

WAVEFORM HARD COPIES NOT REQUIRED FOR REIMBURSEMENT

It is the position of the AANEM that peer review is the best way to prevent excessive use of needle electromyography (EMG) and/or nerve conduction studies (NCSs) and assure quality patient care. For the following reasons AANEM believes that recording and submitting waveforms generated by needle EMG and/or NCSs should not routinely be required for reimbursement:

1. It is not necessary to have reprints of the waveforms available to assess the study performed or to determine the internal consistency of the diagnosis. Qualified physicians can assess the accuracy of the NCSs and EMG studies performed and the appropriateness of the diagnosis by reviewing the data included in a report that conforms to AANEM report writing guidelines. Electrodiagnostic medicine physicians do not currently store the waveforms as part of the patients' medical record.
2. Important information for making the diagnosis is not available on a hard copy of the waveform. Electrodiagnostic (EDX) studies are performed and interpreted in real time. The hard copies are not stored and interpreted later. For the needle EMG examination, it is important that the needle be placed in the correct muscle and inserted to the proper depth. Studies then are performed and recorded at different activity levels (e.g., at rest, slight contraction, and full effort). The correlation between waveforms and activity levels is an important part of the examination and interpretation. Auditory output during the needle EMG examination is also a significant piece of information used to make a diagnosis. For NCSs, the placement of the electrodes is key to receiving the proper data. Because none of the above information can be determined by reviewing the hard copy, requiring a hard copy will not provide a means to determine the quality of the study.
3. Patient care will not be improved by requesting physicians to provide hard copy. The focus of healthcare reform is to improve care and decrease costs. This measure does neither. The requirement of recording waveforms will increase healthcare costs because of the additional time per study, increase in supplies, and increase in staff time, without providing medically useful information. This cost will most likely be shifted to patients.
4. Requiring a hard copy of the waveforms will increase costs for the insurance carrier without providing a meaningful tool to fight over-utilization. Additional staff will need to be hired and trained to interpret the waveforms. There are no guidelines in place for a quality review process. It would require additional costs by the carrier to develop standards for reviewing the waveforms.

It has been suggested that recording the waveforms electronically (i.e., on a DVD) would address the issues of providing the auditory output for review. This suggestion however, would still result in problems related to increased costs. Electronic recording also would not capture the other factors identified in paragraph 1 that are needed to determine the diagnosis.

For the above reasons, AANEM believes that carriers should not require hard copy of needle EMGs or NCSs. It is the opinion of the AANEM that tools, such as the laboratory accreditation process or AANEM's model policy for insurance carriers which addresses the number of studies that should be performed in 90% of cases, best address issues related to over-utilization.

Notwithstanding the above, physicians must comply with state administrative laws or insurance company contract requirements that require the retention of raw data or tables of data for diagnostic tests. Additionally, if a physician or a practice is suspected of engaging in fraudulent activities, they must comply with requests by private or public entities that they retain hard copy as a condition of future reimbursement.

AANEM's report writing guidelines and model policy can be found at <http://aanem.org/Practice/Position-statements.aspx>.

**Approved by the American Association of Neuromuscular & Electrodiagnostic Medicine
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