POSITION STATEMENT: DIAGNOSTIC ELECTROMYOGRAPHY IS THE PRACTICE OF MEDICINE



The American Academy of Neurology (AAN), representing over 34,000 neurologists, neuroscientists, and neurologyfocused advanced practice providers, supports policy measures that ensure the highest quality, safety and costeffectiveness in the performance of diagnostic needle electromyography (EMG).

Clinical diagnostic needle EMG is an invasive medical procedure during which the physician inserts an electrode into a patient's muscles to diagnose the cause of muscle weakness or other symptoms. This type of needle EMG allows physicians to distinguish a wide range of nerve and muscle diseases such as carpal tunnel syndrome, ALS (Lou Gehrig's disease), peripheral neuropathy, and muscular dystrophy.

This statement refers to diagnostic needle EMG. Other applications of needle EMG, where the test is used for monitoring purposes that do not depend on the physician-patient interaction during the test, e.g., during intraoperative neuromonitoring (IONM), are not covered by this statement. Applications of needle EMG for primarily treatment purposes, e.g., where the needle EMG is used to guide chemodenervation procedures, are also not covered by this statement.

Diagnostic needle EMG is a direct extension of the neurological examination and while it is a distinct diagnostic procedure, it should be performed in the context of the physician's overall evaluation of the patient. The test is dynamic and depends upon the real-time interpretation of the physician's visual, tactile, and auditory observations. There is no way for physicians trained in EMG to independently verify the accuracy of reports performed by others.

For this statement, a physician is defined as a person who has 1) received a Doctor of Medicine (MD), Doctor of Osteopathic Medicine (DO) degree in the United States of America, or its equivalent from an accredited School of Medicine outside of the United States of America, and 2) is licensed to practice medicine in the United States. Procedures performed by improperly trained individuals may lead to misdiagnosis, causing delayed or inappropriate treatment (including surgery) and a diminished quality of life.

The AAN Position

The AAN takes the position that diagnostic EMG procedures exclusively fall within the practice of medicine. This definition helps ensure the highest standard of patient care and safety for patients undergoing this procedure. This definition also supports lower health care costs by avoiding unnecessary utilization of repeat EMGs or other procedures.

The AAN supports working through all regulatory and legislative channels to uphold this standard.

The AAN also opposes efforts by non-physician organizations that seek to broaden the scope of practice for their members to perform diagnostic needle EMG.

Policymakers and payers also play a vital role in protecting patients and upholding health care quality. The American Academy of Neurology serves as a resource for all stakeholders regarding the complexity of EMG and its role in the provision of high-quality patient care.

Position Statement History

Originally drafted in 2004, updated in 2018 by Eva Ritzl, MD, FAAN; Radhika Sampat, DO; Janice Wiesman, MD, FAAN; Gil Wolfe, MD, FAAN. Approved by the AAN Board of Directors November 2018.