

**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.**

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**NC Medicaid  
Transcranial Doppler Studies**

**Medicaid  
Clinical Coverage Policy No: 1A-19  
Amended Date: November 1, 2023**

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**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**

Transcranial Doppler (TCD) is used for the noninvasive assessment of blood flow to the brain. The noninvasive test uses sound waves to determine the blood flow moving through the arteries to the brain. The study can assist in determining if the arteries are narrowed or blocked. A transducer (probe) placed at the neck or the temple sends an ultrasound signal. The signal is received and transmitted to a microcomputer that calculates how fast the blood is traveling through the artery. A complete TCD study may include assessment of anterior (front) or posterior (back) cerebrovascular circulation. Complete cerebrovascular ultrasound could include both carotid duplex and TCD.

### **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 the NC Medicaid Program (Medicaid is NC Medicaid program, unless context clearly indicates otherwise).
- 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 a Medicaid Beneficiary 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**

Medicaid shall cover TCD studies of the intracranial arteries for:

- a. diagnoses that indicate severe stenosis or occlusion of an intracranial artery;
- b. vasospasm/vasoconstriction following subarachnoid hemorrhage;
- c. arterial venous malformation; or
- d. brain death.

##### **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 a Medicaid Beneficiary 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**

None Apply.

##### **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 Transcranial Doppler Studies.

#### **5.2 Prior Approval Requirements**

##### **5.2.1 General**

None Apply

##### **5.2.2 Specific**

None Apply.

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

TCD studies are limited to one procedure per date of service by the same or different provider.

- a. Technical or professional components of TCD studies cannot to be billed on the same date of service by the same or different provider as the complete procedure.
- b. TCD studies are included in the reimbursement for surgery. Therefore, it is cannot be billed separately when performed during a surgical session.

### **6.0 Providers 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**

None Apply.

## 6.2 Provider Certifications

None Apply.

## 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:** April 1, 1992

### Revision Information:

Date	Section Updated	Change
12/1/06	Sections 2 through 5	A special provision related to EPSDT was added.
5/1/07	Sections 2 through 5	EPSDT information was revised to clarify exceptions to policy limitations for recipients under 21 years of age
5/1/07	Attachment A	Added UB-04 as an accepted claim form.
3/12/12	Throughout	Policy Conversion: Implementation of Session Law 2009-451, <b>Section 10.32 “NC HEALTH CHOICE/PROCEDURES FOR CHANGING MEDICAL POLICY.”</b>
3/12/12	Throughout	To be equivalent where applicable to NC DMA’s Clinical Coverage Policy # 1A-19 under Session Law 2011-145 § 10.41.(b)
3/12/12	Throughout	Technical changes to merge Medicaid and NCHC current coverage into one 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 by adding Independent Diagnostic Testing Facility (IDTF) to place of service.
02/01/2021	Attachment A (B)	Added diagnosis I63.89 (other cerebral infarction)
03/01/2023	Section 5.1 Prior Approval	Prior approval removed from Medicaid and NCHC for transcranial Doppler Studies and reference to Clinical Policy 1K-7, which terminated 7/1/21

<b>Date</b>	<b>Section Updated</b>	<b>Change</b>
10/01/2023	All Sections & Attachments	Updated policy template language due to North Carolina Health Choice Program's move to Medicaid. Policy posted 10/01/2023 with an effective date of 4/1/2023.
10/01/2023		Corrected amended date in posting from 12/01/2022 to 03/01/2023. For the following language change: Prior approval removed from Medicaid and NCHC for transcranial Doppler Studies and reference to Clinical Policy 1K-7, which terminated 7/1/21
11/01/2023	Attachment A: Claims Information (B)	ICD-10 2023 update adding D57.04, D57.214, D57.414, D57.434, D57.454, D57.814
12/15/2023		Fixed minor formatting issue posting and amended date not changed.

**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)
- Institutional (UB-04/837I 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.

ICD-10- Code(s)		
D57.00 - D57.02	I63.111 - I63.119	I63.531
D57.01	I63.112	I63.532
D57.04	I63.12	I63.539
D57.1	I63.131 - I63.139	I63.6
D57.20 - D57.219	I63.132	I63.8
D57.211	I63.19	I63.9
D57.212	I63.211 - I63.219	I65.01 - I65.09
D57.214	I63.212	I65.02
D57.3	I63.22	I65.03
D57.414	I63.231 - I63.239	I65.1
D57.434	I63.232	I65.21 - I65.29
D57.454	I63.30 - I63.39	I63.22
D57.80 - D57.819	I63.311	I63.89
D57.811	I63.312	I65.23
D57.812	I63.319	I66.01 - I66.9
D57.814	I63.321	I66.02
G45.0 - G45.9	I63.322	I66.03
G46.0 - G46.8	I63.329	I66.09
G93.81	I63.331	I66.11
G93.82	I63.332	I66.12
G93.89	I63.339	I66.13
G94	I63.341	I66.19
I60.00 - I60.9	I63.342	I66.21
I60.4	I63.349	I66.22
I60.6	I63.40 - I63.49	I66.23
I60.7	I63.411	I66.29
I60.8	I63.412	I66.3

I60.01	I63.419	I66.8
I60.02	I63.421	I67.1
I60.10	I63.422	I67.2
I60.11	I63.429	I67.4
I60.12	I63.431	I67.5
I60.20	I63.432	I67.6
I60.21	I63.439	I67.7
I60.22	I63.441	I67.81 - I67.89
I60.30	I63.442	I67.82
I60.31	I63.4	I67.9
I60.32	I63.50 - I63.59	I68.0
I60.50	I63.511	I68.2
I60.51	I63.512	I68.8
I60.52	I63.519	I69.00
I61.2	I63.521	I69.098
I61.8	I63.522	I77.1
I61.9	I63.529	Q28.2
I62.9		Q28.3
I63.011 - I63.019		
I63.012		
I63.02		
I63.031 - I63.039		
I63.032		

**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
93886
93888
93890
93892
93893

**Note:** CPT codes 93888, 93890, 93892, and 93893 are included in 93886. They are not separately reimbursable on the same date of service, same or different provider, and same type of service.

**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.

**E. Billing Units**

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

**F. Place of Service**

Inpatient, Outpatient, Office, Home, Skilled nursing facility, Intermediate care facility and Independent Diagnostic Testing Facility (IDTF).

**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.

Providers are required to bill applicable revenue codes.

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