Priority Health	BILLING POLICY No. 097

NON-INVASIVE PERIPHERAL ARTERIAL VASCULAR STUDIES / NON-INVASIVE PERIPHERAL VENOUS VASCULAR & HEMODIALYSIS ACCESS STUDIES

Date of origin: June 19, 2025	Review dates: April 2026

DEFINITION

This policy identifies billing and payment requirements associated with non-invasive peripheral venous vascular studies utilizing ultrasonic Doppler and physiologic studies to assess the irregularities in blood flow in the venous system.

- **B-mode ultrasound**: Provides grayscale, two-dimensional images of the blood vessels and surrounding tissues
- **Doppler ultrasound**:
  - **Spectral Doppler**: Measures and graphs the speed and direction of blood flow
  - **Color Doppler**: Adds color to the image to visualize blood flow patterns—typically red for flow toward the probe and blue for flow away
- **Duplex imaging**: Combines both structural and flow information in real time, allowing for a comprehensive vascular assessment

Duplex scanning combines Doppler ultrasound with conventional ultrasound to assess both the structure and function of blood vessels in real-time. This imaging technique helps visualize the vessel anatomy, track blood flow, and detect potential obstructions.

Color Doppler enhances the ultrasound image by converting Doppler signals into a color overlay, representing the speed and direction of blood flow within the vessel.

Spectral Doppler analysis further refines the assessment, providing detailed anatomic and hemodynamic information to identify stenosis or plaque buildup in arteries.

Physiologic studies: Functional assessment of vascular health
Physiologic studies involve functional measurement techniques that assess vascular health without imaging.

- **ABI test** is the most performed physiologic study. It compares blood pressure at the ankle to that at the brachial artery (upper arm) using a Doppler stethoscope and a blood pressure cuff.
- **Doppler ultrasound** evaluates arterial blood flow through physiologic waveforms. These waveforms reflect off blood cells, generating changes in sound pitch (Doppler effect). Measurements can be taken at a single level or various segmental limb levels. Absence of blood flow results in no pitch change.
- **Exercise testing** helps analyze the functional significance of vascular disease by reassessing blood pressure with a Doppler stethoscope after a period of controlled physical stress.
- **Plethysmography** measures changes in volume or flow rate in an organ or limb section in response to the inflation and deflation of a blood pressure cuff.
- **Transcutaneous oxygen tension measurement** is typically conducted on the foot or calf to evaluate blood influx and oxygen diffusion to the skin, providing insight into tissue oxygenation.

Peripheral Arterial Examinations: In general, noninvasive studies of the arterial system are to be used when invasive correction is contemplated, or severity of findings dictates noninvasive study follow up. The latter may also be followed with physical findings and/or progression or relief of signs and/or symptoms. It can be useful in pre-operative evaluation of patients with known arteriosclerotic diseases who will be

undergoing surgeries which put them at high risk for vascular complications (i.e. CABG, cranial surgeries, etc.). It can be used for surveillance to ensure graft patency post-operatively.

FOR MEDICARE

For indications that don't meet criteria of NCD, local LCD or specific medical policy a Pre-Service Organization Determination (PSOD) will need to be completed. Get more information on PSOD in our Provider Manual.

POLICY SPECIFIC INFORMATION

The required frequency of follow-up to noninvasive vascular studies after angioplasty is determined by the specific vascular region that was treated.

Pre-surgical mapping of the radial artery should only be supplemented with vein-mapping studies if arterial assessments indicate an unsuitable conduit or if an inadequate arterial supply is available for multiple bypass procedures. This ensures the selection of the most viable vascular structures for surgical intervention, optimizing patient outcomes.

Duplex scanning and physiologic studies may be payable within the same encounter if physiologic findings are abnormal or if assessment is required for vascular trauma, thromboembolic events or aneurysmal disease.

The primary CPT codes for non-invasive vascular studies are in the 93880-93998 range.

Some CPT codes, like those for vessel mapping (93985, 93986), have billing frequency limitations, typically restricting the number of studies per consecutive 12-month period.

According to Medicare guidelines, only one preoperative duplex ultrasound is generally considered reasonable and necessary for hemodialysis access site surgery. This scan is used to evaluate both arterial inflow and venous outflow prior to the creation of an autogenous hemodialysis conduit

Reimbursement rates

Find reimbursement rates for the codes listed on this page in our standard fee schedules for your contract. See our fee schedules (login required).

Documentation requirements

A permanent record of all studies conducted, including interpretations, must be maintained. Documentation should encompass a detailed description of the procedures performed, including any contrast media or radiopharmaceuticals utilized. Any significant patient reactions or complications should be recorded. Additionally, comparisons with prior relevant studies must be addressed, along with both normal and abnormal findings. Variations from standard results should be noted, supported by appropriate measurements.

Reports must address and answer specific clinical questions. If there are limitations preventing definitive conclusions, they should be clearly explained in the documentation. Retention of ultrasound examination images and final interpretations must comply with clinical needs and legal or local healthcare facility requirements.

When a study is performed by a provider other than the ordering/referring physician or nonphysician practitioner, that provider must retain copies of the test results, interpretations and the original order. This order is necessary to ensure adequate diagnostic information is available to the performing provider.

Test results must be shared with the referring physician. Non-invasive vascular studies are justified only if their findings directly impact patient management and treatment decisions.

Additional documentation requirements:

Key Documentation Requirements for Duplex Coding (e.g., 93970, 93971):

1. **Real-Time B-Mode Imaging**: Structural visualization of vessels
2. **Spectral Doppler Analysis**:
    a. Must include velocity measurements of blood flow
    b. Demonstrates flow direction and waveform characteristics
3. **Color Flow Doppler**:
    a. Must be used to assess flow, not just to identify anatomy
    b. If used only for anatomical guidance, it does not qualify for duplex coding

Responses to compression and other maneuvers must be included to assess vein patency and valve function.

- **Waveform analysis** and **color Doppler imaging** should be documented to confirm flow direction and velocity.
- A **hard copy output** or digital image archive must be available for interpretation.
- The study must be **bilateral and complete**—if only one leg or a limited portion is scanned, a different CPT code (e.g., 93971) should be used

CPT code 93990, non-invasive duplex ultrasound of hemodialysis access, is used to bill for a duplex ultrasound scan of a hemodialysis access site. It includes the evaluation of arterial inflow, the body of the access and venous outflow. Specific billing guidelines include split billing for professional and technical components, as well as documentation requirements for medical necessity.

Coding Specifics

- **93922 -** Limited bilateral noninvasive physiologic studies of upper or lower extremity arteries, (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus bidirectional, Doppler waveform recording and analysis at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus volume plethysmography at 1-2 levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries with, transcutaneous oxygen tension measurement at 1-2 levels)
- **93923 -** Complete bilateral noninvasive physiologic studies of upper or lower extremity arteries, 3 or more levels (eg, for lower extremity: ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental blood pressure measurements with bidirectional Doppler waveform recording and analysis, at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental volume plethysmography at 3 or more levels, or ankle/brachial indices at distal posterior tibial and anterior tibial/dorsalis pedis arteries plus segmental transcutaneous oxygen tension measurements at 3 or more levels), or single level study with provocative functional maneuvers (eg, measurements with postural provocative tests, or measurements with reactive hyperemia)
- **93924 -** Noninvasive physiologic studies of lower extremity arteries, at rest and following treadmill stress testing, (ie, bidirectional Doppler waveform or volume plethysmography recording and analysis at rest with ankle/brachial indices immediately after and at timed intervals following performance of a standardized protocol on a motorized treadmill plus recording of time of onset of claudication or other symptoms, maximal walking time, and time to recovery) complete bilateral study
- **93925 -** Duplex scan of lower extremity arteries or arterial bypass grafts; complete bilateral study
- **93926 -** Duplex scan of lower extremity arteries or arterial bypass grafts; unilateral or limited study
- **93930 -** Duplex scan of upper extremity arteries or arterial bypass grafts; complete bilateral study
- **93931 -** Duplex scan of upper extremity arteries or arterial bypass grafts; unilateral or limited study

Modifiers

Priority Health follows standard billing and coding guidelines which include CMS NCCI. Modifiers should be applied when applicable based on this guidance and only when supported by documentation.

Incorrect application of modifiers will result in denials. The modifier below may not be all-inclusive.

26: Professional Component
TC: Technical Component

Per the CCI edits, CPT 93971 requires a 59 modifier when billed together with 93970.

Get more information about modifier use in our Provider Manual.

Place of service

Generally, it is expected that noninvasive vascular studies would not be performed more than once a year, excluding inpatient hospital (21) and emergency room (23) places of service.

Coverage will be considered for services furnished in the appropriate setting to the patient's medical needs and condition. Authorization may be required. Get more information in our Provider Manual.

REFERENCES

- Article – Billing and Coding: Non-Invasive Peripheral Arterial Vascular Studies (A57593) (CMS)
- LCD – Non-Invasive Peripheral Arterial Vascular Studies (L35761) (CMS)
- Double-check Duplex Scan Documentation (AAPC)
- Article – Billing and Coding: Non-Invasive Peripheral Venous Vascular and Hemodialysis Access Studies (A57594) (CMS)

DISCLAIMER

CMS and/or MDHHS guidelines apply unless otherwise specified in this policy or provider manual. Where such guidance is absent, this policy applies. Priority Health's billing policies outline our guidelines to assist providers in accurate claim submissions and define reimbursement or coding requirements if the service is covered by a Priority Health member's benefit plan. The determination of visits, procedures, DME, supplies and other services or items for coverage under a member's benefit plan or authorization isn't being determined for reimbursement. Authorization requirements and medical necessity requirements appropriate to procedure, diagnosis and frequency are still required. We use Current Procedural Terminology (CPT), Centers for Medicare and Medicaid Services (CMS), Michigan Department of Health and Human Services (MDHHS), and other defined medical coding guidelines for coding accuracy.

An authorization isn't a guarantee of payment when proper billing and coding requirements or adherence to our policies aren't followed. Proper billing and submission guidelines must be followed. We require industry standard, compliant codes defined by CPT, HCPCS, and revenue codes for all claim submissions. CPT, HCPCPS, revenue codes, etc., can be reported only when the service has been performed and fully documented in the medical record to the highest level of specificity. Failure to document services rendered or items supplied will result in a denial. To validate billing and coding accuracy, payment integrity pre- or post-claim reviews may be performed to prevent fraud, waste and abuse. Unless otherwise detailed in the policy, our billing policies apply to both participating and non-participating providers and facilities.

If guidelines detailed in government program regulations, defined in policies and contractual requirements aren't followed, Priority Health may:

- Reject or deny the claim
- Recover or recoup claim payment

An authorization on file for an item or services doesn't supersede coding, billing or reimbursement requirements.

These policies may be superseded by mandates defined in provider contracts or state, federal or CMS contracts or requirements. We make every effort to update our policies in a timely manner to align these requirements or contracts. If there's a delay in implementation of a policy or requirement defined by state or federal law, as well as contract language, we reserve the right to recoup and/or recover claim payments to the effective dates per our policy. We reserve the right to update policies when necessary. Our most current policy will be made available in our Provider Manual.

CHANGE / REVIEW HISTORY

Date	Revisions made
04/2026	Added Codes 93922, 93923, 93924, 93925, 93926, 93930, and 93931. Added modifiers 26 and TC