

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management Department: Utilization Management
Approval Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Effective Date: 11/09/2018	Policy Number: UM-MP237
Review Date: 7/21/2026	Cross Reference Number:
Retired Date:	Page 1 of 9

1) POLICY DESCRIPTION:

This policy will outline the criteria for review of requests for nerve conduction studies and needle electromyography.

*For the Medicare and UltraCare lines of business, MetroPlusHealth determines medical necessity based on applicable Medicare National Coverage Determinations (NCD) and Local Coverage Determinations (LCD)."

2) RESPONSIBLE PARTIES:

Medical Management Administration, Utilization Management, Integrated Care Management, Pharmacy, Claims Department, Provider Contracting.

3) DEFINITIONS:

Nerve Conduction Studies (NCS): A medical diagnostic test commonly used to evaluate the function, especially the ability of electrical conduction, of the motor and sensory nerves of the human body, in which a stimulator is placed over a nerve and recording electrodes are placed over muscle or nerve(s).

Needle Electromyography (EMG): A technique for evaluating and recording the electrical activity produced by skeletal muscles, the electrical activities of nerves and muscles are displayed by an electromyograph and are recorded by intramuscular needle electrodes.

Neuromuscular Junction Testing: Involves the stimulation of an individual motor nerve by means of repetitive electrical impulses with measurement of the resulting electrical activity of a muscle supplied by that nerve. Supramaximal electrical stimuli are delivered to the nerve, which can evaluate how nerves and muscles communicate, aiding to diagnose conditions such as myasthenia gravis or Lambert-Eaton syndrome. The standard procedures are repetitive nerve stimulation (RNS) and single-fiber electromyography (SFEMG), used to monitor electrical responses to nerve stimulation.

4) BACKGROUND:

Electromyography (EMG) records the baseline electrical activity in a muscle while nerve conduction studies (NCS) measure conduction in response to an electrical stimulus. Both aid in the evaluation of diseases of the nerves (neuropathy) or muscles (myopathy). EMG and NCS are indicated when the clinical examination does not define a precise diagnosis, or prior to surgery to localize the best muscle to biopsy. NCS and needle EMG should be performed and interpreted at the same time in most test situations. Performance of one does not eliminate

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management Department: Utilization Management
Approval Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Effective Date: 11/09/2018	Policy Number: UM-MP237
Review Date: 7/21/2026	Cross Reference Number:
Retired Date:	Page 2 of 9

the need for the other. This is particularly important in patients with suspected radiculopathy, plexopathy, myopathy, motor neuropathy, or motor neuron disease. In most instances, both NCS and EMG are necessary to perform diagnostic testing.

The electrodiagnostic evaluation is an extension of the neurologic portion of the physical examination. Both require a detailed knowledge of a patient and his/her disease. Training in the performance of electrodiagnostic procedures, in isolation without awareness and ability to diagnose and manage neuromuscular diseases, is not sufficient for electrodiagnostic consultation. Recognition and experience in the management of disparate diseases that produce common electrodiagnostic findings may be necessary.

All needle EMG examinations should be performed by a qualified Electrodiagnostic medicine physician as described in Who is Qualified to Practice Electrodiagnostic Medicine?⁴ In the case of residents or fellows, needle EMG studies should be performed under the supervision of a qualified Electrodiagnostic medicine physician. Under no circumstances should a technologist, regardless of qualifications or experience, perform needle EMG examinations unsupervised.

Electrodiagnostic Medicine studies can provide information to:

1. Identify normal and abnormal nerve, muscle, motor or sensory neuron, and NMJ functioning.
2. Localize region(s) of abnormal function.
3. Define the type of abnormal function.
4. Determine the distribution of abnormalities.
5. Determine the severity of abnormalities.
6. Estimate the date of a specific nerve injury.
7. Estimate the duration of the disease.
8. Determine the progression of abnormalities or of recovery from abnormal function.
9. Aid in diagnosis and prognosis of disease.
10. Aid in selecting treatment options.
11. Aid in following response to treatment by providing objective evidence of change in NM function.
12. Localize correct locations for injection of intramuscular agents (e.g., botulinum toxin).

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management Department: Utilization Management
Approval Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Effective Date: 11/09/2018	Policy Number: UM-MP237
Review Date: 7/21/2026	Cross Reference Number:
Retired Date:	Page 3 of 9

5) POLICY:**Electromyography: Authorization and Medical Necessity Review Requirements**

- a) Authorization is required for all Electromyography services.

Nerve Conduction Studies: Authorization and Medical Necessity Review Requirements

- a) Authorization is required for all Nerve Conduction Studies.
- b) MetroPlus utilizes the American Association of Neuromuscular & Electrodiagnostic's (AANEM) recommendations regarding a reasonable maximum number of studies per diagnostic category necessary for a physician to arrive at a diagnosis in 90% of patients with that final diagnosis.
- c) Requests for a total number of tests that do not exceed the reasonable maximum number of studies per diagnostic category require authorization but do not require medical necessity review.
- d) Requests for a total number of tests that exceed the reasonable maximum number of studies per diagnostic category require authorization and medical necessity review.
- e) InterQual® criteria will be utilized to perform medical necessity reviews.

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management
Approval Date: 11/09/2018	Department: Utilization Management
Effective Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Review Date: 7/21/2026	Policy Number: UM-MP237
Retired Date:	Cross Reference Number:
	Page 4 of 9

	Limbs Studied by Needle Electromyography (95860-95864, 95867-95870, 95885-95887)	Nerve Conduction Studies (Total nerve studied, 95907-95913)	Neuromuscular Junction Testing (Repetitive Stimulation)
Indication	Number of Services (Tests)	Number of Services (Tests)	Number of Services (Tests)
Carpal Tunnel (unilateral)	1	7	--
Carpal Tunnel (bilateral)	2	10	--
Radiculopathy	2	7	--
Mononeuropathy	1	8	--
Polyneuropathy/ Mononeuropathy Multiplex	3	10	--
Myopathy	2	4	2
Motor Neuronopathy (e.g., ALS)	4	6	2
Plexopathy	2	12	--
Neuromuscular Junction	2	2	3
Tarsal Tunnel Syndrome (unilateral)	1	8	--
Tarsal Tunnel Syndrome (bilateral)	2	11	--
Weakness, Fatigue, Cramps, or Twitching (focal)	2	7	2
Weakness, Fatigue, Cramps, or Twitching (general)	4	8	2
Pain, Numbness, or Tingling (unilateral)	1	9	--
Pain, Numbness, or Tingling (bilateral)	2	12	--

6) LIMITATIONS AND EXCLUSIONS:

- Each nerve conduction study code may only be reimbursed once per nerve, or named branch of a nerve, regardless of the number of sites tested or of the number of methods used on that nerve.
- Psychosocial measurements- quantitative sensory testing may not be billed as a separate service.
- Routine testing for Polyneuropathy of Diabetes or End Stage Renal Disease (ESRD) is not considered medically necessary and is not covered.
- Testing for the sole purpose of monitoring disease intensity or treatment efficacy in these two conditions is also not covered.

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management
Approval Date: 11/09/2018	Department: Utilization Management
Effective Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Review Date: 7/21/2026	Policy Number: UM-MP237
Retired Date:	Cross Reference Number:
	Page 5 of 9

- e) Current Perception Threshold/Sensory Nerve Conduction Threshold Test (sNCT) is also not covered.

7) APPLICABLE PROCEDURE CODES:

CPT Code	Description
95907	Nerve conduction studies; 1-2 studies
95908	Nerve conduction studies; 3-4 studies
95909	Nerve conduction studies; 5-6 studies
95910	Nerve conduction studies; 7-8 studies
95911	Nerve conduction studies; 9-10 studies
95912	Nerve conduction studies; 11-12 studies
95913	Nerve conduction studies; 13 or more studies
95860	Needle electromyography; 1 extremity with or without related paraspinal areas
95861	Needle electromyography; 2 extremities with or without related paraspinal areas
95863	Needle electromyography; 3 extremities with or without related paraspinal areas
95864	Needle electromyography; 4 extremities with or without related paraspinal areas
95865	Needle electromyography; larynx
95866	Needle electromyography; hemidiaphragm
95867	Needle electromyography: cranial nerve supplied muscle(s), unilateral
95868	Needle electromyography: cranial nerve supplied muscles, bilateral
95869	Needle electromyography; thoracic paraspinal muscles (excluding T1 or T12)
95870	Needle electromyography: limited study of muscles in 1 extremity or non-limb (axial) muscles (unilateral or bilateral), other than thoracic paraspinal, cranial nerve supplied muscles, or sphincters
95872	Needle electromyography using single fiber electrode, with quantitative measurement of jitter, blocking and/or fiber density, any/all sites of each muscle studied
95885	Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude, and latency/velocity study; limited (List separately in addition to code for primary procedure)
95886	Needle electromyography, each extremity, with related paraspinal areas, when performed, done with nerve conduction, amplitude, and latency/velocity study; complete, five or more muscles studied, innervated by three or more nerves or four or more spinal levels (List separately in addition to code for primary procedure)
95887	Needle electromyography, non-extremity (cranial nerve supplied or axial) muscle(s) done with nerve conduction, amplitude, and latency/velocity study (List separately in addition to code for primary procedure)

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management
Approval Date: 11/09/2018	Department: Utilization Management
Effective Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Review Date: 7/21/2026	Policy Number: UM-MP237
Retired Date:	Cross Reference Number:
	Page 6 of 9

8) APPLICABLE DIAGNOSIS CODES:

ICD-10-CM Code	Description
A05.1	Botulism food poisoning
G12.21	Amyotrophic lateral sclerosis
G50.0-G50.9	Disorders of the trigeminal nerve
G51.0-G51.2	Facial nerve disorders
G54.0-G54.9	Nerve root and plexus disorders
G54.0	Brachial plexus disorders
G54.1	Lumbosacral plexus disorders
G56.00-G56.03	Carpal Tunnel Syndrome
G56.10-G56.13	Other lesions of the median nerve
G56.20-G56.23	Lesion of ulnar nerve
G56.30-G56.33	Lesion of radial nerve
G57.00-G57.03	Lesion of sciatic nerve
G57.20-G57.23	Lesion of femoral nerve
G57.30-G57.33	Lesion of lateral popliteal nerve
G57.40-G57.43	Lesion of medial popliteal nerve
G58.9	Mononeuropathy, unspecified
G60.0	Hereditary motor and sensory neuropathy
G61.0	Guillain-Barre syndrome
G62.9	Polyneuropathy, unspecified
G65.0-G65.2	Sequelae of inflammatory and toxic polyneuropathies
G70.00-G70.01	Myasthenia gravis
G70.80	Lambert-Eaton syndrome, unspecified
G70.81	Lambert-Eaton syndrome in disease classified elsewhere

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management
Approval Date: 11/09/2018	Department: Utilization Management
Effective Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Review Date: 7/21/2026	Policy Number: UM-MP237
Retired Date:	Cross Reference Number:
	Page 7 of 9

G71.20	Congenital myopathy, unspecified
--------	----------------------------------

9) REFERENCES:

- American Association of Electrodiagnostic Medicine. Practice Parameter for Electrodiagnostic Studies in Carpal Tunnel Syndrome: Summary Statement, Muscle Nerve 25: 918.922, 2002**
- American Association of Neuromuscular & Electrodiagnostic Medicine. AANEM Position Statement: Overview of Electrodiagnostic Medicine.** Approved by the American Association of Neuromuscular & Electrodiagnostic Medicine: September 1997; updated 1998, 1999, 2000, 2001, 2002, 2004, 2014, 2017, 2019 and January 2023. Approved 1999. Revised and reapproved January 2023.
- American Association of Neuromuscular & Electrodiagnostic Medicine Model Policy for Needle Electromyography and Nerve Conduction Studies.** Feb 2010. Updated and reapproved January 2016.
- American Association of Neuromuscular & Electrodiagnostic Medicine Position Statement. Who is Qualified to Practice Electrodiagnostic Medicine?** Approved May 1999. Updated and reapproved November 2017. Endorsed by the American Academy of Physical Medicine & Rehabilitation: December 2019.
- Gooch CL, Henderson R, Horowicz SH. Overview of electromyography.** UpToDate. Shefner JM (Ed) UpToDate Updated February 21, 2021. Accessed March 9, 2021.
- Henderson R, Gooch CL, Horowitz AH. Overview of nerve conduction studies. UpToDate Shefner JM (Ed) UpToDate.** Updated January 25, 2021. Accessed March 9, 2021. Kothari MJ. Carpal tunnel syndrome: Clinical manifestations and diagnosis. UpToDate. Shefner JM (Ed) UpToDate, Updated June 8, 2020. Accessed March 16, 2021.
- Munin MC, Heman-Ackah YD, Rosen CA, et al. Consensus Statement: Using Laryngeal EMG for the Diagnosis and Treatment of Vocal Cord Paralysis.** Muscle Nerve. 2016 Jun;53(6):850-5. doi: 10.1002/mus.25090. Epub 2016 Apr 9.
- Bodofsky EB, Carter GT, England JD. Is electrodiagnostic testing for polyneuropathy overutilized? Muscle Nerve 2017; 55:301.**

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management
Approval Date: 11/09/2018	Department: Utilization Management
Effective Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Review Date: 7/21/2026	Policy Number: UM-MP237
Retired Date:	Cross Reference Number:
	Page 8 of 9

9. AANEM policy statement on electrodiagnosis for distal symmetric polyneuropathy. Muscle Nerve 2018; 57:337.

10. Nerve Conduction Studies and Electromyography L35098

[LCD - Nerve Conduction Studies and Electromyography \(L35098\) \(cms.gov\)](#)

REVISION LOG:

REVISIONS	DATE
Creation date	11/9/2018
Annual Review	5/31/2022
Annual Review	6/27/2023
Annual Review and update	7/22/2024
Annual Review	7/22/2025
Annual Review	7/21/2026

Approved:	Date:	Approved:	Date:
		Sanjiv Shah, MD	
		Chief Medical Officer	

Title: Electromyography (EMG) and Nerve Conduction Studies (NCS)	Division: Medical Management Department: Utilization Management
Approval Date: 11/09/2018	LOB: Medicaid, HIV SNP, CHP, MetroPlus Gold, Gold Care I&II, Market Plus, Essential, HARP
Effective Date: 11/09/2018	Policy Number: UM-MP237
Review Date: 7/21/2026	Cross Reference Number:
Retired Date:	Page 9 of 9

Medical Guideline Disclaimer:

Property of Metro Plus Health Plan. All rights reserved. The treating physician or primary care provider must submit MetroPlus Health Plan clinical evidence that the patient meets the criteria for the treatment or surgical procedure. Without this documentation and information, MetroPlus Health Plan will not be able to properly review the request for prior authorization. The clinical review criteria expressed in this policy reflects how MetroPlus Health Plan determines whether certain services or supplies are medically necessary. MetroPlus Health Plan established the clinical review criteria based upon a review of currently available clinical information(including clinical outcome studies in the peer-reviewed published medical literature, regulatory status of the technology, evidence-based guidelines of public health and health research agencies, evidence-based guidelines and positions of leading national health professional organizations, views of physicians practicing in relevant clinical areas, and other relevant factors). MetroPlus Health Plan expressly reserves the right to revise these conclusions as clinical information changes and welcomes further relevant information. Each benefit program defines which services are covered. The conclusion that a particular service or supply is medically necessary does not constitute a representation or warranty that this service or supply is covered and or paid for by MetroPlus Health Plan, as some programs exclude coverage for services or supplies that MetroPlus Health Plan considers medically necessary. If there is a discrepancy between these guidelines and a member's benefits program, the benefits program will govern. In addition, coverage may be mandated by applicable legal requirements of a state, the Federal Government, or the Centers for Medicare & Medicaid Services (CMS) for Medicare and Medicaid members. All coding and website links are accurate at time of publication.