *J. Biol. Chem.* **2004**, *279*, 10331–10337. [\[CrossRef\]](#)
- Zhang, H.; Li, Z.-L.; Yang, F.; Zhang, Q.; Su, X.-Z.; Li, J.; Zhang, N.; Liu, C.-H.; Mao, N.; Zhu, H. Radial shockwave treatment promotes human mesenchymal stem cell self-renewal and enhances cartilage healing. *Stem Cell Res. Ther.* **2018**, *9*, 54. [\[CrossRef\]](#)

21. Hsu, S.-L.; Cheng, J.-H.; Wang, C.-J.; Ko, J.-Y.; Hsu, C.-H. Extracorporeal Shockwave Therapy Enhances Expression of Pdia-3 Which Is a Key Factor of the  $1\alpha,25$ -Dihydroxyvitamin D 3 Rapid Membrane Signaling Pathway in Treatment of Early Osteoarthritis of the Knee. *Int. J. Med. Sci.* **2017**, *14*, 1220–1230. [\[CrossRef\]](#) [\[PubMed\]](#)
22. D'Agostino, M.C.; Craig, K.; Tibalt, E.; Respizzi, S. Shock wave as biological therapeutic tool: From mechanical stimulation to recovery and healing, through mechanotransduction. *Int. J. Surg.* **2015**, *24*, 147–153. [\[CrossRef\]](#) [\[PubMed\]](#)
23. Wang, C.-J.; Yang, K.D.; Ko, J.-Y.; Huang, C.-C.; Huang, H.-Y.; Wang, F.-S. The effects of shockwave on bone healing and systemic concentrations of nitric oxide (NO), TGF- $\beta$ 1, VEGF and BMP-2 in long bone non-unions. *Nitric Oxide* **2009**, *20*, 298–303. [\[CrossRef\]](#) [\[PubMed\]](#)
24. Njawayaya, M.M.; Moses, B.; Martens, D.; Orchard, J.J.; Driscoll, T.; Negrine, J.; Orchard, J.W. Ultrasound Guidance Does Not Improve the Results of Shock Wave for Plantar Fasciitis or Calcific Achilles Tendinopathy: A Randomized Control Trial. *Clin. J. Sport Med.* **2018**, *28*, 21–27. [\[CrossRef\]](#) [\[PubMed\]](#)
25. Surace, S.J.; Deitch, J.; Johnston, R.V.; Buchbinder, R. Shock wave therapy for rotator cuff disease with or without calcification. *Cochrane Database Syst. Rev.* **2020**, *3*, CD008962. [\[CrossRef\]](#) [\[PubMed\]](#)
26. Ogden, J.A.; Tóth-Kischkat, A.; Schultheiss, R. Principles of shock wave therapy. *Clin. Orthop. Relat. Res.* **2001**, *387*, 8–17. [\[CrossRef\]](#)
27. Schmitz, C.; Császár, N.B.M.; Milz, S.; Schieker, M.; Maffulli, N.; Rompe, J.-D.; Furia, J.P. Efficacy and safety of extracorporeal shock wave therapy for orthopedic conditions: A systematic review on studies listed in the PEDro database. *Br. Med. Bull.* **2015**, *116*, 115–138. [\[CrossRef\]](#)
28. Zhang, X.; Yan, X.; Wang, C.; Tang, T.; Chai, Y. The dose–effect relationship in extracorporeal shock wave therapy: The optimal parameter for extracorporeal shock wave therapy. *J. Surg. Res.* **2014**, *186*, 484–492. [\[CrossRef\]](#)
29. Liao, C.-D.; Xie, G.-M.; Tsauo, J.-Y.; Chen, H.-C.; Liou, T.-H. Efficacy of extracorporeal shock wave therapy for knee tendinopathies and other soft tissue disorders: A meta-analysis of randomized controlled trials. *BMC Musculoskelet. Disord.* **2018**, *19*, 278. [\[CrossRef\]](#)
30. Stania, M.; Król, B.; Franek, A.; Błaszczak, E.; Dolibog, P.; Polak, A.; Dolibog, P.; Durmała, J.; Król, P. A comparative study of the efficacy of radial and focused shock wave therapy for tennis elbow depending on symptom duration. *Arch. Med. Sci.* **2020**, *17*, 1686–1695. [\[CrossRef\]](#)
31. Lizis, P. Analgesic effect of extracorporeal shock wave therapy versus ultrasound therapy in chronic tennis elbow. *J. Phys. Ther. Sci.* **2015**, *27*, 2563–2567. [\[CrossRef\]](#) [\[PubMed\]](#)
32. Haake, M.; König, I.R.; Decker, T.; Riedel, C.; Buch, M.; Müller, H.-H.; Extracorporeal Shock Wave Therapy Clinical Trial Group. Extracorporeal shock wave therapy in the treatment of lateral epicondylitis: A randomized multicenter trial. *J. Bone Jt. Surg. Am.* **2002**, *84*, 1982–1991. [\[CrossRef\]](#) [\[PubMed\]](#)
33. Furia, J.P. High-energy extracorporeal shock wave therapy as a treatment for insertional Achilles tendinopathy. *Am. J. Sports Med.* **2006**, *34*, 733–740. [\[CrossRef\]](#) [\[PubMed\]](#)
34. Rompe, J.D.; Nafe, B.; Furia, J.P.; Maffulli, N. Eccentric loading, shock-wave treatment, or a wait-and-see policy for tendinopathy of the main body of tendo Achillis: A randomized controlled trial. *Am. J. Sports Med.* **2007**, *35*, 374–383. [\[CrossRef\]](#)
35. Ozturan, K.E.; Yucel, I.; Cakici, H.; Guven, M.; Sungur, I. Autologous blood and corticosteroid injection and extracorporeal shock wave therapy in the treatment of lateral epicondylitis. *Orthopedics* **2010**, *33*, 84–91. [\[CrossRef\]](#)
36. Taylor, J.; Dunkerley, S.; Silver, D.; Redfern, A.; Talbot, N.; Sharpe, I.; Guyver, P. Extracorporeal shockwave therapy (ESWT) for refractory Achilles tendinopathy: A prospective audit with 2-year follow up. *Foot* **2016**, *26*, 23–29. [\[CrossRef\]](#)
37. Moher, D.; Hopewell, S.; Schulz, K.F.; Montori, V.; Gøtzsche, P.C.; Devereaux, P.J.; Elbourne, D.; Egger, M.; Altman, D.G.; CONSORT. CONSORT 2010 explanation and elaboration: Updated guidelines for reporting parallel group randomised trials. *Int. J. Surg.* **2012**, *10*, 28–55. [\[CrossRef\]](#)
38. Cheng, Y.; Zhang, J.; Cai, Y. Utility of Ultrasonography in Assessing the Effectiveness of Extracorporeal Shock Wave Therapy in Insertional Achilles Tendinopathy. *Biomed. Res. Int.* **2016**, *2016*, 2580969. [\[CrossRef\]](#)
39. De Smedt, T.; de Jong, A.; Van Leemput, W.; Lieven, D.; Van Glabbeek, F. Lateral epicondylitis in tennis: Update on aetiology, biomechanics and treatment. *Br. J. Sports Med.* **2007**, *41*, 816–819. [\[CrossRef\]](#)
40. Sharma, P.; Maffulli, N. Tendon injury and tendinopathy: Healing and repair. *J. Bone Jt. Surg. Am.* **2005**, *87*, 187–202. [\[CrossRef\]](#)
41. Järvinen, T.A.; Kannus, P.; Maffulli, N.; Khan, K.M. Achilles tendon disorders: Etiology and epidemiology. *Foot Ankle Clin.* **2005**, *10*, 255–266. [\[CrossRef\]](#) [\[PubMed\]](#)
42. Yang, T.-H.; Huang, Y.-C.; Lau, Y.-C.; Wang, L.-Y. Efficacy of Radial Extracorporeal Shock Wave Therapy on Lateral Epicondylitis, and Changes in the Common Extensor Tendon Stiffness with Pretherapy and Posttherapy in Real-Time Sonoelastography: A Randomized Controlled Study. *Am. J. Phys. Med. Rehabil.* **2017**, *96*, 93–100. [\[CrossRef\]](#) [\[PubMed\]](#)
43. Sansone, V.; Consonni, O.; Maiorano, E.; Meroni, R.; Goddi, A. Calcific tendinopathy of the rotator cuff: The correlation between pain and imaging features in symptomatic and asymptomatic female shoulders. *Skelet. Radiol.* **2016**, *45*, 49–55. [\[CrossRef\]](#) [\[PubMed\]](#)
44. Hackett, L.; Millar, N.L.; Lam, P.; Murrell, G.A. Are the Symptoms of Calcific Tendinitis Due to Neoinnervation and/or Neovascularization? *J. Bone Jt. Surg. Am.* **2016**, *98*, 186–192. [\[CrossRef\]](#) [\[PubMed\]](#)
45. Speed, C. A systematic review of shockwave therapies in soft tissue conditions: Focusing on the evidence. *Br. J. Sports Med.* **2014**, *48*, 1538–1542. [\[CrossRef\]](#)

46. Louwerens, J.K.; Sierevelt, I.N.; van Noort, A.; van den Bekerom, M.P. Evidence for minimally invasive therapies in the management of chronic calcific tendinopathy of the rotator cuff: A systematic review and meta-analysis. *J. Shoulder Elb. Surg.* **2014**, *23*, 1240–1249. [\[CrossRef\]](#)
47. Sabeti-Aschraf, M.; Dorotka, R.; Goll, A.; Trieb, K. Extracorporeal shock wave therapy in the treatment of calcific tendinitis of the rotator cuff. *Am. J. Sports Med.* **2005**, *33*, 1365–1368. [\[CrossRef\]](#)
48. Tornese, D.; Mattei, E.; Bandi, M.; Zerbi, A.; Quaglia, A.; Melegati, G. Arm position during extracorporeal shock wave therapy for calcifying tendinitis of the shoulder: A randomized study. *Clin. Rehabil.* **2011**, *25*, 731–739. [\[CrossRef\]](#)
49. Fatima, A.; Ahmad, A.; Gilani, S.A.; Darain, H.; Kazmi, S.; Hanif, K. Effects of High-Energy Extracorporeal Shockwave Therapy on Pain, Functional Disability, Quality of Life, and Ultrasonographic Changes in Patients with Calcified Rotator Cuff Tendinopathy. *Biomed. Res. Int.* **2022**, *2022*, 1230857. [\[CrossRef\]](#)
50. Aydın, A.; Atiç, R. Comparison of extracorporeal shock-wave therapy and wrist-extensor splint application in the treatment of lateral epicondylitis: A prospective randomized controlled study. *J. Pain Res.* **2018**, *11*, 1459–1467. [\[CrossRef\]](#)
51. Yao, G.; Chen, J.; Duan, Y.; Chen, X. Efficacy of Extracorporeal Shock Wave Therapy for Lateral Epicondylitis: A Systematic Review and Meta-Analysis. *Biomed. Res. Int.* **2020**, *2020*, 2064781. [\[CrossRef\]](#) [\[PubMed\]](#)
52. Reid, D. The management of greater trochanteric pain syndrome: A systematic literature review. *J. Orthop.* **2016**, *13*, 15–28. [\[CrossRef\]](#) [\[PubMed\]](#)
53. Gazendam, A.; Ekhtiari, S.M.; Axelrod, D.M.; Gouveia, K.B.; Gyemi, L.B.; Ayeni, O.; Bhandari, M. Comparative Efficacy of Nonoperative Treatments for Greater Trochanteric Pain Syndrome: A Systematic Review and Network Meta-Analysis of Randomized Controlled Trials. *Clin. J. Sport Med.* **2022**, *32*, 427–432. [\[CrossRef\]](#) [\[PubMed\]](#)
54. Heaver, C.; Pinches, M.; Kuiper, J.H.; Thomas, G.; Lewthwaite, S.; Burston, B.J.; Banerjee, R.D. Greater trochanteric pain syndrome: Focused shockwave therapy versus an ultrasound guided injection: A randomised control trial. *Hip Int.* **2023**, *33*, 490–499. [\[CrossRef\]](#)
55. Farrokhi, S.; Chen, Y.-F.; Piva, S.R.; Fitzgerald, G.K.; Jeong, J.-H.; Kwok, C.K. The Influence of Knee Pain Location on Symptoms, Functional Status, and Knee-related Quality of Life in Older Adults With Chronic Knee Pain: Data From the Osteoarthritis Initiative. *Clin. J. Pain* **2016**, *32*, 463–470. [\[CrossRef\]](#)
56. Leppänen, M.; Pasanen, K.; Kannus, P.; Vasankari, T.; Kujala, U.M.; Heinonen, A.; Parkkari, J. Epidemiology of Overuse Injuries in Youth Team Sports: A 3-year Prospective Study. *Int. J. Sports Med.* **2017**, *38*, 847–856. [\[CrossRef\]](#)
57. Charles, R.; Fang, L.; Zhu, R.; Wang, J. The effectiveness of shockwave therapy on patellar tendinopathy, Achilles tendinopathy, and plantar fasciitis: A systematic review and meta-analysis. *Front. Immunol.* **2023**, *14*, 1193835. [\[CrossRef\]](#)
58. Taunton, K.M.; Taunton, J.E.; Khan, K.M. Treatment of patellar tendinopathy with extracorporeal shock wave therapy. *BC Med. J.* **2003**, *45*, 500–507.
59. Scott, A.; Ashe, M.C. Common tendinopathies in the upper and lower extremities. *Curr. Sports Med. Rep.* **2006**, *5*, 233–241. [\[CrossRef\]](#)
60. Shakked, R.J.; Raikin, S.M. Insertional Tendinopathy of the Achilles: Debridement, Primary Repair, and When to Augment. *Foot Ankle Clin.* **2017**, *22*, 761–780. [\[CrossRef\]](#)
61. Rompe, J.D.; Furia, J.; Maffulli, N. Eccentric loading versus eccentric loading plus shock-wave treatment for midportion achilles tendinopathy: A randomized controlled trial. *Am. J. Sports Med.* **2009**, *37*, 463–470. [\[CrossRef\]](#) [\[PubMed\]](#)
62. Notarnicola, A.; Pesce, V.; Vicenti, G.; Tafuri, S.; Forcignanò, M.; Moretti, B. SWAAT study: Extracorporeal shock wave therapy and arginine supplementation and other nutraceuticals for insertional Achilles tendinopathy. *Adv. Ther.* **2012**, *29*, 799–814. [\[CrossRef\]](#) [\[PubMed\]](#)
63. Rompe, J.D. Plantar fasciopathy. *Sports Med. Arthrosc. Rev.* **2009**, *17*, 100–104. [\[CrossRef\]](#) [\[PubMed\]](#)
64. Rompe, J.D.; Furia, J.; Weil, L.; Maffulli, N. Shock wave therapy for chronic plantar fasciopathy. *Br. Med. Bull.* **2007**, *81*–82, 183–208. [\[CrossRef\]](#)
65. Lim, A.T.; How, C.H.; Tan, B. Management of plantar fasciitis in the outpatient setting. *Singap. Med. J.* **2016**, *57*, 168–170. [\[CrossRef\]](#)
66. Sun, K.; Zhou, H.; Jiang, W. Extracorporeal shock wave therapy versus other therapeutic methods for chronic plantar fasciitis. *Foot Ankle Surg.* **2020**, *26*, 33–38. [\[CrossRef\]](#)
67. Poveda-Pagán, E.J.; Lozano-Quijada, C.; Segura-Heras, J.V.; Peral-Berna, M.; Lumbreras, B. Referred Pain Patterns of the Infraspinatus Muscle Elicited by Deep Dry Needling and Manual Palpation. *J. Altern. Complement. Med.* **2017**, *23*, 890–896. [\[CrossRef\]](#)
68. Pirri, C.; Fede, C.; Petrelli, L.; De Rose, E.; Biz, C.; Guidolin, D.; De Caro, R.; Stecco, C. Immediate Effects of Extracorporeal Shock Wave Therapy in Fascial Fibroblasts: An In Vitro Study. *Biomedicines* **2022**, *10*, 1732. [\[CrossRef\]](#)
69. Zhang, Q.; Fu, C.; Huang, L.; Xiong, F.; Peng, L.; Liang, Z.; Chen, L.; He, C.; Wei, Q. Efficacy of Extracorporeal Shockwave Therapy on Pain and Function in Myofascial Pain Syndrome of the Trapezius: A Systematic Review and Meta-Analysis. *Arch. Phys. Med. Rehabil.* **2020**, *101*, 1437–1446. [\[CrossRef\]](#)
70. Rajfur, K.; Rajfur, J.; Matusz, T.; Walewicz, K.; Dymarek, R.; Ptazkowski, K.; Taradaj, J. Efficacy of Focused Extracorporeal Shock Wave Therapy in Chronic Low Back Pain: A Prospective Randomized 3-Month Follow-Up Study. *Med. Sci. Monit.* **2022**, *28*, e936614. [\[CrossRef\]](#)

71. Ogur, H.U.; Seyfettinoğlu, F.; Tuhanoğlu, Ü.; Cicek, H.; Zohre, S. An evaluation of two different methods of coccygectomy in patients with traumatic coccydynia. *J. Pain Res.* **2017**, *10*, 881–886. [\[CrossRef\]](#) [\[PubMed\]](#)
72. Gönen Aydın, C.; Örsçelik, A.; Gök, M.C.; Akman, Y.E. The Efficacy of Extracorporeal Shock Wave Therapy for Chronic Coccydynia. *Med. Princ. Pract.* **2020**, *29*, 444–450. [\[CrossRef\]](#)
73. Haghighat, S.; Mashayekhi Asl, M. Effects of Extracorporeal Shock Wave Therapy on Pain in Patients With Chronic Refractory Coccydynia: A Quasi-Experimental Study. *Anesth. Pain Med.* **2016**, *6*, e37428. [\[CrossRef\]](#) [\[PubMed\]](#)
74. Martel-Pelletier, J.; Barr, A.J.; Cicuttini, F.M.; Conaghan, P.G.; Cooper, C.; Goldring, M.B.; Goldring, S.R.; Jones, G.; Teichtahl, A.J.; Pelletier, J.-P. Osteoarthritis. *Nat. Rev. Dis. Primers* **2016**, *2*, 16072. [\[CrossRef\]](#) [\[PubMed\]](#)
75. Chen, L.; Ye, L.; Liu, H.; Yang, P.; Yang, B. Extracorporeal Shock Wave Therapy for the Treatment of Osteoarthritis: A Systematic Review and Meta-Analysis. *BioMed Res. Int.* **2020**, *2020*, 1907821. [\[CrossRef\]](#)
76. Zhang, Y.F.; Liu, Y.; Chou, S.W.; Weng, H. Dose-related effects of radial extracorporeal shock wave therapy for knee osteoarthritis: A randomized controlled trial. *J. Rehabil. Med.* **2021**, *53*, jrm00144. [\[CrossRef\]](#)
77. Graff, J.; Pastor, J.; Funke, P.-J.; Mach, P.; Senge, T. Extracorporeal shock wave lithotripsy for ureteral stones: A retrospective analysis of 417 cases. *J. Urol.* **1988**, *139*, 513–516. [\[CrossRef\]](#)
78. Cacchio, A.; Giordano, L.; Colafarina, O.; Rompe, J.D.; Tavernese, E.; Ioppolo, F.; Flamini, S.; Spacca, G.; Santilli, V. Extracorporeal shock-wave therapy compared with surgery for hypertrophic long-bone nonunions. *J. Bone Jt. Surg. Am.* **2009**, *91*, 2589–2597. [\[CrossRef\]](#)
79. Ogden, J.A.; Alvarez, R.G.; Levitt, R.; Marlow, M. Shock wave therapy (Orthotripsy) in musculoskeletal disorders. *Clin. Orthop. Relat. Res.* **2001**, *387*, 22–40. [\[CrossRef\]](#)
80. Wang, C.-J.; Chen, H.-S.; Chen, C.-E.; Yang, K.D. Treatment of nonunions of long bone fractures with shock waves. *Clin. Orthop. Relat. Res.* **2001**, *387*, 95–101. [\[CrossRef\]](#)
81. D'Agostino, C.; Romeo, P.; Lavanga, V.; Pisani, S.; Sansone, V. Effectiveness of extracorporeal shock wave therapy in bone marrow edema syndrome of the hip. *Rheumatol. Int.* **2014**, *34*, 1513–1518. [\[CrossRef\]](#) [\[PubMed\]](#)
82. Xie, K.; Mao, Y.; Qu, X.; Dai, K.; Jia, Q.; Zhu, Z.; Yan, M. High-energy extracorporeal shock wave therapy for nontraumatic osteonecrosis of the femoral head. *J. Orthop. Surg. Res.* **2018**, *13*, 25. [\[CrossRef\]](#) [\[PubMed\]](#)
83. Vulpiani, M.C.; Vetrano, M.; Trischitta, D.; Scarcello, L.; Chizzi, F.; Argento, G.; Saraceni, V.M.; Maffulli, N.; Ferretti, A. Extracorporeal shock wave therapy in early osteonecrosis of the femoral head: Prospective clinical study with long-term follow-up. *Arch. Orthop. Trauma Surg.* **2012**, *132*, 499–508. [\[CrossRef\]](#) [\[PubMed\]](#)
84. Häußler, J.; Wieber, J.; Catalá-Lehnen, P. The use of extracorporeal shock wave therapy for the treatment of bone marrow oedema—A systematic review and meta-analysis. *J. Orthop. Surg. Res.* **2021**, *16*, 369. [\[CrossRef\]](#) [\[PubMed\]](#)
85. Sconza, C.; Anzà, M.; Di Matteo, B.; Lipina, M.; Kon, E.; Respizzi, S.; Tibalt, E.; D'Agostino, M.C. Extracorporeal shock wave therapy for the treatment of osteonecrosis and bone vascular diseases: A systematic review of randomized controlled trials. *Eur. Rev. Med. Pharmacol. Sci.* **2022**, *26*, 2949–2959. [\[CrossRef\]](#)
86. D'Agostino, C.; Romeo, P.; Amelio, E.; Sansone, V. Effectiveness of ESWT in the treatment of Kienböck's disease. *Ultrasound Med. Biol.* **2011**, *37*, 1452–1456. [\[CrossRef\]](#)
87. Schöberl, M.; Prantl, L.; Loose, O.; Zellner, J.; Angele, P.; Zeman, F.; Spreitzer, M.; Nerlich, M.; Krutsch, W. Non-surgical treatment of pubic overload and groin pain in amateur football players: A prospective double-blinded randomised controlled study. *Knee Surg. Sports Traumatol. Arthrosc.* **2017**, *25*, 1958–1966. [\[CrossRef\]](#)
88. Gao, F.; Sun, W.; Li, Z.; Guo, W.; Kush, N.; Ozaki, K. Intractable bone marrow edema syndrome of the hip. *Orthopedics* **2015**, *38*, e263–e270. [\[CrossRef\]](#)
89. Huisstede, B.M.; van den Brink, J.; Randsdorp, M.S.; Geelen, S.J.; Koes, B.W. Effectiveness of Surgical and Postsurgical Interventions for Carpal Tunnel Syndrome—A Systematic Review. *Arch. Phys. Med. Rehabil.* **2018**, *99*, 1660–1680. [\[CrossRef\]](#)
90. Xie, Y.; Zhang, C.; Liang, B.; Wang, J.; Wang, L.; Wan, T.; Xu, F.; Lei, L. Effects of shock wave therapy in patients with carpal tunnel syndrome: A systematic review and meta-analysis. *Disabil. Rehabil.* **2022**, *44*, 177–188. [\[CrossRef\]](#)
91. Li, W.; Dong, C.; Wei, H.; Xiong, Z.; Zhang, L.; Zhou, J.; Wang, Y.; Song, J.; Tan, M. Extracorporeal shock wave therapy versus local corticosteroid injection for the treatment of carpal tunnel syndrome: A meta-analysis. *J. Orthop. Surg. Res.* **2020**, *15*, 556. [\[CrossRef\]](#) [\[PubMed\]](#)
92. Chen, K.-T.; Chen, Y.-P.; Kuo, Y.-J.; Chiang, M.-H. Extracorporeal Shock Wave Therapy Provides Limited Therapeutic Effects on Carpal Tunnel Syndrome: A Systematic Review and Meta-Analysis. *Medicina* **2022**, *58*, 677. [\[CrossRef\]](#) [\[PubMed\]](#)
93. Kwok, I.H.Y.; Jeong, E.; Aljalalma, M.A.; Haldar, A.; Welck, M. Extracorporeal shock wave treatment in foot and ankle fracture non-unions—A review. *Foot* **2022**, *51*, 101889. [\[CrossRef\]](#) [\[PubMed\]](#)
94. Haake, M.; Bøddeker, I.; Decker, T.; Buch, M.; Vogel, M.; Labek, G.; Maier, M.; Loew, M.; Maier-Boerries, O.; Fischer, J.; et al. Side-effects of extracorporeal shock wave therapy (ESWT) in the treatment of tennis elbow. *Arch. Orthop. Trauma Surg.* **2002**, *122*, 222–228. [\[CrossRef\]](#) [\[PubMed\]](#)
95. Notarnicola, A.; Maccagnano, G.; Tafuri, S.; Fiore, A.; Margiotta, C.; Pesce, V.; Moretti, B. Prognostic factors of extracorporeal shock wave therapy for tendinopathies. *Musculoskelet. Surg.* **2016**, *100*, 53–61. [\[CrossRef\]](#) [\[PubMed\]](#)
96. Hearnden, A.; Desai, A.; Karmegam, A.; Flannery, M. Extracorporeal shock wave therapy in chronic calcific tendonitis of the shoulder—is it effective? *Acta Orthop. Belg.* **2009**, *75*, 25–31.



97. Chou, W.-Y.; Wang, C.-J.; Wu, K.-T.; Yang, Y.-J.; Cheng, J.-H.; Wang, S.-W. Comparative outcomes of extracorporeal shockwave therapy for shoulder tendinitis or partial tears of the rotator cuff in athletes and non-athletes: Retrospective study. *Int. J. Surg.* **2018**, *51*, 184–190. [[CrossRef](#)]
98. Costa, M.L.; Shepstone, L.; Donell, S.T.; Thomas, T.L. Shock wave therapy for chronic Achilles tendon pain: A randomized placebo-controlled trial. *Clin. Orthop. Relat. Res.* **2005**, *440*, 199–204. [[CrossRef](#)]

**Disclaimer/Publisher’s Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.



# Oregon

Tina Kotek, Governor

**Oregon Medical Board**  
1500 SW 1st Ave. Ste 620  
Portland, OR 97201-5847  
**Voice (971) 673-2700**  
**FAX (971) 673-2670**  
**[www.oregon.gov/OMB](http://www.oregon.gov/OMB)**

**Approved by Board July 10, 2025**

**ACUPUNCTURE ADVISORY COMMITTEE**  
**JUNE 6, 2025**  
**VIDEOCONFERENCE MEETING AGENDA**  
**NOON**

The mission of the Oregon Medical Board is to protect the health, safety, and wellbeing of Oregon citizens by regulating the practice of medicine in a manner that promotes access to quality care.

**PUBLIC SESSION**

<b>1</b>	<b>Call to Order</b>	<b>Behall</b>
----------	----------------------	---------------

Dr. Behall, Chair, called the meeting to order at 12:02 p.m. and called the roll.

The following members were present:

Diane Behall, LAc, DAOM, Chair

Paul Yutan, MD

Carli Gaines, LAc, RN

Jill Shaw, DO, Board Liaison

Lisa Tongel, LAc

Dilip Babu, MD, was absent by prior notification. A quorum of the Committee was confirmed. There were no conflicts of interest or biases to declare.

Staff present:

Nicole Krishnaswami, JD, Executive Director

Jordana Gaumond, MD, Medical Director

Netia N. Miles, Licensing Manager

Shayne Nylund, Committee Coordinator

Guests present:

Elizabeth Bourgeois, LAc, Oregon Acupuncture Association

Grace Caswell, Acupuncture Student

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

## **DISCUSSION ITEMS**

2	NCCAOM Route 4, Apprenticeship Training	Gaines
---	---	--------

Ms. Gaines reviewed two requests regarding the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) Route 4 pathway, which allows eligibility to sit for NCCAOM examinations through a three-year formal education and apprenticeship training acupuncture program. While NCCAOM Route 4 would allow an applicant to sit for the required NCCAOM exams they would not have met the Oregon Medical Board's (OMB) rule requirement to have graduated from an accredited program.

Ms. Gaines noted that physicians and physician associates (PAs) do not train under an apprenticeship program and must have graduated from an accredited school to be eligible for licensure, and the current rule upholds the OMB's standards regarding patient safety.

Ms. Tongel agreed that holding licensure by the OMB aligns with their mission regarding patient safety. Additionally, she noted that the National University of Natural Medicine (NUNM) is doing everything it can to make its schooling more accessible to its students, such as offering courses online.

Dr. Yutan noted that allowing an acupuncture apprentice program would be difficult to regulate, specifically if the apprentice program was not in a formal environment.

The Committee did not recommend revising the current rule to allow a pathway for apprenticeship training in lieu of graduating from an ACAHM accredited acupuncture program.

3	Basic Laboratory Tests	Yutan
---	------------------------	-------

Dr. Yutan reviewed two requests regarding acupuncturists' ability to order basic lab tests. He informed the Committee that this inquiry was previously discussed by the Committee in December 2022 and they determined that ordering images and lab tests were not within the scope of practice for acupuncturists.

Ms. Gaines pointed out that the states that allow acupuncturists to order lab tests also appear to be the primary care providers, which Oregon acupuncturists are not. Additionally, she noted other states that allow acupuncturists to order lab tests are required to receive training to be eligible for licensure.

Ms. Tongel confirmed that acupuncture students attending NUNM are not taught how to order basic lab tests.

Dr. Behall stated that the Committee's prior discussion determined that the practitioner was liable if an image was misread or not appropriately followed up on.

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

The Committee re-affirmed that ordering lab tests are currently not within the scope of practice for acupuncturists.

4	Nano Needling	Behall
---	---------------	--------

Dr. Behall reviewed a scope of practice inquiry regarding nano needling. She noted that the Committee discussed a similar inquiry in June 2013, where it was determined that microneedling was within the acupuncture scope of practice. It was further recommended that an acupuncturist undergo a cosmetic acupuncture course prior to offering the service. She noted that insertion of needles in nano needling is less in depth than microneedling.

The Committee confirmed that nano needling is within the current scope for acupuncturists and recommended a practitioner participate in a nano needling course prior to offering this service.

### **INFORMATIONAL ITEMS**

5	Public Comments	Behall
---	-----------------	--------

Public attendee Grace Caswell, acupuncture student, stated she is in support of the NCCAOM Route 4 pathway as NCCAOM works with accredited programs seeking people who have attended at least a minimum of two years of formal education before they leave that formal institution and transition over to an apprentice program. She additionally noted the apprentice program is modeled after an accredited program. She further stated an apprenticeship program would make her a safe and effective practitioner.

6	Investigative Update from Walter Frazier, Investigations Manager	Behall
---	--	--------

Dr. Behall introduced the investigative update. There was no discussion from the Committee.

7	2025 Legislative Session Update	Gaines
---	---------------------------------	--------

Ms. Gaines introduced the 2025 legislative session update. There was no discussion from the Committee.

8	Approved Clinical Supervisors	Behall
---	-------------------------------	--------

Dr. Behall presented the list of approved clinical supervisors. There was no discussion from the Committee.

9	Review of Board-Approved Minutes from December 6, 2024	Yutan
---	--	-------

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*



Dr. Yutan reviewed the Board-approved minutes from the December 6, 2024, Acupuncture Advisory Committee meeting. There was no discussion from the Committee.

10	Future Committee and Board Meeting Dates	Behall
----	--	--------

Dr. Behall reviewed the future meeting dates for the Acupuncture Advisory Committee. No conflicts or concerns were raised by the Committee.

11	Reappointment of Diane Behall, LAc, DAOM, to a Second Term on the Acupuncture Advisory Committee	Gaines
----	--	--------

**COMMITTEE ACTION:** Ms. Gaines moved to reappoint Dr. Behall to a second term on the Acupuncture Advisory Committee. Dr. Yutan seconded the motion. Dr. Behall, Ms. Gaines, Dr. Yutan and Ms. Tongel voted “aye.” Dr. Babu was absent. The motion passed 4-0-0-1.

**ADJOURN**

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*



# Oregon

Tina Kotek, Governor

**Oregon Medical Board**  
1500 SW 1st Ave. Ste 620  
Portland, OR 97201-5847  
**Voice (971) 673-2700**  
**FAX (971) 673-2670**  
**[www.oregon.gov/OMB](http://www.oregon.gov/OMB)**

**Approved by the Board on October 2, 2025**

**ACUPUNCTURE ADVISORY COMMITTEE  
SEPTEMBER 12, 2025  
VIDEOCONFERENCE MEETING AGENDA  
NOON**

The mission of the Oregon Medical Board is to protect the health, safety, and wellbeing of Oregon citizens by regulating the practice of medicine in a manner that promotes access to quality care.

**PUBLIC SESSION**

1	<b>Call to Order</b>	Behall
---	----------------------	--------

Dr. Behall, Chair, called the meeting to order at 12:02 p.m. and called the roll.

The following members were present:

Diane Behall, LAc, DAOM, Chair

Dilip Babu, MD

Carli Gaines, LAc, RN

Lisa Tongel, LAc

Paul Yutan, MD (left around 1:00 p.m.)

Staff present:

Elizabeth Ross, Legislative & Policy Analyst

Shayne Nylund, Committee Coordinator

Nicole Krishnaswami, JD, Executive Director (arrived around 1:40 p.m.)

Netia N. Miles, Licensing Manager

Jordana Gaumond, MD, Medical Director

Absent by prior notification:

Jill Shaw, DO, Board Liaison

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

1	Public Comments	Behall
---	-----------------	--------

Dr. Behall opened the floor to public comments.

Letty Dogheart introduced themselves as a disabled veteran, community healthcare worker, health educator, and community herbalist originally from Coahuila who has been living in Multnomah Territory for 13 years. They were trained in 5NP through the Canoe Journey Herbalists in Puyallup territory and have provided 5NP care at Canoe Journey events and other tribal events in coastal Salish lands. Dogheart expressed strong support for the implementation of 5NP, emphasizing the critical need for community members to have access to care providers that look like them. Dogheart shared a recent example of working with migrant farm workers and described how these workers are under tremendous stress. While they were able to offer auricular seeds on the five points, they noted that these individuals really needed the full needling treatment and had to be referred to other resources. Dogheart emphasized that at that moment, they could have provided complete 5NP treatment in a safe community space. Dogheart concluded by stressing the importance of accessible training requirements that work with busy community schedules and expressed appreciation for all the work that had brought the legislation this far.

Karina Natalie Arndt, an emeritus acupuncturist licensed since 1987, acknowledged the painful reality of widespread suffering from substance abuse, mental health issues, and trauma, expressing that everyone present wanted to see improvement in these areas and recognizing 5NP as a useful tool. However, they raised significant legal concerns about HB 2143's language after consulting with Stephen Kafoury, who served as the acupuncturist lobbyist for over 20 years and has extensive experience in legislative law. Noting HB 2143 does not explicitly define or state that 5NP is not the practice of acupuncture, creating legal ambiguity as acupuncture is defined as "putting needles into people" and 5NP involves inserting needles into people. This uncertainty led Arndt to propose three implementation models in a written submission: Model A featuring minimal training with easy access and no supervision; Model B involving small amounts of training with clinical supervision; and Model C requiring moderate training for independent practitioners. They recommended Model B, believing it would allow practitioners to become certified quickly while providing better assurance for patient safety, patient rights, and quality of care. They suggested maximizing mobility for supervision, drawing from their nursing experience 40 years ago when they performed complex procedures in home settings, and proposed mobile units connected with acupuncture clinics to provide oversight for community-based technicians.

Jennie Brixey identified themselves as a program specialist for Native American and Alaska Native communities at the Multnomah County Health Department, though they emphasized they were speaking as an individual community member rather than representing their employer. They described their role as a longtime community health worker in the Portland Native community and a registered traditional health worker with the Oregon Health Authority. Brixey shared that they had personally benefited from acupuncture and ear seeds during their own healing process, making this support deeply personal. They

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

expressed strong concerns about requiring acupuncturist supervision, viewing it as a significant barrier to access. Brixey explained that while many urban tribal community members can access these services on reservations, many people are far from their homelands and living in the city. They described community health workers ready to do this training and emphasized that these are highly skilled individuals who have completed their own training programs and are trusted members of their community. Brixey concluded by expressing gratitude for the time and energy being invested in this process while acknowledging it would be a contentious topic.

Susan Williams, an Oregon resident who served as chair of the Arizona Acupuncture Board of Examiners in 2021 described how Arizona's board worked closely with stakeholders including licensed acupuncturists, addiction treatment professionals, and others to successfully pass a bill to clarify the role of acupuncture detoxification specialists (ADSs). Williams reported impressive results from Arizona's implementation: the number of ADSs increased by 45.7% since implementation, and in the four-plus years since the law took effect, there have been zero consumer or other complaints filed with the board. They described 5NP as "a no-harm form of treatment that can easily be learned by lay individuals, broadly accessible in many types of environments, and administered in a wide range of environments." Their passion for the work stemmed from personal tragedy—despite their privileged life, the opioid epidemic touched them seven times with overdose deaths and motivated them to champion greater accessibility to auricular acupuncture treatment. Through their acupuncture training in Portland and researching the National Acupuncture Detoxification Association, they became convinced that auricular acupuncture could be lifesaving in responding to the opioid crisis.

Margeaux Fraasa, a consultant and contractor with the NAYA Program of CAPACES Leadership Institute in the Willamette Valley, spoke primarily from their work with migrant Indigenous communities. They explained that NAYA is a traditional education program where all staff and the community they serve are migrant Indigenous peoples, many working as farmworkers in the local area. Fraasa provided cultural context, explaining that while acupuncture has lineage from the Asian continent, many of their migrant Indigenous communities have similar ancestral practices involving needles from maguey (agave) or lime trees used on pressure points by traditional healers to promote movement and healing of physical pain or trapped emotional trauma. They highlighted significant access barriers, noting that acupuncture and natural health practices, like home births, are often more accessible to people of privilege rather than low-income or historically oppressed communities. Fraasa described multiple barriers facing community members, including language barriers and historical oppression within Western medical system spaces. They emphasized seeing tremendous need for this type of support and having community health workers on their team who are ready to show up and support their community. Fraasa viewed 5NP as having ancestral roots in supporting people through natural ways of aligning the body and its health. They agreed with other commenters that acupuncturist supervision would be very limiting to the certification process.

Whitsitt Goodson brought multiple professional perspectives as a licensed acupuncturist working at Working Class Acupuncture in Portland, faculty member at POCA Technical Institute, board member of the Oregon Association of Acupuncturists (OAA), and active participant in the 5NP Workgroup. Having been involved in 5NP efforts almost from the beginning in Oregon, Goodson endorsed the Workgroup's recommendations as substantially representing their viewpoints and described them as quite effective at promoting public safety and regulating 5NP technicians. They emphasized the critical importance of maintaining minimal barriers and ensuring patient access, explaining that 5NP targets people who already

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

face far too many barriers to accessing any kind of medical care. Goodson characterized 5NP as non-diagnostic, very simple, and inherently very safe, creating a pathway to connect with hard-to-reach populations during what they described as a crisis of mental health and addiction. They concluded by encouraging the Committee to keep patient access and simplicity as primary considerations, viewing 5NP as a potentially life-saving tool for people in need.

Dr. Jen Kearns brought 20 years of acupuncture experience, including work with Michael Smith at Lincoln Recovery Center, serving as a peer mentor at Rikers Island in New York, and running various pop-up veterans' clinics for PTSD and pain using 5NP. As the only Workgroup member bringing concerns to the rulemaking discussions, Kearns is a proponent of community health and understands communities are in need but expressed serious reservations about the current bill's structure as poorly written and unclear. Kearns emphasized that while everyone referenced positive contexts where 5NP treatment had been successful, the current bill does not contain those protective contexts. Their primary concern was that anyone 18 years or older could perform the procedure anywhere, in any setting, which they found unsafe. They argued that boundaries were necessary and recommended supervision by either an acupuncturist or medical doctor to provide malpractice coverage, clinical settings. While acknowledging Oregon's excellent Medicaid system and substantial acupuncture coverage, Kearns worried about offering what they termed a band-aid, sending someone into the community as a medical provider with minimal training could be as damaging as providing inadequate care to the most vulnerable populations. They expressed concern that this doesn't ensure access to other healthcare or guidance toward additional services, and worried about implementation expanding beyond its intended context into settings like yoga studios and coffee shops. Despite supporting the concept, they felt the bill didn't hit the mark and needed better structure.

Zachary Krebs spoke as both a brain surgery survivor and chronic pain patient, as well as the owner of a small acupuncture clinic in Oregon. After their surgery, Krebs spent months learning to walk again while dealing with double vision and daily chronic pain, crediting acupuncture with helping calm their nervous system and enabling them to keep moving forward. This experience fostered their strong belief in the 5NP and its potential usefulness in Oregon. Krebs emphasized that 5NP is already successfully used in many other states because it works and is safe, simple, non-pharmaceutical, and cost-free. They highlighted its accessibility through group settings to people who might never enter a traditional acupuncture clinic, often the people who need it most. They specifically identified people battling addiction, in recovery programs, trauma survivors, experiencing homelessness, and others in marginalized communities who are too often excluded from the healthcare system. They argued that Oregon's implementation must avoid artificial barriers, specifically opposing required acupuncturist supervision or unnecessary additional training hours that wouldn't make the protocol safer. Krebs pointed out that acupuncturists aren't available everywhere, especially in rural or underserved communities, making gatekeeping of this simple, safe, community-based treatment counterproductive. Speaking as both a healthcare professional and someone who had lived through pain, they described understanding how small acts of relief can feel like lifelines, viewing the 5NP as a potential lifeline for thousands of Oregonians, especially those that society too often leaves behind.

Sonya Gregg, co-director of POCA Technical Institute, spoke from experience attempting to address healthcare access gaps through acupuncturist training. Their school's mission focuses on recruiting and training students to provide acupuncture to underserved communities, but they acknowledged the harsh

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

reality that they simply don't have the capacity to train enough licensed acupuncturists to address the opioid epidemic. Gregg characterized 5NP as a safe, low-barrier treatment that could support communities across Oregon, particularly in far-reaching areas where no other options exist. They emphasized that training community members such as recovery mentors and traditional health workers to provide 5NP would make treatment accessible to communities that licensed acupuncturists cannot reach. They specifically supported the POCA or NADA training model with their specified hourly requirements, urging the Committee not to create additional barriers like direct supervision or increased training hours. Gregg advocated for trained technicians to have complete autonomy to apply 5NP in any setting they deem appropriate without direct oversight, concluding with a sincere encouragement for the Committee to vote in favor of trained 5NP technician autonomy.

Lara Pacheco, an acupuncturist working for Working Class Acupuncture in partnership with CODA (a substance use support program), provided both 5NP and broader acupuncture services through this collaboration. Speaking as an Indigenous, Latinx person, they emphasized the critical importance of communities providing care for themselves through simple and effective methods like 5NP. Pacheco echoed many previous speakers about the importance of lowering barriers and removing supervision requirements, noting that multiple states have successfully implemented similar programs without safety issues. They shared that several of their patients who are struggling with addiction are "more than thrilled to learn this really simple and effective, safe protocol to keep on providing it for their communities." They assured the Committee that there would be no end to demand for acupuncture services in general, indicating no concern about professional competition. Their testimony emphasized the need to make this care accessible to the people who need it most by putting it directly in the hands of community members, concluding with strong advocacy for lowering barriers, removing clinical supervision requirements, and enabling community-based care delivery.

Maddie Foley brought multiple perspectives as treasurer of the Oregon Association of Acupuncturists (OAA), an integral participant in passing House Bill 2143, a member of the 5NP Workgroup, and a practicing acupuncturist in Lane County. They emphasized speaking as an individual rather than representing the organizations with which they're affiliated. Foley directly challenged arguments they had heard supporting supervision requirements, particularly claims about sufficient numbers of acupuncturists and robust Medicaid coverage, stating these arguments were not in line with reality. They reported that their clinic is one of the only clinics in Lane County that accepts Medicaid, and while there are plenty of acupuncturists in the area, very few work with Medicaid patients. This creates a significant gap between the theoretical availability of care and actual access, particularly given the severe addiction and mental health problems in Lane County. Drawing from their volunteer work providing 5NP in both hospital acute detox and inpatient residential settings, Foley offered practical insights into supervision requirements. While expressing love for 5NP, they noted that as a practicing doctor of acupuncture and Chinese medicine, supervising the simple 5NP day in and day out would not be professionally stimulating, and they wouldn't want to spend two hours weekly supervising capable technicians performing what amounts to 5 points in each ear. Foley emphasized that the law was developed in collaboration with the OAA and incorporated recommendations from other states with implementation experience, noting that other states were actively working to dismantle the types of regulations being considered for Oregon implementation.

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

Chris Monteiro, a licensed acupuncturist practicing in Rhode Island, brought the perspective of someone who had participated in similar legislative efforts in their state. They noted that while Oregon's proposed law was superior to Rhode Island's because it would allow more people to use 5NP, Rhode Island's law had been successfully operating for approximately four years. Monteiro reported that Rhode Island had trained several hundred people including social workers, mental health counselors, peer recovery counselors, and licensed drug and alcohol counselors, with no complaints or problems arising. They expressed a wish that more people could access this tool in Rhode Island and noted they had legislation pending to increase availability to other trained individuals. As a POCA trainer, Monteiro emphasized that their training, which includes practice sessions to hone skills, had proven adequate to provide safe and effective preparation. They described building a supportive community that supports one another as they continue developing this work. They expressed excitement about Oregon's thorough process to ensure rules would facilitate easy 5NP implementation.

Adriana Locke, a 5NP Workgroup member and licensed acupuncturist who owns and operates Zocalo Wellness (described as a majority OHP clinic), spoke to their experience providing culturally specific healthcare and their mission to diversify the acupuncture profession. Their clinic focuses on providing living wage jobs to diverse acupuncturists to keep them in Oregon, specifically targeting acupuncturists of color, trans and queer non-binary acupuncturists, and Native acupuncturists. Locke provided insight into the homogeneity of Oregon's acupuncture profession, noting there are very few acupuncturists of color and very few who can provide culturally specific care. They described the barriers to obtaining an acupuncture license as "incredible," sharing that they personally carry six figures of debt from their education. This context informed their argument that requiring acupuncturists to provide 5NP in culturally specific situations—such as on reservations, in Native communities, or in Indigenous migrant communities—is simply unreasonable because such practitioners don't exist in sufficient numbers. They characterized the 5NP opportunity as amazing for expanding access without expanding barriers, expressing personal investment in seeing culturally specific, linguistically specific providers delivering accessible medicine that acupuncturists in Oregon are not currently positioned to provide. While acknowledging Oregon's OHP system and acupuncture coverage, Locke emphasized that significant barriers remain, including authorization requirements and the challenge of building trust. They noted receiving referrals from white acupuncturists who had damaged relationships with communities of color through culturally inappropriate care, emphasizing that these same practitioners would not be suitable supervisors for community-based 5NP providers.

Michaela Foley spoke as POCA Cooperative's legislative liaison and trainer, working annually with thousands of auricular acupuncture technicians across the country and internationally. They emphasized 5NP's compatibility with culturally specific care paradigms and solidarity models needed in current times, arguing that acupuncturists simply lack the people power to meet existing needs. Having recently graduated from acupuncture school themselves and being in the midst of board examinations, Foley spoke personally about the financial and educational barriers to becoming an acupuncturist. They explained that the debt burden acupuncturists face, combined with the income requirements to pay off that debt, makes it unrealistic for professional acupuncturists to supervise 5NP treatments in the volume and manner needed. They noted that professional acupuncturists and medical professionals are already stretched too thin to provide the oversight that would be required. Drawing from their work with other states' legislation, Foley reported that states with the least restrictive rules and regulations experience the most success. As the person who personally handles all complaints received by POCA, they provided

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

important safety data: they had never received a safety complaint, only minor interpersonal complaints occasionally. They emphasized that POCA maintains a rigorous training program that doesn't allow unqualified practitioners to practice, expressing excitement about bringing this proven model to Oregon communities that desperately need this therapy.

Rebecca Davis, an acupuncturist who co-owns a small clinic and works as a mental health administrator, provided perspective from both the acupuncture and mental health fields. Davis reported that therapists in their area had expressed interest in becoming 5NP trained, particularly to treat young people experiencing significant mental health challenges. Davis attested to the substantial difficulties young people face accessing mental health appointments due to scheduling constraints and insurance limitations around acupuncture reimbursement for providers. Their testimony emphasized supporting accessibility from a mental health field perspective, viewing 5NP as an important tool for addressing gaps in youth mental health services.

There were other members of the public in attendance; however, they did not comment.

OREGON ADMINISTRATIVE RULES (OAR)

3	Chapter 847, Division 070, 008, and 010	FIRST REVIEW	Gaines
<p><b>The proposed rulemaking implements SB 874(2025) adding a definition for “Traditional Eastern medicine” to provide cohesion and clarify the OMB’s authority to regulate acupuncturists. The bill replaced the term “Oriental medicine” with “Traditional Eastern medicine” throughout ORS chapter 677. The bill also clarifies the definition of "acupuncture" and updates the Oregon Association of Acupuncturists name. SB 874 did not change the scope of practice for acupuncturists in Oregon.</b></p> <p><b>Additionally, the National Certification Commission for Acupuncture and Oriental Medicine (NCCAOM) is changing their name to the National Certification Board for Acupuncture and Herbal Medicine (NCBAHM) in January 2026. The proposed rule also makes this update. Their exam titles, including Foundations of Oriental Medicine, will remain the same.</b></p>			

The Committee reviewed Chapter 847, Division 070, 008, and 010. Ms. Gaines noted the changes were straightforward and praised the more specific acupuncture definition.

**RECOMMENDATION:** Ms. Gaines moved the Committee recommend filing a notice of proposed rulemaking on Chapter 847, Division 070, 008, and 010 as written. Dr. Babu seconded the motion. Dr. Behall, Dr. Yutan, Ms. Tongel, Ms. Gaines and Dr. Babu voted “aye”. The motion passed 5-0-0-0.

4	Five-Needle Protocol	FIRST REVIEW	Babu
---	----------------------	--------------	------

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*



**The Oregon Legislature passed House Bill 2143 (2025) and Governor Kotek signed the bill into law. This legislation allows individuals with specific training and registration to provide five-needle protocol (5NP) treatments beginning March 1, 2026, without additional licensure.**

**The law directs the Oregon Medical Board to establish rules for training qualifications and safety standards. The OMB's role is to implement the law that has already been enacted. The proposed rulemaking establishes the qualifications for registration of 5NP technicians and creates sanitation and best practice standards for 5NP treatments.**

**In August and September 2025, the OMB convened a Workgroup of acupuncturists, physicians, and community members to provide recommendations on the draft rules. Their meeting minutes are attached along with public comments received during their review.**

**Additionally, HB 2143 authorizes the OMB to establish registration and renewal fees 5NP technicians. The proposed fee rulemaking sets fees at \$100 for initial registration and \$50 annually (\$100 biennially) for renewal starting March 1, 2026. The Board determined and provided the fee amounts during the legislative process based on estimated costs to implement HB 2143. The Board will apply its existing Criminal Records Check Fee to 5NP technicians during the initial application process and as needed for renewals or investigations, as permitted under HB 2143.**

The Committee discussed implementing House Bill 2143, which authorizes Five-Needle Protocol treatments beginning March 1, 2026. Dr. Dilip Babu presented the Workgroup's findings from extensive August-September 2025 meetings involving acupuncturists, physicians, and community members.

Dr. Babu outlined nine proposed rules covering the complete regulatory framework. The rules establish a purpose statement defining 5NP for treating substance use disorder, mental health conditions, and trauma. Key definitions include the 5NP protocol itself and 5NP technician qualifications. Licensed acupuncturists and physicians may practice 5NP without additional registration under this new system. The qualification requirements include a minimum age of 18, completion of 30 hours of didactic training plus 40 supervised treatment sessions, and good moral character standards. Criminal history does not automatically disqualify candidates. Registration fees were set at \$100 initially, with renewal costs of \$50 annually or \$100 biennially starting March 1, 2026.

Dr. Paul Yutan opened the discussion by stating this was a robust discussion and he felt honored to be a part of it. Dr. Yutan provided his experience with 5NP has mostly been with the VA, and it's been very effective. He noted all the points of the community are well heard, and he was okay with the rules as provided. *Dr. Yutan then left the meeting.*

Carli Gaines started by praising the Workgroup's efforts and the clear definition of 5NP, which she felt left no room for misinterpretation. However, she raised concerns about supervision, noting this was a major theme in public comments. Gaines argued that while she didn't believe supervision should be limited to acupuncturists, some form of clinical oversight was necessary. She drew parallels to other healthcare roles like phlebotomists and medical assistants, noting these positions require direct supervision despite

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

similar entry-level requirements. Gaines also commented that many states allowing 5NP certifications require the person to already be a licensed provider.

Lisa Tongel presented a contrasting viewpoint, emphasizing the bill's intent to provide access to marginalized communities through culturally and linguistically specific care. She expressed concern that supervision requirements would create barriers contrary to the legislation's purpose and could be culturally insensitive. She highlighted the minimal incident reports from other states that had implemented similar programs and expressed trust in POCA and NADA organizations to address safety concerns adequately during the training.

Dr. Babu acknowledged the supervision debate as a central theme in Workgroup discussions. As a physician focused on patient safety, he had carefully examined safety concerns but remained unclear about specific risks associated with 5NP. He noted the treatment appeared safer than many procedures in his medical practice and cited successful implementation in other states without significant safety complaints. Dr. Babu emphasized his priority was removing barriers to increase access for Oregonians, particularly given the devastating effects of substance use disorders he witnesses in his practice.

Dr. Behall articulated specific safety scenarios that concerned her, including needle shock, fainting, and mental health crises. Drawing from her experience in chronic pain management with lower-income populations, she emphasized that complex cases always arise, requiring experienced medical judgment. While acknowledging 5NP's straightforward nature, she stressed the importance of having backup support for unexpected situations. She suggested supervision didn't necessarily require on-site presence but could involve accessible medical directors or clinical supervisors.

The discussion also reviewed the training structure outlined in the draft rules. The rules require the 40 treatment sessions occur during the training course under direct supervision of a 5NP trainer, not as independent community practice. The training curriculum also includes elements to address potential risks, side effects, and complications, as well as trauma-informed care components.

The Committee also discussed concerns regarding needle removal procedures. The draft consent form allowed either the technician or patient to remove needles, reflecting current practice in some 5NP settings. Ms. Gaines and Dr. Behall expressed concerns, noting this deviates from standard medical protocols and creates potential needle-stick injury risks. They would prefer technician-only needle removal.

OMB Executive Director, Nicole Krishnaswami, clarified that the legislation intended for 5NP technicians not to be supervised. During the legislative process, lawmakers considered models ranging from complete deregulation to supervised practice, ultimately choosing the independent model with registration and standards set by the OMB. She commented that adding supervision requirements would require new legislative action, as this would exceed the board's statutory authority. Ms. Gaines noted this legislative clarification resolved concerns about supervision, as it became clear such requirements were outside the Oregon Medical Board's rulemaking authority.

*Note: All vote tallies are shown as follows: Ayes – Nays – Abstentions – Absentees.*

OMB staff explained that the Committee was making first review recommendations to the board for October consideration, with final Committee review scheduled for December, after public comment collection.

**RECOMMENDATION:** Dr. Babu moved the Committee recommend filing a notice of proposed rulemaking on Chapter 847, Division 71, Rules 0, 5, 7, 20, 25, 30, 35, 40, and 50, and Division 5, Rule 5. Ms. Gaines seconded the motion. Dr. Babu, Ms. Gaines and Ms. Tongel voted “aye”. Dr. Behall voted “nay”. Dr. Yutan was absent by prior notification. The motion passed 3-1-0-1.

5	Review of 5NP Supporting Materials	Babu
---	------------------------------------	------

Dr. Babu introduced the 5NP supporting materials. There was no discussion from the Committee.

ADJOURN @ 2:06 p.m.



Approved by the Board on October 3, 2024

## 2025 - 2026 BOARD AND COMMITTEE MEETING DATES

Meetings are held hybrid, virtual, or in person at  
Crown Plaza, 1500 S.W. 1st Ave., Suite 620, Portland, 97201

### BOARD

8:00 AM

1st Thursday of January, April, July, and October - at the call of the Chair (in person, hybrid, or virtual)

January 9, 2025	April 3, 2025	July 10, 2025	October 2, 2025
January 8, 2026	April 2, 2026	July 9, 2026	October 1, 2026

### INVESTIGATIVE COMMITTEE

8:00 AM

1st Thursday of every month without Board a meeting – in person

*Full Board Conference-Call Meeting, 5:00 PM*

February 6, 2025	March 6, 2025	May 1, 2025	June 5, 2025
August 7, 2025	September 4, 2025	November 6, 2025	December 4, 2025

### ADMINISTRATIVE ADVISORY COMMITTEE

5:00 PM

2nd Wednesday of March, June, September, and December - virtual

March 12, 2025	June 11, 2025	September 10, 2025	December 10, 2025
March 11, 2026	June 10, 2026	September 9, 2026	December 9, 2026

### ACUPUNCTURE ADVISORY COMMITTEE

12:00 PM

1st Friday of June and December - virtual

*Application Filing Deadline – 6 weeks in advance of meeting. File Completion Deadline – 3 weeks in advance of meeting.*

June 6, 2025	December 5, 2025	June 5, 2026	December 4, 2026
--------------	------------------	--------------	------------------

### EMERGENCY MEDICAL SERVICES(EMS) ADVISORY COMMITTEE

9:00 AM

3rd Friday of February, May, August, and November - virtual

February 21, 2025	May 16, 2025	August 15, 2025	November 21, 2025
February 20, 2026	May 15, 2026	August 21, 2026	November 20, 2026

### LEGISLATIVE ADVISORY COMMITTEE

TBD

Meets at the call of the Chair - virtually

# 2025

## JANUARY

- Board 9<sup>th</sup> 8:00 AM

## FEBRUARY

- Investigative Committee 6<sup>st</sup> 8:00 AM
- EMS Advisory Committee 21<sup>th</sup> 9:00 AM

## MARCH

- Investigative Committee 6<sup>th</sup> 8:00 AM
- Administrative Affairs Committee 12<sup>th</sup> 5:00 PM

## APRIL

- Board 3<sup>rd</sup> 8:00 AM

## MAY

- Investigative Committee 1<sup>st</sup> 8:00 AM
- EMS Advisory Committee 16<sup>th</sup> 9:00 AM

## JUNE

- Investigative Committee 5<sup>th</sup> 8:00 AM
- Acupuncture Advisory Committee 6<sup>th</sup> 12:00 PM
- Administrative Affairs Committee 11<sup>th</sup> 5:00 PM

## JULY

- Board 10<sup>th</sup> 8:00 AM

## AUGUST

- Investigative Committee 7<sup>th</sup> 8:00 AM
- EMS Advisory Committee 15<sup>th</sup> 9:00 AM

## SEPTEMBER

- Investigative Committee 4<sup>th</sup> 8:00 AM
- Administrative Affairs Committee 10<sup>th</sup> 5:00 PM

## OCTOBER

- Board 2<sup>nd</sup> 8:00 AM

## NOVEMBER

- Investigative Committee 6<sup>th</sup> 8:00 AM
- EMS Advisory Committee 21<sup>st</sup> 9:00 AM

## DECEMBER

- Investigative Committee 4<sup>th</sup> 8:00 AM
- Acupuncture Advisory Committee 5<sup>th</sup> 12:00 PM
- Administrative Affairs Committee 10<sup>th</sup> 5:00 PM