Iowa Board of Physical and Occupational Therapy
Policy Statement: Needle Electromyography and Nerve Conduction Studies

Adopted by the Iowa Board of Physical and Occupational Therapy Examiners
on November 18, 2005.

Needle electromyography (needle EMG) is an electrodiagnostic study used to evaluate the physiology of the peripheral nervous system and muscles. It involves insertion of a needle electrode through the skin and into the muscle. This policy statement contains the Board of Physical and Occupational Therapy's policy position that the performance of needle EMG falls within the scope of physical therapy if the physical therapist has received proper training and education in the performance of the procedure.

The Physical Therapy Practice Act (Chapter 148A) defines Physical Therapy as … "that branch of science that deals with the evaluation and treatment of human capabilities and impairments." Physical Therapy includes the use of…"electricity" … for evaluation and treatment techniques. Physical Therapy also includes "the interpretation of performances, tests and measurements" (Iowa Code section 148A.1).

The licensed physical therapist is bound by Iowa Code chapter 148A and 645 Iowa Administrative Code Chapter 201.1 to practice within the scope of the physical therapy license and within his or her area of knowledge, and by 202.2(2) to not ..."deviate from the standards of learning or skill ordinarily possessed and applied by other physical therapists …acting in the same or similar circumstances." Physical therapists are required by rule to "assist in identifying a professionally qualified licensed practitioner to perform the service, in the event that the physical therapist does not possess the skill to evaluate a patient, plan the treatment program, or carry out the treatment." (645 IAC 201.1(2)"l"). The Iowa Board of Physical and Occupational Therapy recommends and expects those providing such advanced skills as needle electromyography and nerve conduction studies to support that practice through advanced education and competence (including appropriate continuing education and mentoring and board certification by the American Board of Physical Therapy Specialties or active pursuit of board certification).

Physical Therapists in Iowa must complete a professional education program accredited by the American Physical Therapy Association or foreign equivalent and pass the National Physical Therapy Examination (NPTE) administered by the Federation of State Boards of Physical Therapy. Successful completion of coursework and attaining a passing score on the board exam set competence for the practice of Physical Therapy in the State of Iowa.

The position of the American Physical Therapy Association and the Federation of State Boards of Physical Therapy is that needle electromyography and nerve conduction studies are within the scope of practice for physical therapists. The elements of the "scope of practice" of any discipline include three determinants: 1) an established history of inclusion in education and training; 2) an established history of inclusion in clinical practice; and 3) specific statutory authority. (Excerpt from the Model Practice Act).

The first two elements are well established by the Normative Model of Physical Therapy Education and the American Physical Therapy Association. When the first two elements are well established, specific statutory authority may be substituted appropriately by the "absence of statutory prohibition." There is a long history of educational inclusion and an established history of clinical practice of needle electromyography and nerve conduction testing in physical therapy in the State of Iowa which substantiates that this procedure is within the scope of practice of physical therapy.

The American Physical Therapy Association Guide to Physical Therapy Practice, Revised 2001, explicitly defines needle electromyography and nerve conduction studies among the tests and measures physical therapists perform within their scope of practice.

The American Board of Physical Therapy Specialties recognizes and promotes advanced care through certification. Clinical Electrophysiologic Physical Therapy is one of seven specialization areas.

Given this information, the Iowa Board of Physical and Occupational Therapy determines the following regarding performance of needle electromyography and nerve conduction studies:

1. Definition: The performance of tests and measurements of neuromuscular function may include the performance and interpretation of electroneuromyographic examinations.
2. Independent, safe, effective and efficient electrophysiologic examinations and evaluations by physical therapists include the following:
    a. Establishing appropriate rapport with each patient/client.
    b. Conducting a history and systems review to plan an appropriate electrophysiologic examination and evaluation.
    c. Documenting electrophysiologic examination results.
    d. Analyzing and interpreting findings of the electrophysiologic examination.
    e. Communicating examination procedures and results of evaluation to appropriate individuals.
3. Such examinations are allowed under Iowa Code chapter 148A, which does not require physician referral.
4. Proper and complete testing may include use of surface and needle electrodes.
5. A physical therapist must conduct the examination and not delegate any aspect of the exam to someone under his supervision. A physical therapist may train and mentor another physical therapist in performing needle electromyography and nerve conduction studies.
6. An authorized health care provider may consider the results of the test, along with other clinically relevant information, to complete the differential process of determining a specific medical diagnosis for the patient.

7. Any physical therapist who makes a medical diagnosis is in violation of the Iowa Medical Practice Act.
8. Physical therapists performing such examinations should have completed, or be in the process of completing, the requirements for advanced competence in Clinical Electrophysiologic Physical Therapy testing by the American Board of Physical Therapy Specialties. The board certification examination is administered by the National Board of Medical Examiners in Philadelphia, PA.
9. Physical therapists performing such examinations may be disciplined by the Board of Physical and Occupational Therapy if the Board determines that the physical therapist is performing needle EMG outside the scope of his or her training or expertise.

This policy statement is not a legally binding opinion of the Board of Physical and Occupational Therapy, but is intended to provide guidance to physical therapists and to the public. Formal policy may be made only through administrative rules, declaratory orders or contested case decisions.