



Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Coverage varies by payer. Check with payer for both coverage and prior authorization requirements.

Local Coverage Determination (LCD) Requirements

WPS Non-Coronary Stents

Percutaneous Transluminal Angioplasty (PTA) and stenting of vessels is covered only when all of the following conditions are met:

- The patient has undergone thorough medical evaluation and management of symptoms. See below under specific categories for guidelines on medical evaluation and management recommendations.
- Surgical intervention would otherwise be considered as an alternative treatment for the patient.
- A stent may be placed as a planned adjunct to PTA rather than in response to a suboptimal or failed PTA (so-called primary stent deployment). Primary stenting is justified for situations where PTA alone is not expected to provide a durable result, such as arterial or venous occlusions that carry a high risk for distal embolization or rapid recurrence OR occlusive lesions known to be unfavorable for PTA alone such as significantly calcified lesions, eccentric lesions, lesions related to external compression (e.g., May-Thurner syndrome and malignant compression of the superior vena cava), or ostial renal artery stenosis.

LOCATION/ CONDITION

PTA AND STENTING

Brachiocephalic arteries	May be indicated for treatment of flow-limiting stenosis resulting in conditions such as subclavian steal syndrome, upper extremity claudication, ischemic rest pain of the arm and hand, non-healing tissue ulceration and focal gangrene. Stenting of the inflow arteries when significantly stenotic, is often useful.
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Pulmonary artery

May be indicated for congenital pulmonary artery stenosis.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Renal artery	<p>Appropriate for: renal artery dissection, renal artery aneurysm, renal artery atherosclerosis greater than 50% in a transplanted kidney, flash pulmonary edema or acute coronary syndrome (ACS) with severe hypertension (HTN), resistant HTN (Uncontrolled hypertension with failure of maximally tolerated doses of at least three antihypertensive agents, one of which is a diuretic, or intolerance to medications), or ischemic nephropathy with chronic kidney disease (CKD) with eGFR < 45 cc/min and global renal ischemia (unilateral significant renal artery stenosis with a solitary kidney or bilateral significant renal artery stenosis) without other explanation.</p> <p>May be appropriate for: Unilateral renal artery stenosis with CKD (eGFR < 45cc/min). Unilateral renal artery stenosis with prior episodes of congestive heart failure (Stage C). Anatomically challenging or high-risk lesion (early bifurcation, small vessel, severe concentric calcification, and severe aortic atheroma or mural thrombus).</p> <p>Rarely appropriate for: Unilateral, solitary, or bilateral renal artery stenosis with controlled BP and normal renal function. Unilateral, solitary, or bilateral renal artery stenosis with kidney size < 7cm in pole-to-pole length. Unilateral, solitary, or bilateral renal artery stenosis with chronic end stage renal disease on hemodialysis > 3 months. Unilateral, solitary, or bilateral renal artery chronic total occlusion.</p>
Lower extremity arteries (aorto-iliac, superficial femoral and infra-popliteal arteries)	Not expected to be often indicated in infra-popliteal vessels and in those cases the rationale for stent placement must be thoroughly explained in the record.
Critical limb ischemia	Appropriate for limb threatening lower extremity ischemia.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Claudication/PAD May be appropriate for individuals who have failed medical management and home exercise program and continue to have significant activity limiting disease, with an anatomically suitable lesion for intervention. Medical management of peripheral artery disease (PAD) should include Class I recommendations for antiplatelet therapy, statins, home exercise program, smoking cessation including planning, counseling or behavior modification and pharmacotherapy if needed.

Mesenteric vessels Stenting covered only when angioplasty of the vessels would not suffice and after the patient has had a thorough medical evaluation and management of symptoms, and for whom surgical intervention is the likely alternative. The eligible patients will be required to have multiple comorbidities documented making them poor candidates for open surgical procedures. In these situations, PTA and stent placement should be considered an alternative to surgery and not an addition to medical management.

Hemodialysis access graft/fistula May be appropriate for stenosis, restenosis, occlusion and pseudoaneurysm.

Superior vena cava and subclavian/innominate veins stents covered for superior vena cava syndrome, post-radiation venous stenosis, congenital stenosis, and thrombosis and embolism, including acute thrombophlebitis. Stenting of the veins, such as the innominate, subclavian, or superior vena cava when they are the outflow vessels of an arteriovenous fistula for chronic hemodialysis and are significantly stenotic, is often useful.

Inferior vena cava and iliofemoral veins includes vena caval and iliofemoral venous occlusions and stenosis due to the following: post-radiation venous stenosis, congenital stenosis or webs, extrinsic venous compression (May-Thurner syndrome), thrombophlebitis, and symptomatic post-traumatic venous stenosis.

Sequential Procedures

Management options to maintain or re-establish the patency of a vessel in a particular vascular family include surgery, thrombectomy, embolectomy, endarterectomy, thrombolysis, atherectomy, angioplasty, and stent placement. These procedures may be performed alone or in sequence. The subsequent procedure(s) is necessary because the initial approach was unsuccessful or only partially successful in accomplishing the intended goal (that is, to maintain or re-establish the patency of a vessel).

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Limitations

The placement of a stent in a vessel for which there is no objective-related symptom or limitation of function is considered to be preventive, and therefore, not covered by Medicare.

Use of non-coronary vascular stents is covered only after the patient has had a thorough evaluation and treatment of symptoms and when PTA of the vessel alone has not, or is not expected to sufficiently resolve the symptoms making surgery the likely alternative.

A non-coronary intravascular stent(s) that carries an Investigational Device Exemption (IDE) may be covered under Medicare. Medicare coverage of IDE devices is predicated, in part, upon their status with the FDA.

Lower Extremity Revascularization

Vascular Territories

Iliac Vascular Territory Common iliac, Internal iliac, External iliac	Use only 37220 or 37221 for initial artery treated. Up to 2 add-on codes (37222, 37223) may be reported for additional vessels per extremity.
Femoral/Popliteal Vascular Territory	Considered one single vessel per lower extremity. Report one single code (37224, 37225, 37226, 37227) for all segments treated. Use code for the most complex service performed when more than one lesion is treated. There are no add-on codes for this territory.
Tibial/Peroneal Vascular Territory Anterior tibial, Posterior tibial, Peroneal	Use only 37228, 37229, 37230, or 37231 for initial artery treated. Up to 2 add-on codes (37232, 37233, 37234, 37235) may be reported for additional vessels per extremity. Do not use add-on codes for additional lesions within the same vessel.

One primary code is used for each territory treated.

Report stent code once when more than one stent is placed in the same vessel.

Lesions crossing territories treated with a single therapy should be reported with one code.

Interventions on each leg are reported separately. Use modifier 59 to denote separate, distinct procedures.

Interventions are reported per vessel, not per lesion. Code to the most extensive service performed.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Lower Extremity Revascularization includes:

- Access and selective catheterization
- Radiologic supervision and interpretation directly related to intervention
- Embolic protection
- Closure of arteriotomy
- Imaging to document completion of intervention
- Balloon angioplasty
- 36140, 36200, 36245, 36246, 36247, 36248. 76000, 75960, 75962, 75964 through the same access site performed on the treated vessel

37220	Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal angioplasty.
37221	Revascularization, endovascular, open or percutaneous, iliac artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed.
37222	Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal angioplasty.
37223	Revascularization, endovascular, open or percutaneous, iliac artery, each additional ipsilateral iliac vessel; with transluminal stent placement(s), includes angioplasty within the same vessel when performed.
37224	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal angioplasty.
37225	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with atherectomy, includes angioplasty within the same vessel, when performed.
37226	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s), includes angioplasty within the same vessel when performed.
37227	Revascularization, endovascular, open or percutaneous, femoral, popliteal artery(s), unilateral; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed.
37228	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal angioplasty.
37229	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with atherectomy, includes angioplasty within the same vessel, when performed.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

37230	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed.
37231	Revascularization, endovascular, open or percutaneous, tibial, peroneal artery, unilateral, initial vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed.
37232	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, each additional vessel; with transluminal angioplasty.
37233	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, each additional vessel; with atherectomy, includes angioplasty within the same vessel, when performed.
37234	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, each additional vessel; with transluminal stent placement(s), includes angioplasty within the same vessel, when performed.
37235	Revascularization, endovascular, open or percutaneous, tibial/peroneal artery, each additional vessel; with transluminal stent placement(s) and atherectomy, includes angioplasty within the same vessel, when performed.

Transluminal Balloon Angioplasty

Includes

- Conventional, low profile, cutting, drug coated balloon
- Radiological supervision and interpretation directly related to intervention
- Imaging to document completion of intervention
- Closure of the arteriotomy by pressure

Multiple angioplasties in single vessel are billed with single code.

Lesions crossing vessels treated with a single therapy should be reported with one code.

Not separately reportable with stenting in extracranial carotid, innominate arteries, peripheral arteries, and peripheral veins.

Report 37247/37249 for distinct ipsilateral or contralateral vessels treated in the same session.

Report non-selective/selective catheter placement separately.

Report intravascular ultrasound separately.

Report ultrasound guidance for vascular access separately.

Report mechanical thrombectomy or thrombolytic therapy separately.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Report extensive repair of an artery separately.

Report initial diagnostic angiogram separately.

37246	Transluminal balloon angioplasty (except lower extremity artery(ies) for occlusive disease, intracranial, coronary, pulmonary, or dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same artery; initial artery.
37247	Transluminal balloon angioplasty (except lower extremity artery(ies) for occlusive disease, intracranial, coronary, pulmonary, or dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same artery; each additional artery.
37248	Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; initial vein.
37249	Transluminal balloon angioplasty (except dialysis circuit), open or percutaneous, including all imaging and radiological supervision and interpretation necessary to perform the angioplasty within the same vein; each additional vein.

Stent Placement

Includes:

- Balloon angioplasty in treated vessel
- Post-dilation following stent placement
- Treatment of another lesion in the same vessel
- Use of different size balloon to achieve therapeutic result
- Radiological supervision and interpretation directly related to intervention
- Closure of arteriotomy
- Imaging to document completion of intervention

Multiple stents in a single vessel are billed with a single code.

Lesions crossing vessels treated with a single therapy should be reported with one code.

Report 37237/37239 for distinct vessels treated in the same session.

Report non-selective/selective catheter placement separately.

Report intravascular ultrasound separately.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Report mechanical thrombectomy or thrombolytic therapy separately.

Report extensive repair of an artery separately.

When covered stent is deployed as sole management of aneurysm, use stent code, not embolization code.

37236 Transcatheter placement of an intravascular stent(s) (except lower extremity artery(s) for occlusive disease, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; initial artery.

37237 Transcatheter placement of an intravascular stent(s) (except lower extremity artery(s) for occlusive disease, cervical carotid, extracranial vertebral or intrathoracic carotid, intracranial, or coronary), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; each additional artery.

37238 Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; initial vein.

37239 Transcatheter placement of an intravascular stent(s), open or percutaneous, including radiological supervision and interpretation and including all angioplasty within the same vessel, when performed; each additional vein.

Embolization

Embolization includes:

- Radiological supervision and interpretation
- Intra-procedure guidance and road mapping
- Imaging necessary to document completion of procedure
- Moderate sedation

Report selective catheter placement separately with modifier 59.

Report diagnostic angiography separately with modifier 59.

Report one embolization code for each surgical field.

Surgical field is defined as the area surrounding and directly involved in the treatment.

When a stent is placed for the purpose of providing latticework for embolization coils, report only the embolization code.

Report multiple embolization procedures with multiple surgical fields with multiple emboli-

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

zation codes.

The immediate indication for the procedure should be used when overlapping indications exist.

Do not report 37241 and 37242 in conjunction with 36836 and 36837.

Ultrasound guidance is separately reportable.

Diagnostic angiography/venography is separately reportable.

37241 Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and image guidance necessary to complete the intervention; venous, other than hemorrhage (eg congenital or acquired venous malformations, venous and capillary hemangiomas, varices, varicoceles).

37242 Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and image guidance necessary to complete the intervention; arterial, other than hemorrhage or tumor (eg congenital or acquired arterial malformations, arteriovenous malformations, arteriovenous fistulas, aneurysms, pseudoaneurysms).

37243 Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and image guidance necessary to complete the intervention; for tumors, organ ischemia, or infarction.

37244 Vascular embolization or occlusion, inclusive of all radiological supervision and interpretation, intraprocedural roadmapping, and image guidance necessary to complete the intervention; for arterial or venous hemorrhage or lymphatic extravasation.

Intravascular Ultrasound (IVUS)

IVUS includes:

- All transducer manipulations and repositioning within the specific vessel being examined (includes before, during, and after a therapeutic intervention)

Report non-selective/selective catheter placement separately.

If the lesion crosses margins from one vessel to another, report IVUS once per lesion.

37252 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; initial noncoronary vessel.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

37253 Intravascular ultrasound (noncoronary vessel) during diagnostic evaluation and/or therapeutic intervention, including radiological supervision and interpretation; each additional noncoronary vessel.

Arterial Thrombectomy

Catheter placement is separately reportable.

Diagnostic studies are separately reportable.

Other percutaneous interventions are separately reportable. Use modifier 59 as appropriate.

Report 37185 once no matter how many subsequent vessels are treated.

Thrombectomy includes:

- Fluoroscopic radiological supervision and interpretation for guidance of procedure
- Injection of thrombolytic agent

37184 Primary percutaneous transluminal mechanical thrombectomy, noncoronary, non-intracranial, arterial, or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injection(s); initial vessel.

37185 Primary percutaneous transluminal mechanical thrombectomy, noncoronary, non-intracranial, arterial, or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injection(s); second and all subsequent vessel(s) within the same vascular family.

37186 Secondary percutaneous transluminal thrombectomy (eg, nonprimary mechanical, snare basket, suction technique), noncoronary, non-intracranial, arterial or arterial bypass graft, including fluoroscopic guidance and intraprocedural pharmacological thrombolytic injections, provided in conjunction with another percutaneous intervention other than primary mechanical thrombectomy.

Vena Cava Filter

Includes:

- Vascular access
- Vessel selection and mapping
- Ultrasound and fluoroscopic imaging guidance

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

- 37191** Insertion of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed.
- 37192** Repositioning of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed.
- 37193** Retrieval (removal) of intravascular vena cava filter, endovascular approach including vascular access, vessel selection, and radiological supervision and interpretation, intraprocedural roadmapping, and imaging guidance (ultrasound and fluoroscopy), when performed.

Thrombolysis

Catheter placement is separately reportable.

Ultrasound guidance for vascular access is separately reportable.

Diagnostic studies and other percutaneous interventions are separately reportable.

Thrombolysis includes:

- Fluoroscopic guidance and radiological supervision and interpretation
- Related evaluation and management services on the day of the procedure

- 37211** Transcatheter therapy, arterial infusion for thrombolysis other than coronary or intracranial, any method, including radiological supervision and interpretation, initial treatment day.
- 37213** Transcatheter therapy, arterial or venous infusion for thrombolysis other than coronary, any method, including radiological supervision and interpretation, continued treatment on subsequent day during course of thrombolytic therapy, including follow-up catheter contrast injection, position change, or exchange when performed.
- 37214** Transcatheter therapy, arterial or venous infusion for thrombolysis other than coronary, any method, including radiological supervision and interpretation, continued treatment on subsequent day during course of thrombolytic therapy, including follow-up catheter contrast injection, position change, or exchange when performed; cessation of thrombolysis including removal of catheter and vessel closure by any method.

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

Transcatheter Carotid Artery Revascularization (TCAR)

Medicare National Coverage Determination (NCD)

Stenting is considered reasonable and necessary with:

- Use of FDA approved carotid stent
- Use of FDA approved or cleared embolic protection device

And in patients with:

- Symptomatic carotid artery stenosis equal to or greater than 50%

Asymptomatic carotid artery stenosis equal to or greater than 70%.

When the following have been completed:

- Neurological assessment by a neurologist or NIH stroke scale (NIHSS) certified health professional before and after carotid artery stenting
- Use of duplex ultrasound for first-line evaluation of carotid artery stenosis
- Computed tomography angiography or magnetic resonance angiography, if not contraindicated to confirm the degree of stenosis and information about the aortic arch, and extra- and intracranial circulation
- Intra-arterial digital subtraction (catheter) angiography may be used only when there is significant discrepancy between non-invasive imaging results, or in lieu of computed tomography angiography or magnetic resonance angiography if these are contraindicated
- Formal shared decision making with the patient

Shared decision making must include:

- Discussion of all treatment options including: carotid endarterectomy, stenting including transcatheter carotid artery revascularization, and optimal medical therapy
- Explanation of risks and benefits for each option specific to the beneficiary
- Integration of clinical guidelines (e.g., patient comorbidities and concomitant treatments)
- Discussion and incorporation of beneficiary's personal preferences and priorities

<https://www.cms.gov/medicare-coverage-database/view/ncacal-decision-memo.aspx?proposed=N&ncaid=311>

TCAR includes:

- Ipsilateral selective carotid catheter placement
- Diagnostic carotid catheterization confirming the need for stenting

Peripheral Interventions

Coding Guidelines for Peripheral Interventions

37215	Transcatheter placement of intravascular stent(s), cervical carotid artery, open or percutaneous, including angioplasty, when performed, and radiological supervision and interpretation; with distal embolic protection.
37216	Transcatheter placement of intravascular stent(s), cervical carotid artery, open or percutaneous, including angioplasty, when performed, and radiological supervision and interpretation; without distal embolic protection.

References

American Medical Association (2024). CPT 2024 Professional Edition.

American Medical Association (September 2019). Arterial Mechanical Thrombectomy Guidelines. CPT Assistant Online.

American Medical Association (2017). Cardiovascular Coding Changes for 2017. CPT Assistant Online.

American Medical Association (July 2011). Coding Communication: Lower Extremity Revascularization (37220-37235) and Supra-Inguinal Atherectomy Reporting (0234T-0238T) CPT Assistant Online.

American Medical Association (November 2013). Vascular Embolization and Occlusion Procedures. CPT Assistant Online.

American Medical Association (April 2012). Peripheral Vascular Changes: CPT 2012 Overview. CPT Assistant Online.

Centers for Medicare and Medicaid Services (January 2023). Non-Coronary Vascular Stents. L35998. Electronically accessed at <https://www.cms.gov/medicare-coverage-database/view/lcd.aspx?lcdid=35998&ver=34&keyword=atherectomy&keywordType=any&areald=all&doc-Type=6,3,5,1,F,P&contractOption=all&sortBy=title&bc=1>.

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