

**To all beneficiaries enrolled in a Prepaid Health Plan (PHP): for questions about benefits and services available on or after implementation, please contact your PHP.**

**Table of Contents**

1.0 Description of the Procedure, Product, or Service..... 1  
1.1 Definitions ..... 2

2.0 Eligibility Requirements ..... 2  
2.1 Provisions..... 2  
2.1.1 General..... 2  
2.1.2 Specific ..... 2  
2.2 Special Provisions..... 2  
2.2.1 EPSDT Special Provision: Exception to Policy Limitations for a Medicaid Beneficiary under 21 Years of Age ..... 2

3.0 When the Procedure, Product, or Service Is Covered..... 3  
3.1 General Criteria Covered ..... 3  
3.2 Specific Criteria Covered..... 4  
3.2.1 Specific criteria covered by Medicaid ..... 4  
3.2.2 Medicaid Additional Criteria Covered..... 4

4.0 When the Procedure, Product, or Service Is Not Covered..... 4  
4.1 General Criteria Not Covered ..... 5  
4.2 Specific Criteria Not Covered..... 5  
4.2.1 Specific Criteria Not Covered by Medicaid..... 5  
4.2.2 Medicaid Additional Criteria Not Covered..... 5

5.0 Requirements for and Limitations on Coverage ..... 5  
5.1 Prior Approval ..... 5  
5.2 Prior Approval Requirements ..... 5  
5.2.1 General..... 5  
5.2.2 Specific ..... 5  
5.3 Additional Limitations or Requirements ..... 6

6.0 Provider(s) Eligible to Bill for the Procedure, Product, or Service ..... 6  
6.1 Provider Qualifications and Occupational Licensing Entity Regulations..... 6  
6.2 Provider Certifications ..... 6

7.0 Additional Requirements ..... 7  
7.1 Compliance ..... 7

8.0 Policy Implementation/Revision Information..... 8

Attachment A: Claims-Related Information ..... 11  
A. Claim Type ..... 11  
B. International Classification of Diseases and Related Health Problems, Tenth Revisions, Clinical Modification (ICD-10-CM) and Procedural Coding System (PCS) ..... 11  
C. Code(s)..... 11  
D. Modifiers..... 12

E.	Billing Units.....	12
F.	Place of Service .....	12
G.	Co-payments.....	12
H.	Reimbursement .....	12

**Related Clinical Coverage Policies**

Refer to <https://medicaid.ncdhhs.gov/> for the related coverage policies listed below:

## **1.0 Description of the Procedure, Product, or Service**

In diagnosing muscle and nerve disorders, providers often conduct 2 different tests a needle electromyogram (an EMG) and a nerve conduction study (NCS). Needle EMGs test the electrical activity of muscles, while NCSs test how fast and well a nerve sends these electrical signals. When functioning correctly, the nerves send electrical impulses to the muscles, which then respond in a particular way. When they do not respond as expected, providers conduct tests to determine the cause. Typically, needle EMGs and NCSs are conducted in tandem, providing a complete picture of the beneficiary's condition.

The electrodiagnostic (EDX) evaluation is an extension of the neuromuscular portion of the physical examination. EDX evaluations are performed by providers, almost exclusively neurologists or physiatrists. An EDX evaluation requires a detailed knowledge of a beneficiary's disease. During an EDX evaluation, providers typically perform needle electromyography (EMG) and nerve conduction studies (NCSs). Electrodiagnostic studies may be rendered by a Licensed Physical Therapist if currently listed on the American Physical Therapy Association website as a Board Certified Clinical Electrophysiologic Certified Specialist per the American Board of Therapy Specialists.

Training to perform these procedures occur in conjunction with training in the clinical diagnostic and management aspects of neuromuscular disease. This training allows for the proper performance of an EDX evaluation and the correct interpretation of EDX test results. Providers performing an EDX evaluation must be aware of the patterns of abnormality observed in different diseases. Physicians and other qualified health care professionals must be able to interpret the results of NCSs and needle EMG and combine these results with the beneficiary's history, physical examination, and other test results to reach a medical diagnosis. Physical therapists may establish treatment plans based on results of EDX testing but may not make a medical diagnosis.

EDX results may be similar in different diseases therefore a thorough knowledge of EDX evaluation is important to assure quality care. Non-physician providers, including physical therapists without Board Certified Clinical Electrophysiologic Specialist Certification per the American Board of Therapy Specialists, chiropractors, physician assistants, and others, do not have the appropriate training and knowledge to perform and interpret EMG studies and interpret NCSs. These providers, along with Electroneurodiagnostic (END) technologists, may perform NCS with direct physician supervision. Both EMGs and NCSs are usually required for a clinical diagnosis of peripheral nervous system disorders.

Performance of one test does not eliminate the need for the other. The number of EMG and NCSs needed to determine a diagnosis are matters of clinical judgment. The complexity and extent of testing needed is determined after the initial pre-test evaluation and often modified during the testing procedure.

NCSs are performed to assess the integrity and diagnose diseases of the peripheral nervous system. Specifically, they assess action potentials resulting from peripheral nerve stimulation which are recordable over the nerve or from an innervated muscle, the speed (conduction velocity and latency), size (amplitude), and shape of the response.

### 1.1 Definitions

None Apply.

## 2.0 Eligibility Requirements

### 2.1 Provisions

#### 2.1.1 General

*(The term “General” found throughout this policy applies to all Medicaid policies)*

- a. An eligible beneficiary shall be enrolled in either the NC Medicaid Program (*Medicaid is NC Medicaid program, unless context clearly indicates otherwise*); or
- b. Provider(s) shall verify each Medicaid beneficiary’s eligibility each time a service is rendered.
- c. The Medicaid beneficiary may have service restrictions due to their eligibility category that would make them ineligible for this service.

#### 2.1.2 Specific

*(The term “Specific” found throughout this policy only applies to this policy)*

- a. **Medicaid**  
None Apply.

### 2.2 Special Provisions

#### 2.2.1 EPSDT Special Provision: Exception to Policy Limitations for a Medicaid Beneficiary under 21 Years of Age

- a. **42 U.S.C. § 1396d(r) [1905(r) of the Social Security Act]**

Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) is a federal Medicaid requirement that requires the state Medicaid agency to cover services, products, or procedures for Medicaid beneficiary under 21 years of age **if** the service is **medically necessary health care** to correct or ameliorate a defect, physical or mental illness, or a condition [health problem] identified through a screening examination (includes any evaluation by a physician or other licensed practitioner).

This means EPSDT covers most of the medical or remedial care a child needs to improve or maintain his or her health in the best condition possible, compensate for a health problem, prevent it from worsening, or prevent the development of additional health problems.

Medically necessary services will be provided in the most economic mode, as long as the treatment made available is similarly efficacious to the service requested by the beneficiary’s physician, therapist, or other licensed practitioner; the determination process does not delay the delivery of the needed service; and the determination does not limit the beneficiary’s right to a free choice of providers.

EPSDT does not require the state Medicaid agency to provide any service, product or procedure:

1. that is unsafe, ineffective, or experimental or investigational.
2. that is not medical in nature or not generally recognized as an accepted method of medical practice or treatment.

Service limitations on scope, amount, duration, frequency, location of service, and other specific criteria described in clinical coverage policies may be exceeded or may not apply as long as the provider's documentation shows that the requested service is medically necessary "to correct or ameliorate a defect, physical or mental illness, or a condition" [health problem]; that is, provider documentation shows how the service, product, or procedure meets all EPSDT criteria, including to correct or improve or maintain the beneficiary's health in the best condition possible, compensate for a health problem, prevent it from worsening, or prevent the development of additional health problems.

**b. EPSDT and Prior Approval Requirements**

1. If the service, product, or procedure requires prior approval, the fact that the beneficiary is under 21 years of age does **NOT** eliminate the requirement for prior approval.
2. **IMPORTANT ADDITIONAL INFORMATION** about EPSDT and prior approval is found in the *NCTracks Provider Claims and Billing Assistance Guide*, and on the EPSDT provider page. The Web addresses are specified below.

*NCTracks Provider Claims and Billing Assistance Guide:*

<https://www.nctracks.nc.gov/content/public/providers/provider-manuals.html>

EPSDT provider page: <https://medicaid.ncdhhs.gov/>

### 3.0 When the Procedure, Product, or Service Is Covered

*Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for Medicaid Beneficiaries under 21 Years of Age.*

#### 3.1 General Criteria Covered

Medicaid shall cover the procedure, product, or service related to this policy when medically necessary, and:

- a. the procedure, product, or service is individualized, specific, and consistent with symptoms or confirmed diagnosis of the illness or injury under treatment, and not in excess of the beneficiary's needs;
- b. the procedure, product, or service can be safely furnished, and no equally effective and more conservative or less costly treatment is available statewide; and
- c. the procedure, product, or service is furnished in a manner not primarily intended for the convenience of the beneficiary, the beneficiary's caretaker, or the provider.

## 3.2 Specific Criteria Covered

### 3.2.1 Specific criteria covered by Medicaid

- a. Medicaid shall cover EDX studies for the following indications:
  1. Focal neuropathies, entrapment neuropathies, or compressive lesions or syndromes such as carpal tunnel syndrome, ulnar neuropathies, or root lesions, for localization.
  2. Traumatic nerve lesions, for diagnosis and prognosis.
  3. Generalized neuropathies, such as metabolic, diabetic, uremic, toxic, hereditary, or immune-mediated.
  4. Neuromuscular junction disorders such as myasthenia gravis, myasthenic syndrome or botulism.
  5. Symptom-based presentations such as “pain in limb”, weakness, disturbance in skin sensation or “paraesthesia” when appropriate pre-test evaluations are inconclusive, and the clinical assessment unequivocally supports the need for the study.
  6. Radiculopathy-cervical, lumbosacral.
  7. Polyneuropathy-metabolic, degenerative, hereditary.
  8. Plexopathy-idiopathic, trauma, inflammatory, infiltrative. radiation induced.
  9. Myopathy such as polymyositis and dermatomyositis, myotonic, and congenital myopathies.
  10. Precise muscle location for injections such as botulinum toxin, or phenol.
- b. Medicaid shall cover EDX studies when all of the following criteria are met:
  1. the testing is medically indicated and guided by a documented neuromuscular history and physical;
  2. the testing is performed using EDX equipment that provides assessment of all parameters of the recorded signals; and
  3. the testing is performed by the following: a physical therapist with special training in EDX and is Board Certified Clinical Electrophysiologic Certified Specialist per the American Board of Physical Therapy Specialists; or neurologists, or physiatrists who are Board Certified by American Board of Electrodiagnostic Medicine or other equivalent examining board. Refer to **Subsection 6.1** for provider qualifications.

**Note:** In some situations, it is necessary to test an asymptomatic contralateral limb to establish normative values for an individual beneficiary. Normal values based on the general population alone are less sensitive than this approach; therefore, restrictions on contralateral asymptomatic limb testing will reduce the sensitivity of electrodiagnostic tests.

### 3.2.2 Medicaid Additional Criteria Covered

None Apply.

## 4.0 When the Procedure, Product, or Service Is Not Covered

*Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for Medicaid Beneficiaries under 21 Years of Age.*

#### 4.1 General Criteria Not Covered

Medicaid shall not cover the procedure, product, or service related to this policy when:

- a. the beneficiary does not meet the eligibility requirements listed in **Section 2.0**;
- b. the beneficiary does not meet the criteria listed in **Section 3.0**;
- c. the procedure, product, or service duplicates another provider's procedure, product, or service; or
- d. the procedure, product, or service is experimental, investigational, or part of a clinical trial.

#### 4.2 Specific Criteria Not Covered

##### 4.2.1 Specific Criteria Not Covered by Medicaid

EDX Studies are not covered when the criteria in **Subsection 3.2.1.a** and **Subsection 3.2.1.b** are not met and for any of the following:

- a. Examinations using portable hand-held devices;
- b. Using the studies as screening tests for polyneuropathy of diabetes or end-stage renal disease in beneficiaries without clinical deficits is not indicated;
- c. Using the studies for the sole purpose of monitoring disease intensity or treatment effectiveness for polyneuropathy of diabetes or end-stage renal disease;
- d. EDX testing with automated, noninvasive nerve conduction testing devices is considered investigational and not medically necessary for all indications
- e. Psychophysical measurements (current, vibration, thermal perceptions), even though they involve delivery of a stimulus, are not covered;
- f. Current Perception Threshold and Sensory Nerve Conduction Threshold Test (sNCT) is investigational and not covered; or
- g. Studies performed with devices designed only for "screening purposes" rather than diagnosis is not acceptable under this policy.

##### 4.2.2 Medicaid Additional Criteria Not Covered

None Apply.

### 5.0 Requirements for and Limitations on Coverage

*Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for a Medicaid Beneficiary under 21 Years of Age.*

#### 5.1 Prior Approval

Medicaid shall not require prior approval for EDX.

#### 5.2 Prior Approval Requirements

##### 5.2.1 General

None Apply.

##### 5.2.2 Specific

None Apply.

### **5.3 Additional Limitations or Requirements**

None Apply.

## **6.0 Provider(s) Eligible to Bill for the Procedure, Product, or Service**

To be eligible to bill for the procedure, product, or service related to this policy, the provider(s) shall:

- a. meet Medicaid qualifications for participation;
- b. have a current and signed Department of Health and Human Services (DHHS) Provider Administrative Participation Agreement; and
- c. bill only for procedures, products, and services that are within the scope of their clinical practice, as defined by the appropriate licensing entity.

### **6.1 Provider Qualifications and Occupational Licensing Entity Regulations**

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. The American Physical Therapy Association (APTA) allows licensed physical therapists who are currently listed on the APTA website as a Board Certified Clinical Electrophysiologic Specialist to perform EMG and nerve conduction studies in North Carolina.

The Board-Certified Physical Therapist may provide physical therapy interpretation and physical therapy treatment plan. Medical interpretation, diagnosis and medical follow up must be performed by a physician with special training in electrodiagnostic medicine. This type of training is generally included in the residency or fellowship programs of physicians who specialize in physical medicine and rehabilitation (physiatrists) or neurology (neurologists). This would provide for direct supervision by experienced physicians in electrodiagnostic studies for a period of at least six (6) months full-time or the equivalent. Needle insertion for an EMG requires detailed knowledge of anatomy to prevent injury to anatomical structures, nerves, and arteries.

A qualified provider 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.

### **6.2 Provider Certifications**

Electrodiagnostic studies may be rendered by a Licensed Physical Therapist who is currently listed on the American Physical Therapy Association website as a Board Certified Clinical Electrophysiologic Certified Specialist per the American Board of Physical Therapy Specialists.

It is required that providers be credentialed through the American Board of Electrodiagnostic Medicine or other equivalent examining board.



## 7.0 Additional Requirements

*Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for a Medicaid Beneficiary under 21 Years of Age.*

### 7.1 Compliance

Provider(s) shall comply with the following in effect at the time the service is rendered:

- a. All applicable agreements, federal, state and local laws and regulations including the Health Insurance Portability and Accountability Act (HIPAA) and record retention requirements; and
- b. All NC Medicaid's clinical (medical) coverage policies, guidelines, policies, provider manuals, implementation updates, and bulletins published by the Centers for Medicare and Medicaid Services (CMS), DHHS, DHHS division(s) or fiscal contractor(s).

## 8.0 Policy Implementation/Revision Information

**Original Effective Date:** January 1, 1974

### Revision Information:

Date	Section Revised	Change
07/01/2010	All sections and attachment(s)	Session Law 2009-451, Section 10.31(a) Transition of NC Health Choice Program administrative oversight from the State Health Plan to the Division of Medical Assistance (DMA) in the NC Department of Health and Human Services.
07/01/2011	Subsection 3.2	Revised Specific Criteria
07/01/2011	Subsection 4.2	Revised Specific Criteria
07/01/2011	Subsection 6.1	Revised Provider qualifications
07/01/2011	Attachment A	Updated (C) Procedure Codes and added descriptions
07/01/2011	Attachment A	Updated (D) Modifiers and (F)Place of Service
07/01/2011	All sections and attachment(s)	Initial promulgation of current coverage
03/12/2012	All sections and attachment(s)	Technical changes to merge Medicaid and NCHC current coverage into one policy.
04/01/2013	All sections and attachment(s)	Replaced “recipient” with “beneficiary.”
04/01/2013	Attachment A letters C & F	The America Medical Association (AMA) added new CPT codes 95907, 95908, 95909, 95910, 95911, 95912, 95913, 958940 and 95941. Four codes were deleted, 95900, 95903, 95904 and 95920, to better describe the services being performed, effective with date of service January 1, 2013.
05/01/2013	Attachment A	Removed yellow highlight and deleted strikethrough text that had been left in policy
10/01/2015	All Sections and Attachments	Updated policy template language and added ICD-10 codes to comply with federally mandated 10/1/2015 implementation where applicable.
03/15/2019	Table of Contents	Added, “To all beneficiaries enrolled in a Prepaid Health Plan (PHP): for questions about benefits and services available on or after November 1, 2019, please contact your PHP.”
03/15/2019	All Sections and Attachments	Updated policy template language.
12/04/2019	Table of Contents	Updated policy template language, “To all beneficiaries enrolled in a Prepaid Health Plan (PHP): for questions about benefits and services available on or after implementation, please contact your PHP.”
12/04/2019	Attachment A	Added, “Unless directed otherwise, Institutional Claims must be billed according to the National Uniform Billing Guidelines. All claims must comply with National Coding Guidelines.
09/15/2020	Attachment A (F)	Revised Place of Service to include Independent Diagnostic Testing Facilities (IDTF)
11/01/2023	Section 6.2	Adding physical therapist with Board Certified Clinical

NC Medicaid Electrodiagnostic Studies		Medicaid Clinical Coverage Policy No: 1A-27 Amended Date: June 1, 2024
		Electrophysiologic Certified Specialist per the American Board of Therapy Specialists
11/01/2023	Attachment A	Added codes 95885, 95886, and 95905
11/01/2023	throughout	Physicians changed to providers
11/01/2023	throughout	Patient changed to beneficiary
11/01/2023	Section 1.0	<p>Added EDS may be rendered by a licensed physical therapist listed on American Physical Therapy Association website as a Board Certified Electrophysiologic Certified Specialist per the American Board of Therapy Specialists.</p> <p>Added and other qualified healthcare professional</p> <p>Added physical therapists may establish treatment plans based on results of EDX testing but may not make a medical diagnosis</p> <p>Added without Board Certified Clinical Electrophysiologic Specialist Certification</p> <p>Removed NCS's may be performed without EMG on some occasions, e.g., entrapment neuropathies, but this should be the exception rather than the normal practice pattern</p>
11/01/2023	3.2.1a(3)	Added such as metabolic, toxic, hereditary or immune-mediated
11/01/2023	3.2.1a(4)	Added or botulism
11/01/2023	3.2.1a(8)	Added inflammatory and radiation induced
11/01/2023	3.2.1b(3)	Added testing is performed by the following: a physical therapist with special training in EDX and is Board Certified Clinical Electrophysiologic or neurologists, or physiatrists who are board certified by American Board of Electrodiagnostic Medicine or other equivalent examining board and removed electrodiagnostic medicine
11/01/2023	4.2.1(a)	Added examinations using portable hand held devices
11/01/2023	4.2.1(b)	Added in beneficiaries without clinical deficits is not indicated
11/01/2023	4.2.1(d)	Removed including as an alternative method of performing NCS
11/01/2023	6.1	Added "While the American Physical Therapy Association (APTA) allows licensed physical therapists who are currently listed on the APTA website as a Board Certified Clinical Electrophysiologic Specialist to perform EMG and nerve conduction studies in North Carolina. The Board-Certified Physical Therapist may provide physical therapy interpretation, diagnose, and medical follow-up must be performed by a physician with special training in electrodiagnostic medicine."

<b>NC Medicaid Electrodiagnostic Studies</b>		<b>Medicaid Clinical Coverage Policy No: 1A-27 Amended Date: June 1, 2024</b>
11/01/2023	6.1	Removed 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 recommended that the physicians be credentialed through the American Board of Electrodiagnostic Medicine or other equivalent examining board.
11/01/2023	All Sections & Attachments	Updated policy template language due to North Carolina Health Choice Program's move to Medicaid. Policy posted 11/01/2023 with an effective date of 4/1/2023.
12/15/2023		Fixed minor formatting issue posting and amended date not changed.
06/01/2024	Attachment A ( C )	Removed CPT 95905

### Attachment A: Claims-Related Information

Provider(s) shall comply with the, *NCTracks Provider Claims and Billing Assistance Guide*, Medicaid bulletins, fee schedules, NC Medicaid’s clinical coverage policies and any other relevant documents for specific coverage and reimbursement for Medicaid:

**A. Claim Type**

Professional (CMS-1500/837P transaction)

Unless directed otherwise, Institutional Claims must be billed according to the National Uniform Billing Guidelines. All claims must comply with National Coding Guidelines.

**B. International Classification of Diseases and Related Health Problems, Tenth Revisions, Clinical Modification (ICD-10-CM) and Procedural Coding System (PCS)**

Provider(s) shall report the ICD-10-CM and Procedural Coding System (PCS) to the highest level of specificity that supports medical necessity. Provider(s) shall use the current ICD-10 edition and any subsequent editions in effect at the time of service. Provider(s) shall refer to the applicable edition for code description, as it is no longer documented in the policy.

**C. Code(s)**

Provider(s) shall report the most specific billing code that accurately and completely describes the procedure, product or service provided. Provider(s) shall use the Current Procedural Terminology (CPT), Health Care Procedure Coding System (HCPCS), and UB-04 Data Specifications Manual (for a complete listing of valid revenue codes) and any subsequent editions in effect at the time of service. Provider(s) shall refer to the applicable edition for the code description, as it is no longer documented in the policy.

If no such specific CPT or HCPCS code exists, then the provider(s) shall report the procedure, product or service using the appropriate unlisted procedure or service code.

CPT Code (s)	Allowable Units
95860	1/day
95861	1/day
95863	1/day
95864	1/day
95867	1/day
95868	1/day
95869	1/day
95870	4/day
95872	1/day
95875	1/day
95885	4/day
95886	4/day
95907	1/day
95908	1/day
95909	1/day
95910	1/day
95911	1/day
95912	1/day

CPT Code (s)	Allowable Units
95913	1/day
95937	12/day
+95940	20/day
+95941	5 hours w/o records

**Unlisted Procedure or Service**

**CPT:** The provider(s) shall refer to and comply with the Instructions for Use of the CPT Codebook, Unlisted Procedure or Service, and Special Report as documented in the current CPT in effect at the time of service.

**HCPCS:** The provider(s) shall refer to and comply with the Instructions For Use of HCPCS National Level II codes, Unlisted Procedure or Service and Special Report as documented in the current HCPCS edition in effect at the time of service.

**D. Modifiers**

Provider(s) shall follow applicable modifier guidelines.

The technical component or the professional component of a procedure cannot be billed on the same date of service, same or different provider, as the complete component of the procedure.

**E. Billing Units**

Provider(s) shall report the appropriate procedure code(s) used which determines the billing unit(s).

Refer to **Attachment A: Section C** for allowable units.

**F. Place of Service**

All codes with the exception of 95940 and 95941 may be performed inpatient, outpatient hospital, Independent Diagnostic Testing Facilities (IDTF) and office. 95940 and 95941 are limited to inpatient and outpatient hospital.

**G. Co-payments**

For Medicaid refer to Medicaid State Plan:

<https://medicaid.ncdhhs.gov/meetings-notices/medicaid-state-plan-public-notices>

**H. Reimbursement**

Provider(s) shall bill their usual and customary charges.

For a schedule of rates, refer to: <https://medicaid.ncdhhs.gov/>