



Cohere Medical Policy - Catheter-Based Angiogram, Lower Extremity Arteries

Clinical Policy for Medical Necessity Review

Version: 3

Cohere Health UMC Approval Date: August 14, 2025

Last Annual Review: August 14, 2025

Revision: Not Applicable

Next Annual Review: August 14, 2026

Important Notices

Notices & Disclaimers:

GUIDELINES ARE SOLELY FOR COHERE'S USE IN PERFORMING MEDICAL NECESSITY REVIEWS AND ARE NOT INTENDED TO INFORM OR ALTER CLINICAL DECISION-MAKING OF END USERS.

Cohere Health, Inc. ("**Cohere**") has published these clinical guidelines to determine the medical necessity of services (the "**Guidelines**") for informational purposes only, and solely for use by Cohere's authorized "**End Users**". These Guidelines (and any attachments or linked third-party content) are not intended to be a substitute for medical advice, diagnosis, or treatment directed by an appropriately licensed healthcare professional. These Guidelines are not in any way intended to support clinical decision-making of any kind; their sole purpose and intended use is to summarize certain criteria Cohere may use when reviewing the medical necessity of any service requests submitted to Cohere by End Users. Always seek the advice of a qualified healthcare professional regarding any medical questions, treatment decisions, or other clinical guidance. The Guidelines, including any attachments or linked content, are subject to change at any time without notice.

© 2025 Cohere Health, Inc. All Rights Reserved.

Other Notices:

HCPCS® and CPT® copyright 2025 American Medical Association. All rights reserved.

Fee schedules, relative value units, conversion factors and/or related components are not assigned by the AMA, are not part of CPT, and the AMA is not recommending their use. The AMA does not directly or indirectly practice medicine or dispense medical services. The AMA assumes no liability for data contained or not contained herein.

HCPCS and CPT are registered trademarks of the American Medical Association.

Policy Information:

Specialty Area: Cardiovascular Disease

Policy Name: Cohere Medical Policy - Catheter-Based Angiogram, Lower Extremity Arteries

Type: ☒ Adult (18+ yo) | ☒ Pediatric (0-17 yo)

Table of Contents

Important Notices	2
Medical Necessity Criteria	4
Service: Catheter-Based Angiogram, Lower Extremity Arteries	4
Description	5
Medical Necessity Criteria	5
Indications	5
Non-Indications	6
Level of Care Criteria	6
Procedure Codes (CPT/HCPCS)	6
Medical Evidence	8
References	10
Policy Revision History/Information	13

Medical Necessity Criteria

Service: Catheter-Based Angiogram, Lower Extremity Arteries

Cohere Health takes an evidence-based approach to reviewing imaging and procedure requests, meaning that sufficient clinical information must be provided at the time of submission to determine medical necessity. Documentation must include a recent and detailed history, physical examination related to the onset or change in symptoms, relevant lab results, prior imaging, and details of previous treatments. Advanced imaging or procedures should be requested after a recent clinical evaluation by the treating provider, which may include referral to a specialist.

- When a specific clinical indication is not explicitly addressed in the Cohere Health medical policy, medical necessity will be determined based on established clinical best practices, as supported by evidence-based literature, peer-reviewed sources, professional society guidelines, and state or national recommendations, unless otherwise directed by the health plan.
- Requests submitted without clinical documentation, or those that do not align with the provided clinical information—such as mismatched procedure, laterality, body part, or CPT code—may be denied for lack of medical necessity due to insufficient or inconsistent clinical information.
- When there are multiple diagnostic or therapeutic procedures requested simultaneously or within the past three months, each will be reviewed independently. Clinical documentation must clearly justify all of the following:
 - The medical necessity of each individual request
 - Why prior imaging or procedures were inconclusive or why additional/follow-up studies are needed
 - How the results will impact patient management or treatment decisions
- Requests involving adjacent or contiguous body parts may be considered not medically necessary if the documentation demonstrates that the patient's primary symptoms can be adequately assessed with a single study or procedure.

Description

A peripheral angiogram of the lower extremities is an examination procedure that checks for obstructions in the blood vessels that supply blood to the legs and feet. The procedure is usually performed if the physician suspects the patient may have peripheral artery disease (PAD). Catheter angiography, also known as conventional angiography, is the standard technique where a catheter is placed into an artery, usually in the groin area, and a contrast dye is injected to enable visualization of blood vessels through radiography imaging. It is primarily utilized for diagnosing and formulating treatment plans in patients with a suspected vascular anomaly.¹

Medical Necessity Criteria

Indications

Catheter-based angiogram, lower extremity arteries is considered appropriate if **ANY** of the following is **TRUE**^{1-5,9}:

- The patient is experiencing chronic limb-threatening ischemia (CLTI) or acute limb ischemia, and **ANY** of the following is **TRUE**^{1,3-5,9}:
 - Wound due to arterial insufficiency that has not healed despite wound care³; **OR**
 - Ischemic rest pain with pain in the forefoot relieved with dependency and lasting more than 2 weeks^{3,5,9}; **OR**
 - Gangrene is present^{3,5,9}; **OR**
 - Acute limb ischemia (sudden loss of blood supply typically due to embolization or dissection)^{1,5}; **OR**
- The patient is experiencing intermittent claudication, and **ALL** of the following⁵⁻⁸:
 - Failure to show significant clinical improvement despite documented compliance with optimal medical care; **AND**
 - Tests demonstrate greater than mild obstruction; **OR**
- The patient has **ANY** of the following^{3,9,12}:
 - Aneurysm⁹; **OR**
 - Pseudoaneurysm¹²; **OR**
 - Dissection⁹; **OR**
 - Symptomatic or asymptomatic in-stent restenosis (greater than or equal to 50%)³; **OR**

- Threatened bypass graft (only approvable for percutaneous transluminal angioplasty [PTA] and stenting); **OR**
- Planned procedure requiring vascular access when there is a significant stenosis (e.g., access for endovascular aortic repair [EVAR] or transcatheter aortic valve replacement [TAVR]).

Non-Indications

Catheter-based angiogram, lower extremities, is not considered appropriate if the following is **TRUE**^{2-3,6-7,10,13}:

- The patient is unwilling to undergo interventional therapy if angiography discovers disease.

Level of Care Criteria

Outpatient

Procedure Codes (CPT/HCPCS)

CPT/HCPCS Code	Code Description
36245	Insertion of catheter into first order abdominal branch of artery, within a vascular family
36246	Insertion of catheter into initial second order abdominal branch of artery, within a vascular family
36247	Insertion of catheter into initial third order abdominal branch of artery, within a vascular family
36248	Selective catheter placement, arterial system; additional second order, third order, and beyond, abdominal, pelvic, or lower extremity artery branch, within a vascular family (List in addition to code for initial second or third order vessel as appropriate).
37252	Radiologic supervision and interpretation with the IVUS procedure and are used for procedures involving both arteries and/or veins. Reported once per procedure for the first vessel studied with IVUS.
37253	Radiologic supervision and interpretation with the IVUS procedure and are used for procedures involving both arteries and/or veins. Each initial vessel.

75710	Angiography, extremity, unilateral, radiological.
75716	Angiography, extremity, bilateral, radiological.

Medical Evidence

Omeh and Shlofmitz (2025) published a review on the fundamental principles, indications, procedure techniques, and complications of angiography. They also highlight the importance of interdisciplinary team members in improving patient outcomes. They state that noninvasive angiography, such as CT and MR, has taken over most traditional invasive angiography diagnostic applications. However, traditional invasive angiography is still essential in a time of rapidly growing therapeutic procedures.¹

In 2024, the American College of Cardiology and the American Heart Association Joint Committee on Clinical Practice Guidelines published a guideline for the management of lower extremity peripheral artery disease (Gornik et al.) to help clinicians treating patients with PAD in the lower extremities, and discussing its several clinical presentations such as asymptomatic, chronic symptomatic, chronic limb-threatening ischemia, and acute limb ischemia. Of interest, they recommend that the resting ABI equal to or lower than 0.90 should be reported as abnormal. In the section of imaging recommendations for PAD, they recommend CT, MR, and catheter angiography of the lower extremities for patients with functionally limiting claudication or CLTI to assess the disease's severity and determine a potential revascularization. However, for patients with a confirmed PAD diagnosis, CT, MR, and catheter angiography of the lower extremities should not be used only for anatomical assessment. In short, catheter angiography has radiation and contrast exposure risks and arterial injury risks. It should be reserved for more severe cases of PAD and when potential revascularization is being considered.⁹

The European Society of Cardiology published guidelines for managing peripheral arterial and aortic diseases (Mazzolai et al., 2024). They recommend the ankle-brachial index as the initial non-invasive diagnostic test to confirm a decrease in the blood flow to the lower limbs, and it should be performed for both legs. An ABI equal to or lower than 0.90 confirms PAD diagnosis. They encourage the use of non-invasive, radiation and contrast-free tests for screening and diagnosis of PAD.⁵

Gerhard-Herman et al. (2017) developed the 2016 AHA/ACC guideline for managing patients with lower extremity peripheral artery disease. Invasive angiography is recommended in a patient with critical limb ischemia in whom revascularization is considered. This was a Class I (Strong) recommendation with Level of Evidence as Expert Opinion. The use of noninvasive imaging can cause a delay in crucial treatment for the patient. A Class IIa (Moderate Strength of Recommendation) Level of Evidence Expert Opinion rating was given to invasive angiography in patients with lifestyle-limiting claudication with an inadequate response to guideline-directed medical treatment (GDMT) when revascularization is considered. The risk of invasive angiography can be less than that of noninvasive studies, particularly in advanced chronic kidney disease, as the contrast dose is lower in the invasive scenario. The committee concluded that invasive and noninvasive angiography is not recommended in asymptomatic peripheral arterial disease (Class of Recommendation: Harm; Level of Evidence B-R (Randomized)).¹³

Woo and colleagues (2022) published the Society of Vascular Surgery appropriate use criteria for management of intermittent claudication. 2280 unique intermittent claudication treatment scenarios were rated. Invasive treatment recommendations were made for patients who have completed exercise therapy, are nonsmokers, and are on optimal medical therapy with severe lifestyle limitations. The group stated that there is an unclear benefit and possible harm related to invasive intervention in the infrapopliteal segment for intermittent claudication.⁷

Conte et al. (2019) developed global vascular guidelines for the management of CLTI. The group proposed a new anatomic scheme for threatened limbs, the Global Limb Anatomic Staging System (GLASS). This integrated, limb-based approach is based on a set of clinical assumptions and simplified approaches to stratification. They make a strong recommendation for revascularization to all average-risk patients with advanced limb-threatening conditions and significant perfusion deficits. There was a weak recommendation for revascularization in average-risk patients with intermediate limb threat (based on a scoring tool such as Wifi). It is stated that a more in-depth study is required regarding the relationship between regional ischemia and patterns of infrapopliteal and pedal disease.³

References

1. Omeh DJ, Shlofmitz E. Angiography. [Updated 2023 Aug 7]. In: StatPearls [Internet]. Treasure Island (FL): StatPearls Publishing; 2025 Jan. <https://www.ncbi.nlm.nih.gov/books/NBK557477/>
2. Patel MR, Bailey SR, Bonow RO, et al. ACCF/SCAI/AATS/AHA/ASE/ASNC/HFSA/HRS/SCCM/SCCT/SCMR/STS 2012 appropriate use criteria for diagnostic catheterization: A report of the American College of Cardiology Foundation Appropriate Use Criteria Task Force, Society for Cardiovascular Angiography and Interventions, American Association for Thoracic Surgery, American Heart Association, American Society of Echocardiography, American Society of Nuclear Cardiology, Heart Failure Society of America, Heart Rhythm Society, Society of Critical Care Medicine, Society of Cardiovascular Computed Tomography, Society for Cardiovascular Magnetic Resonance, and Society of Thoracic Surgeons. *J Am Coll Cardiol*. 2012 May 29;59(22):1995–2027. doi: 10.1016/j.jacc.2012.03.003. Epub 2012 May 9. PMID: 22578925
3. Conte MS, Bradbury AW, Kolh P, et al. Global vascular guidelines on the management of chronic limb-threatening ischemia. *J Vasc Surg*. 2019;69(6):3S–125S.e40. doi:10.1016/j.jvs.2019.02.016
4. Aday AW, Kinlay S, Gerhard-Herman MD. Comparison of different exercise ankle pressure indices in the diagnosis of peripheral artery disease. *Vasc Med*. 2018 Dec;23(6):541–548. doi: 10.1177/1358863X18781723. Epub 2018 Jul 11. PMID: 29992854; PMCID: PMC6494702
5. Mazzolai L, Teixido-Tura G, Lanzi S, et al. 2024 ESC guidelines for the management of peripheral arterial and aortic diseases. *Eur Heart J*. 2024 Sep 29;45(36):3538–3700. doi: 10.1093/eurheartj/ehae179. PMID: 39210722
6. Klein AJ, Jaff MR, Gray BH, et al. SCAI appropriate use criteria for peripheral arterial interventions: An update. *Catheter Cardiovasc Interv*. 2017 Oct 1;90(4):E90–E110. doi: 10.1002/ccd.27141. Epub 2017 Jun 5. PMID: 28489285

7. Woo K, Syracuse JJ, Klingbell K, et al. Society for Vascular Surgery appropriate use criteria for management of intermittent claudication. *J Vasc Surg.* 2022; 76(1): 3–22 e21
8. Benowitz NL, Bernert JT, Foulds J, et al. Biochemical verification of tobacco use and abstinence: 2019 update. *Nicotine Tob Res.* 2020;22(7):1086–1097. doi:10.1093/ntr/ntz132
9. Gornik HL, Aronow HD, Goodney PP, et al. 2024 ACC/AHA/AACVPR/APMA/ABC/SCAI/SVM/SVN/SVS/SIR/VESS Guideline for the management of lower extremity peripheral artery disease: A report of the American College of Cardiology/American Heart Association Joint Committee on Clinical Practice Guidelines. *Circulation.* 2024 Jun 11;149(24):e1313–e1410. doi: 10.1161/CIR.0000000000001251. Epub 2024 May 14. Erratum in: *Circulation.* 2025 Apr 8;151(14):e918. doi: 10.1161/CIR.0000000000001329. PMID: 38743805
10. Topfer LA, Spry C. New technologies for the treatment of peripheral artery disease. 2018 Apr 1. In: CADTH Issues in emerging health technologies. Ottawa (ON): Canadian Agency for Drugs and Technologies in Health; 2016–2021. 172. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK519606/>
11. Criqui MH, Matsushita K, Aboyans V, et al. Lower extremity peripheral artery disease: Contemporary epidemiology, management gaps, and future directions: A scientific statement from the American Heart Association. *Circulation.* 2021 Aug 31;144(9):e171–e191. doi: 10.1161/CIR.0000000000001005. Epub 2021 Jul 28. Erratum in: *Circulation.* 2021 Aug 31;144(9):e193. doi: 10.1161/CIR.0000000000001019. PMID: 34315230; PMCID: PMC9847212
12. Henry JC, Franz RW. Pseudoaneurysms of the peripheral arteries. *Int J Angiol.* 2019 Mar;28(1):20–24. doi: 10.1055/s-0039-1677676. Epub 2019 Jan 22. PMID: 30880887; PMCID: PMC6417897
13. Gerhard-Herman MD, Gornik HL, Barrett C, et al. 2016 AHA/ACC Guideline on the Management of Patients With Lower Extremity Peripheral Artery Disease: A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines. *Circulation.* 2017 Mar 21;135(12):e726–e779. doi: 10.1161/CIR.0000000000000471. Epub

2016 Nov 13. Erratum in: Circulation. 2017 Mar 21;135(12):e791-e792. doi: 10.1161/CIR.0000000000000502. PMID: 27840333; PMCID: PMC5477786

14. ACR Committee on Drugs and Contrast Media. ACR Manual on Contrast Media. American College of Radiology. 2025.
<https://www.acr.org/Clinical-Resources/Clinical-Tools-and-Reference/Contrast-Manual>

Policy Revision History/Information

Original Date: May 23, 2024		
Review History		
Version 1	05/23/2024	New policy.
Version 2	08/06/2024	Updated indications, non-indications, and references.
Version 3	08/14/2025	<p>Annual review.</p> <p>Added a new Description section.</p> <p>Simplified indications throughout the policy, including removing several clinical findings and test results.</p> <p>One relative non-indication was removed.</p> <p>Additional citations were added throughout the indications section.</p> <p>Added CPT code 36248.</p>