

## Corporate Medical Policy

### Electrodiagnostic Studies

**File Name:** electrodiagnostic\_studies  
**Origination:** 2/2008  
**Last CAP Review:** 11/2011  
**Next CAP Review:** 11/2012  
**Last Review:** 11/2011

#### Description of Procedure or Service

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Electrodiagnostic studies are performed by physicians that have extensive knowledge of neurological and musculoskeletal disorders. These physicians must have successfully completed special training in electrodiagnostic studies to be able to accurately interpret and diagnose the patient's condition. Electrodiagnostic studies are used to establish an accurate diagnosis for patients presenting with symptoms suggestive of a neuromuscular disorder.

An electrodiagnostic consultation includes: 1) a focused neuromusculoskeletal history and physical exam; 2) a differential diagnosis based on the history and physical; 3) testing of the muscles and nerves with nerve conduction studies (NCSs) and needle electromyography (EMG); and 4) a final diagnosis. Electrodiagnostic studies are an extension of a detailed neuromuscular history and physical examination. Knowledge of the patient and their condition improves the ability to determine a differential diagnosis and final diagnosis. The physical examination focuses on the individual's symptoms and history to determine what nerves and muscles need to be studied. Therefore electrodiagnostic studies are individualized based on the patient's specific symptoms.

An assortment of tests may be used to obtain the specific information needed to make a final diagnosis, including motor and sensory nerve conduction latency and velocity studies, invasive needle EMG, repetitive stimulations studies, reflex latency measurements, measurements of evoked potentials, twitch tension measurement, exercise tests, and the evaluation of autonomic nervous system functions.

Nerve conduction studies (NCS) are done first to assess the integrity and diagnose disease of the peripheral nervous system. They assess the speed, conduction velocity and/or latency, size, amplitude and shape of the response. Electrodes are placed on the skin to electronically stimulate the nerve and measure the response. Patients can have normal NCS but still need the EMG studies to evaluate for suspected radiculopathy, plexopathy or motor neuron disease.

Needle EMG studies are individualized based on the findings from the nerve conduction study and may need to be changed during the procedure based on real time findings. Needles are inserted into the specific skeletal muscle to measure the muscle's response to nerve stimulation. The findings of these studies evaluate muscle weakness and whether the weakness is due to the muscles or with the nerves that supply the muscles. All the data is evaluated to determine a final diagnosis.

#### **Related Policies:**

Automated Nerve Conduction Studies  
Paraspinal Surface Electromyography (EMG)  
Quantitative Sensory Tests

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*\*\*\*Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.*

## Policy

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**BCBSNC will provide coverage for Electrodiagnostic Studies when it is determined to be medically necessary because the medical criteria and guidelines shown below are met.**

## Benefits Application

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This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

## When Electrodiagnostic Studies are covered

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Electrodiagnostic studies may be necessary to evaluate or diagnose the following conditions:

1. Myopathies;
2. Neuropathies;
3. Neuromuscular junction disorder;
4. Nerve compression syndromes;
5. Plexopathies
6. Intraoperative monitoring for surgeries that may pose a risk for nervous system damage and continuous monitoring is reported simultaneously to the surgical team.

## When Electrodiagnostic Studies are not covered

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Electrodiagnostic studies are not covered for the following:

1. When the criteria listed above are not met,
2. Nerve Conduction Studies are considered investigational for screening,
3. Nerve Conduction Studies without needle EMG are considered not medically necessary,\*\*\*
4. Mobile EMG labs.
5. Surface Electromyography (SEMG). [See BCBSNC policy entitled, Paraspinal Surface Electromyography (EMG)].
6. Quantitative Sensory Tests.
7. Automated Nerve Conduction Tests.
8. When performed by non-physicians or physicians without appropriate training and education as stated in the Policy Guidelines.

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## Policy Guidelines

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### Training and Qualification

Needle insertion for an EMG requires detailed knowledge of anatomy to prevent injury to anatomical structures, nerves, and arteries. A qualified physician in electrodiagnostic studies must be knowledgeable regarding the pathology of muscle and nerve, neuromuscular physiology, electrophysiology, and clinical understanding of neurological and musculoskeletal conditions in order to formulate an accurate diagnosis.

The American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) has indicated in their position statements that needle EMG must be performed by a physician with special training in electrodiagnostic medicine (typically neurologists or physiatrists). This training and education is usually obtained through an accredited residency or fellowship program in neurology or physical medicine and rehabilitation. The physician must complete at least 200 electrodiagnostic consultations during his/her training program. Full competency is achieved through the experience of completing an additional 200 complete Electrodiagnostic consultations. It is also recommended that the physician be credentialed through the American Board of Electrodiagnostic Medicine or other equivalent examining board.

Consistent with North Carolina coverage mandates, electrodiagnostic studies may be rendered by a licensed Chiropractor that has been Board Certified as a Chiropractic Neurologist by the American Chiropractic Neurology Board.

### Independent Use of Nerve Conduction Studies

The American Association of Neuromuscular & Electrodiagnostic Medicine (AANEM) states; "Nerve conduction studies performed independent of needle EMG may only provide a portion of the information needed to diagnose muscle, nerve root, and most nerve disorders."  
"When the NCS is used on its own without integrating needle EMG findings or when an individual relies solely on a review of NCS data, the results can be misleading and important diagnoses may be missed. Patients may thus be subjected to incorrect, unnecessary, and potentially harmful treatment interventions."

## Billing/Coding/Physician Documentation Information

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This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at [www.bcbsnc.com](http://www.bcbsnc.com). They are listed in the Category Search on the Medical Policy search page.

Applicable service codes: 95860, 95861, 95863, 95864, 95865, 95866, 95867, 95868, 95869, 95870, 95872, 95873, 95874, 95875, 95885, 95886, 95887, 95900, 95903, 95904, 95938, 95939.

\*\*\*Note:

1. Use of CPT code 95904 is incorrect coding for Quantitative Sensory Testing.
2. Needle EMG codes should not be used for Surface EMG.

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all

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specific information needed to make a medical necessity determination is included.

## Scientific Background and Reference Sources

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The American Association of Neuromuscular & Electrodiagnostic Medicine. AANEM recommended policy for electrodiagnostic medicine. Retrieved 10/17/07 from <http://www.aanem.org/>

The American Association of Neuromuscular & Electrodiagnostic Medicine. Proper performance and interpretation of electrodiagnostic studies. *Muscle Nerve* 2006.22:436-439.

The American Association of Neuromuscular & Electrodiagnostic Medicine. Who is qualified to practice electrodiagnostic medicine? Position Statement. Retrieved 10/17/07 from <http://www.aanem.org/practicissues/postionstatements/Who%27sQualified.cfm>

Senior Medical Director review 1/2008.

Specialty Matched Consultant Advisory Panel - 5/2008

Senior Medical Director review 7/2009

American Chiropractic Neurology Board. About ACNB Retrieved 6/14/2010 from: <http://www.acnb.org/>.

Specialty Matched Consultant Advisory Panel – 8/2010

Specialty Matched Consultant Advisory Panel – 10/2011

## Policy Implementation/Update Information

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3/10/08 New policy developed. Reviewed with Senior Medical Director 1/24/2008. Notification given 3/10/2008. Policy effective date is 6/16/2008.

6/30/08 Specialty Matched Consultant Panel review 5/29/08. No changes to policy statement. References added.

8/31/09 Reviewed with Senior Medical Director 7/20/09. Reworded statement in the "When Non Covered" section; from "8. When performed by physicians or non-physicians without appropriate training and education as stated in the Policy Guidelines." to "When performed by non-physicians or physicians without appropriate training and education as stated in the Policy Guidelines." No change in the intent. (btw)

6/22/10 Policy Number(s) removed (amw)

10/12/10 Consultant Advisory Panel Meeting August 5, 2010. No changes to policy statement. Added note to "Coding/Billing" section to indicate; "Note: Use of CPT code 95904 is inappropriate coding for Quantitative Sensory Testing." Added the following statement to the "Policy Guidelines" section to indicate; "Consistent with North Carolina coverage mandates, electrodiagnostic studies may be rendered by a licensed Chiropractor that has been Board Certified as a Chiropractic Neurologist by the American Chiropractic Neurology Board." References added. (btw)

1/10/12 Specialty Matched Consultant Advisory Panel meeting "Description" revised. . "Policy Guidelines" reformatted. Added the following CPT codes to the "Billing/Coding" section:

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95885, 95886, 95887, 95938, and 95939. (btw)

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Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.