# Non-Invasive Peripheral Vascular Arterial Studies (93922, 93923, 93924, 93925, 93926, 93930, 93931) L35761

## Indications:

Diagnostic tests must be ordered by the physician who is treating the beneficiary and who will use the results in the management of the beneficiary's specific medical problem. Services are deemed medically necessary when all of the following conditions are met:

1. Signs/symptoms of ischemia or altered blood flow are present;

2. The information is necessary for appropriate medical and/or surgical management;

3. The test is not redundant of other diagnostic procedures that must be performed. Although, in some circumstances, non-invasive vascular tests are complimentary, such as MRA and duplex, where the latter may confirm an indeterminate finding or demonstrate the physiologic significance of an anatomic stenosis (especially in the lower extremity arterial system).

#### **Peripheral Arterial Examinations**

In general, noninvasive studies of the arterial system are to be utilized 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.

Non-invasive peripheral arterial studies performed to establish the level and/or degree of arterial occlusive disease are considered medically necessary if:

- a. Signs and/or symptoms of possible limb ischemia are present; and
- b. The patient can be medically managed or is a candidate for percutaneous, surgical, diagnostic, or therapeutic procedures.

Acute ischemia is characterized by the sudden onset of severe pain, coldness, numbness, and pallor of the extremity. Chronic ischemia or critical limb ischemia can have intermittent claudication, pain at rest, diminished pulse, ulceration, and gangrene.

# Specific Indications:

- 1. Signs and symptoms of reduced peripheral blood flow that result in tissue loss, gangrene, or pre-gangrenous changes. Duplex scans are not always needed but may be helpful in defining the regions for arteriography (angiograms), thus limiting the contrast load to the patient.
- 2. Suspected arterial occlusive disease with symptoms including claudication, rest pain, ischemic tissue loss, aneurysm, and/or arterial embolization. Claudication is defined as pain occurring within 1 block or less of walking and/or of such severity that it interferes significantly with the patient's occupation or lifestyle. Rest pain of vascular disease (typically including the forefoot), is usually associated with absent pulses, which becomes increasingly severe with elevation and diminishes with placement of the leg in a dependent position.

- 3. Evaluation of grafts or other vascular intervention when signs and symptoms of ischemia, rejection, and/or vascular disease are present.
- 4. The monitoring of sites of previous surgical interventions, including sites of previous bypass surgery with either synthetic or autologous vein grafts.
- 5. The monitoring of sites of various percutaneous interventions, including angioplasty, thrombolysis/thrombectomy, atherectomy, or stent placement.
- 6. Follow-up for progression of previously identified disease, such as documented stenosis in an artery that has not undergone intervention, aneurysms, atherosclerosis, or other occlusive diseases.
- 7. The evaluation of suspected vascular and perivascular abnormalities, including masses, aneurysms, pseudoaneurysms, arterial dissections, vascular injuries, arteriovenous fistulae, thromboses, emboli, various communications between arteries and veins, or vascular malformations.
- 8. Mapping of arteries prior to surgical interventions.
- 9. Clarifying or confirming the presence of significant arterial abnormalities identified by other imaging modalities.
- 10. Evaluation of arterial integrity in the setting of blunt or penetrating trauma with suspicion of vascular injury (including complications of diagnostic and/or therapeutic procedures).
- 11. Evaluation of patients suspected of thoracic outlet syndrome, with symptoms of positional numbness, pain, tingling, or a cold hand.
- 12. Allen's test to establish patency of palmar arch.

## Limitations:

Peripheral artery studies may **not** be considered medically necessary if only the following signs and symptoms are present:

- 1. Continuous burning of the feet, as it is considered to be a neurologic symptom.
- 2. Nonspecific leg pain and pain in a limb as a single diagnosis is too general to warrant further investigation, unless related to other signs and symptoms.
- 3. Peripheral edema will only be covered with arterial occlusive disease in the immediate postoperative period, in association with another inflammatory process, or in association with rest pain.
- 4. Absence of peripheral pulses, e.g., dorsalis pedis or posterior tibial, is not an indication to proceed beyond the physical examination unless the absent pulses can be related to other signs and/or symptoms.
- 5. Screening of the asymptomatic patient is not covered.
- 6. Ankle-brachial index alone or when part of the physical examination, and not as part of the limited or complete bilateral physiologic studies, is not separately covered.
- 7. The use of a simple hand-held Doppler device that does not produce hard copy or that produces a record that does not permit analysis of bidirectional vascular flow, is considered to be part of the physical examination of the vascular system and is not separately reimbursable.

Each patient's condition and response to treatment must medically warrant the number of services reported for payment. Medicare requires the medical necessity for each study reported to be clearly documented in the patient's medical record.

Frequency of follow-up studies will be carefully monitored for medical necessity, and it is the responsibility of the physician/provider to maintain documentation of medical necessity in the patient's medical record.

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

Only one preoperative scan is considered reasonable and necessary for bypass surgery. If a more current preoperative scan is indicated for a patient with multiple comorbidities having difficulty being stabilized for surgery or a change in condition, the medical record would need to support the medical necessity of the second scan.

In the immediate post-operative period, patients may be studied if re-established pulses are lost, become equivocal, or if the patient develops related signs and/or symptoms of ischemia with impending repeat intervention.

The frequency of medically necessary follow-up noninvasive vascular studies post-angioplasty is dictated by the vascular distribution treated.

Pre-surgical conduit mapping of the radial artery(ies) should only be accompanied by veinmapping studies when the arterial studies demonstrate a non-acceptable conduit, or an insufficient conduit is available for multiple bypass procedures.

Duplex scanning and physiologic studies may be reimbursed during the same encounter if the physiologic studies are abnormal and/or to evaluate vascular trauma, thromboembolic events or aneurysmal disease. The documentation must support the medical necessity.

Assessment of the Ankle brachial indices (ABI) only is considered part of the physical examination and is not covered according to Title XVIII of the Social Security Act section 1862 (a) (7) which excludes routine physical examinations and services from Medicare coverage.

Preventive and/or screening services unless covered under statute are not covered by Medicare.

Most Common Diagnoses for Peripheral Arterial Vascular Studies (which meet medical necessity) *		
125.10	Coronary artery disease without angina pectoris	
125.110	Coronary artery disease with unstable angina	
125.111	Coronary artery disease with angina and documented spasm	
125.112	Atherosclerotic heart disease of native coronary artery with refractory angina pectoris	
125.85	Chronic coronary microvascular dysfunction	
170.0	Atherosclerosis of aorta	
170.201	Atherosclerosis, right leg	
170.202	Atherosclerosis, left leg	
170.203	Atherosclerosis, bilateral legs	
170.211	Atherosclerosis, with intermittent claudication, right leg	
170.212	Atherosclerosis, with intermittent claudication, left leg	
170.213	Atherosclerosis, with intermittent claudication, bilateral legs	
170.221	Atherosclerosis, with rest pain, right leg	
170.222	Atherosclerosis, with rest pain, left leg	
170.223	Atherosclerosis, with rest pain, bilateral legs	

170.235	Atherosclerosis, with ulceration of foot, right leg
170.245	Atherosclerosis, with ulceration of foot, left leg
170.261	Atherosclerosis of extremities with gangrene, right leg
170.262	Atherosclerosis of extremities with gangrene, left leg
171.43	Infrarenal abdominal aortic aneurysm
172.4	Aneurysm of artery of lower extremities
173.00	Raynaud's syndrome
173.9	Peripheral vascular disease with claudication
177.0	Arteriovenous fistula, acquired
177.1	Stricture of artery
196	Gangrene
M79.601	Pain in right arm
M79.602	Pain in left arm
M79.604	Pain in right leg
M79.605	Pain in left leg
M79.661	Pain in right lower leg
M79.662	Pain in left lower leg
M79.671	Pain in right foot
M79.672	Pain in left lower leg
T82.868A	Thrombosis due to vascular prosthetic devices, implants and grafts, initial encounter
Z01.810	Encounter for preprocedural cardiovascular examination
Z95.820	Peripheral vascular angioplasty status with implants and grafts
Z95.828	Presence of other vascular implants and grafts
Z98.62	Peripheral vascular angioplasty status

\*Note: See the complete list of Medicare covered diagnoses and payment rules: https://www.cms.gov/medicare-coverage-database/view/article.aspx?articleid=57593&ver=12

To see the complete coverage indications and limitations: https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?LCDId=35761

The above CMS and WPS-GHA guidelines are current as of: 07/01/2025.