

The American Congress of Electroneuromyography and The Section on Clinical Electrophysiology and Wound Management's position statement on the Minimum Standards of Performance and Interpretation of Electromyography and Nerve Conduction Studies

The guidelines serve to clarify the American Congress of Electroneuromyography and the Section on Clinical Electrophysiology and Wound Management's position on issues related to qualifications to perform and interpret electromyography and nerve conduction studies. This clarification is provided for use by governmental agencies, insurers, healthcare professionals, and the public.

1. The EMG/NCS should be medically indicated and include both the needle electromyography (EMG) component and the nerve conduction study (NCS) component.
2. Testing must be performed using EMG/NCS equipment that provides assessment of all parameters of the recorded signal. The NCS parameters, at a minimum must include amplitudes of proximal and distal sites, distal and proximal latencies, distances between recording sites, and velocities by segments. The inclusion of negative waveform duration is optional. Late responses, when performed, must include latency. Findings of Needle EMG at a minimum must include insertional activity, the presence of spontaneous potentials, size and morphology of motor unit potentials, and recruitment pattern. The inclusion of waveforms from EMG and NCS in the report is optional. Studies performed with automated devices that only stimulate and record at distal sites are not acceptable to describe the pathophysiologic status of the peripheral neuromuscular system.
3. The number of tests performed should be the minimum needed to establish an accurate assessment of the pathophysiologic status of the peripheral nerves and muscles tested and in consideration of potential alternative underlying pathology.
4. The EMG/NCS should be performed by a physical therapist (PT) or physician meeting the criteria in the guideline below or be under the direct supervision of a physical therapist or physician meeting the criteria below. Direct supervision means that the PT or the physician is in close physical proximity to the EMG/NCS laboratory while testing is underway, is immediately available to provide the trained individual with assistance and direction, and is responsible for selecting the appropriate nerves and muscles to be tested.
5. It is appropriate for only one PT or physician and the supervising PT or physician, if applicable, to perform or supervise all of the components of the EMG/NCS (e.g., history taking, physical examination, supervision and/or performance of the EMG/NCS, and interpretation) for a given patient and for all the testing to occur on the same date of service. Furthermore, the reporting of EMG/NCS results should be integrated into one unifying pathophysiologic assessment. Only in exceptional circumstances should all testing not occur on the same date or only one component (EMG or NCS) performed without the other. If EMG or NCS is performed separately, with or without the other component of EMG/NCS, then a clearly justifiable clinical reason should be stated in the report.

6. A medical diagnosis cannot be determined by the EMG/NCS alone. After the completion of the EMG/NCS, the healthcare professional who receives the EMG/NCS report from the healthcare provider performing and interpreting the EMG/NCS, considers the results/interpretation of the NCS/EMG in light of the other exams/tests to arrive at a medical diagnosis.

Guideline for qualifications to perform both the technical and professional components of electromyography and nerve conduction studies:

1. A physical therapist certified by the American Board of Physical Therapy Specialties as a qualified Electrophysiologic Clinical Specialist (ECS) and/or meets the criteria set by Center for Medicaid and Medicare Services under program memorandum carriers Transmittal B-01-28 Change Request 850 or Medicare Carriers Manual Part-3 Transmittal 1725 Change Request 1756.
2. A physical therapist who has completed a residency or fellowship in clinical electrophysiology credentialed by the American Board of Physical Therapy Residency or Fellowship Education.
3. A physician (MD or DO) certified by the American Board of Electrodiagnostic Medicine or the American Board of Medical Specialties in areas such as neuromuscular medicine, electrodiagnosis, and clinical neurophysiology.
4. A physical therapist or physician who has completed a structured didactic and clinical training program under the mentorship of a physical therapist who meets criteria 1 or 2 above or a physician who meets criteria 3. This training program should involve the completion of 200 NCS/EMG studies during the training program and an additional 200 studies performed independently with periodic peer review.