
Medicine: Non-Invasive Vascular Diagnostic Studies

Page updated: January 2025

This section contains information to assist providers in billing for medicine procedures related to Non-Invasive Vascular Diagnostic Studies (NVDS).

Non-Invasive Vascular Diagnostic Studies (NVDS)

«CPT® codes 93880 through 93889, 93891 through 93931, 93970 through 93998 should be used to bill for NVDS.» For males age 21 years and older, authorization is required for CPT codes 93980 (duplex scan of arterial inflow and venous outflow of penile vessels; complete study) and 93981 (duplex scan of arterial inflow and venous outflow of penile vessels; follow-up or limited study).

Billing Frequency Limitations

«For CPT codes 93880 through 93889, 93891 through 93931, 93970 through 93981, 93985, 93986 and 93990, only one NVDS is reimbursable when billed by the same provider, for the same recipient and same date of service.» Reimbursement for an NVDS is not to exceed the price on file for the complete test if both the complete and limited test procedure codes of the same service are billed by the same provider, for the same recipient and same date of service.

For CPT codes 93880 through 93888, 93925 through 93931, 93970 through 93979, 93985 and 93986, billing frequency is limited to two per consecutive 12-month period, per code, by any provider, for the same recipient.

«For CPT codes 93892 and 93893, billing frequency is limited to four procedures per consecutive 12-month period, per code, by any provider, for the same recipient.»

CPT code 93998 must be billed “By Report.”

When the code frequency for NVDS is exceeded, a *Remittance Advice Details* (RAD) will be issued directing the provider to resubmit the claim with documentation of medical justification. A current history and physical, or a current progress note that states the recipient’s diagnosis and need for additional NVDS should be included with the claim. If available, prior studies should be submitted to further support the need for medical necessity.

Split-Billing Procedures

«When billing CPT codes 93880 through 93889, 93891 through 93931, 93970 through 93981 and 93990 for NVDS, providers must follow split-billing procedures.» When billing for both the professional and technical service components, a modifier is neither required nor allowed. When billing for only the professional component, use modifier 26. When billing for only the technical component, use modifier TC.

Note: Do not bill modifier 99 on claims for NVDS. The claim will be denied.

Transcranial Doppler

Providers—including Portable X-ray providers—may be reimbursed for CPT codes 93886 (Transcranial Doppler study of the intracranial arteries; complete study), 93888 (Transcranial Doppler study of the intracranial arteries; limited study), 93890 (Transcranial Doppler study of the intracranial arteries; vasoreactivity study), 93892 (Transcranial Doppler study of the intracranial arteries; emboli detection without injection) and 93893 (Transcranial Doppler study of the intracranial arteries; emboli detection) when billed for any of the following but not limited to:

- Identification of children with sickle-cell disease who are at high risk of stroke
- Evaluation and follow-up of patients after subarachnoid hemorrhage
- Detection of severe stenosis in the major intracranial arteries in patients with symptoms suggesting a vascular lesion
- Assessment of patterns and extent of collateral circulation in patients with known areas of severe stenosis or occlusion
- Assessment of patients with suspected brain death

Codes 93886 through 93893 are reimbursable only when billed with one or more of the following ICD-10-CM diagnosis codes: D57.00 through D57.819, G45.0 through G45.9, G81.00 through G81.94, I60.00 through I61.9, I62.9, I63.00 through I63.59, I65.01 through I67.9, O99.411 through O99.43, Q21.1.

Carotid NVDS

Current medical and surgical management of patients with suspected carotid lesions or at increased risk of such lesions remains controversial. Consequently, the indications for NVDS and/or surgery are not clearly established and medical opinion varies widely. Medical policy guidelines for carotid NVDS are:

- Carotid NVDS are not indicated for patients with classic hemispheric transient ischemic attacks (TIAs) or resolved stroke since retrograde arch and four-vessel cerebral arteriography with intracranial view are mandatory for these patients regardless of the NVDS findings.
- Carotid NVDS are not indicated for routine screening of asymptomatic older (over age 60) patients without carotid bruits. Even for such patients with bruits, routine NVDS are not indicated since evidence that prophylactic endarterectomy alters the stroke risk of these patients is not convincing.
- Carotid NVDS are indicated for patients with atypical symptoms that are suspicious but not typical of ischemic neurological events.
- Carotid NVDS may be indicated for asymptomatic older (over age 60) patients with carotid bruits who are about to undergo major peripheral vascular, thoracic or cardiac surgery.

Erectile Dysfunction Diagnostic Evaluation

The diagnostic evaluation of Erectile Dysfunction (ED) for males age 21 years and older is reimbursable when billed with CPT codes 93980 and 93981. Providers may also bill for the procedures associated with CPT codes 54230 and 54250 (refer to *Surgery: Male Genital System*). Prior authorization is required for the diagnostic evaluation of ED.

«CPT Codes Billable for Erectile Dysfunction Diagnostic Evaluation»

| CPT Code | Description |
|----------|---|
| 93980 | Duplex scan of arterial inflow and venous outflow of penile vessels; complete study |
| 93981 | Duplex scan of arterial inflow and venous outflow of penile vessels; follow up or limited study |

Complete/Limited NVDS

Billing for both a single level/unilateral/limited non-invasive vascular diagnostic study and the corresponding multiple level/bilateral/ complete non-invasive study is considered duplicate billing. If the single level/unilateral/limited procedure has been previously reimbursed, the corresponding multiple level/bilateral/complete procedure will be reduced by the amount reimbursed in history. If the multiple level/bilateral/complete procedure has been previously reimbursed, the corresponding single level/unilateral/limited procedure will be denied.

«Code Sets Table»

| Limited/Complete | Description (Complete Study) |
|------------------|--|
| 93882/93880 | Duplex scan of extracranial arteries |
| 93888/93886 | Transcranial Doppler study of the intracranial arteries |
| 93922/93923 | Non-invasive physiologic studies of upper or lower extremity arteries |
| 93926/93925 | Duplex scan of lower extremity arteries or arterial bypass grafts |
| 93931/93930 | Duplex scan of upper extremity arteries or arterial bypass grafts |
| 93971/93970 | Duplex scan of extremity veins including responses to compression and other maneuvers |
| 93976/93975 | Duplex scan of arterial inflow and venous outflow of abdominal, pelvic, scrotal contents and/or retroperitoneal organs |
| 93979/93978 | Duplex scan of aorta, inferior vena cava, iliac vasculature, or bypass grafts |
| 93981/93980 | Duplex scan of arterial inflow and venous outflow of penile vessels |

<<Legend>>

Symbols used in the document above are explained in the following table.

| Symbol | Description |
|---------------|---|
| << | This is a change mark symbol. It is used to indicate where on the page the most recent change begins. |
| >> | This is a change mark symbol. It is used to indicate where on the page the most recent change ends. |