

# Physical Therapists & The Performance of Dry Needling

An Educational Resource Paper

PRODUCED BY THE APTA DEPARTMENT OF PRACTICE AND APTA STATE GOVERNMENT AFFAIRS

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American Physical Therapy Association

## PHYSICAL THERAPISTS & THE PERFORMANCE OF DRY NEEDLING

### FORWARD

The issue of whether the performance of dry needling (sometimes referred to as trigger point dry needling or intramuscular manual therapy) is within the professional and legal scope of physical therapist practice continues to be a question posed to state regulatory boards and agencies. The American Physical Therapy Association (APTA) created this document to provide background information for state chapters, regulatory entities, and providers who are dealing with this issue.

APTA is the national professional association representing more than 88,000 physical therapists, physical therapist assistants, and students nationwide.

### DRY NEEDLING BY PHYSICAL THERAPISTS

Dry needling (DN) is a skilled intervention used by physical therapists (where allowed by state law) that uses a thin filiform needle to penetrate the skin and stimulate underlying myofascial trigger points, muscular, and connective tissues for the management of neuromusculoskeletal pain and movement impairments. A trigger point describes a taut band of skeletal muscle located within a larger muscle group. Trigger points can be tender to the touch and can refer pain to distant parts of the body. Physical therapists utilize dry needling with the goal of releasing/inactivating the trigger points and relieving pain. Preliminary research supports that dry needling improves pain control, reduces muscle tension, normalizes biochemical and electrical dysfunction of motor endplates, and facilitates an accelerated return to active rehabilitation.

Numerous terms have been used in conjunction with dry needling. Some of the more common terms include trigger point manual therapy, trigger point dry needling, and intramuscular manual therapy. While the term “intramuscular manual therapy” may be considered by some to be a more accurate description of dry needling when performed by physical therapists as the technique is closely associated with manual therapy, APTA recognizes that dry needling is the more widely accepted and utilized term. The term ‘intramuscular manual therapy’ should not be misinterpreted as an endorsement by APTA to bill dry needling utilizing the CPT code 97140 (manual therapy). Physical therapists should check with the insurance payor to see if it has issued any policies regarding billing of dry needling.

### PHYSICAL THERAPY PROFESSIONAL ORGANIZATIONS’ POSITIONS ON DRY NEEDLING

APTA recognizes dry needling as being part of the physical therapist professional scope of practice. APTA Board Directors Guideline BOD G02-14-18-12 titled [Guidelines: Physical Therapist Scope of Practice](#) lists dry needling as 1 of the interventions provided by physical therapists:

*Physical therapy, which is limited to the care and services provided by or under the direction and supervision of a physical therapist, includes:*

*(2) alleviating impairment and functional limitation by designing, implementing, and modifying therapeutic interventions that include, but are not limited to:*

- *Dry needling*

To achieve a better understanding of the use of dry needling in the physical therapist profession nationally and internationally, APTA reached out to the following US organizations:

- Academy of Orthopaedic Manual Physical Therapists (AAOMPT)
- The Federation of State Boards of Physical Therapy (FSBPT)

In addition, APTA reached out to a number of international physical therapy organizations:

- Australian Physiotherapy Association (APA)
- Canadian Physical Therapy Association (CPA)
- United Kingdom Chartered Society of Physiotherapy

Two questions were asked by APTA of the organizations:

- 1) Have you adopted a formal or established an information statement on the use of dry needling? and,
- 2) Do you have a formal or informal process for including dry needling, or other “new” tests, measures, or interventions into your scope of practice for physical therapists/physiotherapists?

As to the first question, all groups either said “yes,” or indicated that they intentionally do not specify procedures in their scope but rather define the scope broadly. In each of those cases that did not specify but defined their scope broadly and, with the exception of the UK, they had subgroups or other documents that strongly implied or made it explicit that dry needling is performed and supported by the profession. The scope of practice in the UK would not exclude it.

The responses to the second question were more mixed; however, the majority continued to indicate that they had a process to define scope but not one that would specify procedures or interventions within the scope. See **Appendix A** for AAOMPT’s response, **Appendix B** for the FSBPT White Paper, and **Appendix C** for the responses from international organizations.

## PHYSICAL THERAPIST EDUCATION

Physical therapists are educated at the doctoral level. As of January 1, 2016, the doctor of physical therapy degree (DPT) will be the required degree for all entry-level physical therapist education programs. As of year-end 2010 there are 213 accredited programs (of which 206 offer the DPT), there are 13 developing DPT programs, and there are 33,800 entry-level DPT graduates.

The education of physical therapists includes anatomy, histology, physiology, biomechanics, kinesiology, neuroscience, pharmacology, pathology, clinical sciences, clinical interventions, clinical applications, and screening. Much of the basic anatomical, physiological, and biomechanical knowledge that dry needling uses is taught as part of the core physical therapist education; the specific dry needling skills are supplemental to that knowledge. Currently dry needling is not specifically included in entry-level education for physical therapists; however some physical therapist education programs have begun including it in their curriculum.

## PHYSICAL THERAPIST LICENSURE & REGULATION

Physical therapists in the United States are licensed and regulated in all 50 states and the District of Columbia. Licensure is required in each state in which a physical therapist practices and must be renewed on a regular basis, with a majority of states requiring continuing education or other continuing competency requirement for renewal.

Only those who “meet and maintain prescribed standards” established by the state’s regulatory board will, for the protection and benefit of the public, be allowed to profess their qualifications and provide their services to the public. The public is dependent upon the state to evaluate and affirm the qualifications for licensure of physical therapists.

The sole purpose of state licensure and regulation is public protection. Licensure laws are intended to ensure safe and competent practice by a regulated profession. Licensure laws also ensure that only individuals who have met certain prescribed criteria may publically refer to themselves as being a certain regulated profession. State regulation of health care providers is not intended to allow for one profession to claim sole ownership of a specific intervention or tool.

Physical therapists are governed by the physical therapy licensure law in the state in which they practice, along with any rules, regulations, positions, or interpretations adopted by the state licensure

board. When a state’s practice act is silent on an issue or intervention, the determination of what constitutes practice “beyond the scope” of physical therapy is predominantly the responsibility of licensing board members. Scope of practice changes as contemporary practice evolves, and boards need the latitude to determine the appropriateness of physical therapy procedures as they relate to both established and evolving scope of practice.

## CURRENT STATUS OF DRY NEEDLING IN PHYSICAL THERAPISTS’ LEGAL SCOPE OF PRACTICE IN THE STATES

A number of state physical therapy licensure boards have been asked whether or not dry needling is within the state’s physical therapy scope of practice. Most state licensure laws do not provide a laundry list of every specific intervention, tool, or modality that the regulated profession may, or may not, provide. Barring specific prohibitive language in the state’s physical therapy licensure statute, the performance of dry needling by a physical therapist may be determined by the state regulatory board to be allowed, provided that the physical therapist is competent to do so, and does not profess to be engaging in the practice of another profession. For example it would be inappropriate and a violation of state law for a physical therapist to refer to the performance of dry needling as “acupuncture” as acupuncture describes the scope of services and interventions provided by an acupuncturist. Conversely the performance of an intervention such as therapeutic exercise by an acupuncturist should not be referred to as “physical therapy” as “physical therapy” describes the services provided by a licensed physical therapist.

As of April 2014, states that have issued opinions affirming that dry needling is within the physical therapist scope of practice include, but are not limited to, Alabama, Arizona, Colorado, the District of Columbia, Georgia, Iowa, Kentucky, Maryland, Mississippi, Montana, Louisiana, Massachusetts, Nevada, New Hampshire, New Mexico, North Carolina, Ohio, \*Oregon, South Carolina, Tennessee, Texas, Virginia, West Virginia, Wisconsin, and Wyoming. Five state boards — Idaho, Kansas, Idaho, New York, , and South Dakota, — have stated it is not within the scope of practice. It is not part of the scope of practice in Hawaii, as the Hawaii physical therapy statute contains language prohibiting physical therapists from puncturing the skin for any purpose.

It should be noted that a number of the state regulatory boards have stated that dry needling is within the physical therapist scope of practice provided that the physical therapist has the additional education and training to perform dry needling and is competent to do so. A number of state regulatory boards have adopted regulations or published guidelines outlining education and competency standards for physical therapists performing dry needling, including Colorado, Louisiana, Mississippi, North Carolina, Virginia, and the District of Columbia. Three states, Arizona, Georgia, and Utah

have dry needling specifically listed under the definition of the practice of physical therapy in their states' physical therapy statute and are in the process of developing competency guidelines.

*\*Oregon has stated that it is likely with the scope of practice, however has advised licensee not to perform it until training and education can be determined.*

## DISTINCTION BETWEEN PROFESSIONS' SCOPES OF PRACTICE

While the skills and services provided by a physical therapist are distinct, there are interventions, tools, and modalities contained within the physical therapist scope of practice that overlap with other professions, and vice versa. Health care education and practice have developed in such a way that most professions today share some procedures, tools, or interventions with other regulated professions. It is unreasonable to expect a profession to have exclusive domain over an intervention, tool, or modality. According to the publication "Changes in Healthcare Professions Scope of Practice: Legislative Considerations," no one profession actually owns a skill or activity in and of itself. One activity does not define a profession but it is the entire scope of activities within the practice that makes any particular profession unique. Simply because a skill or activity is within one profession's skill set does not mean another profession cannot and should not include it in its own scope of practice.

The practice of acupuncture by acupuncturists and the performance of dry needling by physical therapists differ in terms of historical, philosophical, indicative, and practical context. The performance of modern dry needling by physical therapists is based on western neuroanatomy and modern scientific study of the musculoskeletal and nervous system. Physical therapists that perform dry needling do not use traditional acupuncture theories or acupuncture terminology.

Similarities do exist in terms of dermal penetration with a solid filament needle (a tool) to varying depths within the body for therapeutic indications. The fact that needles are being used in the practice of dry needling does not mean that a state acupuncture board would automatically have jurisdiction over such practice. Most state laws governing the licensure of health care professions provide exemptions for other health care providers who are acting within their scope of practice, as long as providers do not refer to their services as anything but the profession for which they are regulated.

There are differences in the philosophy, rationale, and use in treatment of dry needling by physical therapists versus acupuncturists. According to the American College of Acupuncture and Oriental Medicine, the Master of Acupuncture & Oriental Medicine degree program is based on preserving the ancient theories, principles,

and tenets of traditional Chinese medicine. The objectives and philosophy behind the use of dry needling by physical therapists is not based on ancient theories or tenets of traditional Chinese medicine. The performance of modern dry needling by physical therapists is based on western neuroanatomy and modern scientific study of the musculoskeletal and nervous systems.

## SUMMARY RESEARCH REVIEW ON DRY NEEDLING

In 2011, APTA performed a synthesis and evaluation of the related literature. Based on specified search criteria 154 articles were identified. Articles were reviewed to determine those appropriate for individual expert review. Those articles excluded were: those educational in nature or with no research design or peer review process, such as lectures, posters, debates, or correspondences, or a Delphi study of practitioners (36); those not on topic such as electrical stimulation, needle injections without data pertinent to dry needling, or planned studies with no data (57); those without full text in English (2); those not on human subjects (5); those that had a newer version of the same study (2); and those that were summaries and systematic reviews or clinical reviews (6). The conclusions of the 6 summaries and systematic reviews or clinical reviews can be found as **Appendix D**.

The remaining 46 individual studies were reviewed by a member expert in research analysis using a standardized review form. The results of the review included 10 case reports (n<10), 1 case series (n≥ 10), 12 observational studies, and 23 randomized controlled trials (RCT). These 46 studies were reviewed using a rating scale from 0-5, with 5 indicating the highest level of quality and highest level of support for dry needling. The median quality of the research was 3; the median support of dry needling was 2. Of the 23 RCTs, again using a rating scale from 0-5, with 5 indicating the highest level of quality and highest level of support for dry needling, the median quality of the research was 4; the median support of dry needling was 3. One case study of the 10 noted above was not included in the rating of the evidence. This case addressed an adverse event of a cervical epidural hematoma from dry needling performed by a physician.

## NOTE

APTA will revise this document as new information and data becomes available and updates occur. For questions or comments regarding this document, please contact APTA State Government Affairs at [advocacy@apta.org](mailto:advocacy@apta.org).