New Century Health

Cardio Policy:

Ankle Brachial Index

POLICY NUMBER UM CARDIO_1078	**SUBJECT** Ankle Brachial Index	**DEPT/PROGRAM** UM Dept	**PAGE 1 OF 4**
DATES COMMITTEE REVIEWED 04/01/11, 11/07/12, 06/16/14, 02/19/15, 08/12/15, 11/23/16, 12/21/16, 10/10/17, 02/13/19, 02/21/19, 04/09/19, 05/08/19, 12/11/19, 05/13/20, 07/31/20, 01/13/21, 03/10/21, 08/11/21, 02/09/22	**APPROVAL DATE** February 9, 2022	**EFFECTIVE DATE** February 25, 2022	**COMMITTEE APPROVAL DATES** 04/01/11, 11/07/12, 06/16/14, 02/19/15, 08/12/15, 11/23/16, 12/21/16, 10/10/17, 02/13/19, 02/21/19, 04/09/19, 05/08/19, 12/11/19, 05/13/20, 07/31/20, 01/13/21, 03/10/21, 08/11/21, 02/09/22
PRIMARY BUSINESS OWNER: UM		**COMMITTEE/BOARD APPROVAL** Utilization Management Committee	
URAC STANDARDS HUM v8: UM 1-2; UM 2-1	**NCQA STANDARDS** UM 2	**ADDITIONAL AREAS OF IMPACT**	
CMS REQUIREMENTS	**STATE/FEDERAL REQUIREMENTS**	**APPLICABLE LINES OF BUSINESS** Commercial, Exchange, Medicaid	

I. PURPOSE

Indications for determining medical necessity for ankle brachial index.

II. DEFINITIONS

The Ankle Brachial Pressure Index, known more commonly as an ABI, is the ratio of the blood pressure in the lower legs to the blood pressure in the arms. Compared to the arm, lower blood pressure in the leg is an indication of blocked arteries (peripheral vascular disease). The ABI is calculated by dividing the systolic blood pressure at the ankle by the systolic blood pressures in the arm while a person is at rest.

An appropriate diagnostic or therapeutic procedure is one in which the expected clinical benefit exceeds the risks or negative consequences of the procedure by a sufficiently wide margin such that the procedure is generally considered acceptable or reasonable care. The ultimate objective of AUC is to improve patient care and health outcomes in a cost–effective manner but is not intended to ignore ambiguity and nuance intrinsic to clinical decision making.

Appropriate Care- Median Score 7-9

May be Appropriate Care- Median Score 4-6

Rarely Appropriate Care- Median Score 1-3

III. POLICY

Indications for medical necessity determinations are:

A. Patients with atypical leg pain and/ or claudication with prior established diagnosis of peripheral artery disease (PAD) with no prior ABI within the last 12 months. **(AUC Score 8)**[1,2,3,4]

B. Asymptomatic/Symptomatic patients with no prior established diagnosis of PAD who have absent or diminished infra- popliteal pulses or femoral bruit by physical examination with no prior ABI done within the last 12 months. **(AUC Score 8)**[1,2,3,4]

C. Patients with DM-2 in absence of claudication presenting with absence of or diminished femoral-popliteal pulses with no prior ABI done within the last 12 months. **(AUC Score 8)**[1,2,3,4]

D. Asymptomatic/Symptomatic patients with no prior established diagnosis of PAD who have ulcer(s) or infection on their lower extremity with no prior ABI done within the last 6 months since onset of ulcer/infection. **(AUC Score 9)**[1,2,3,4]

E. Asymptomatic/Symptomatic patients with no prior established diagnosis of PAD but is at increased risk for PAD (age >50years, presence of Diabetes Mellitus and/or history of smoking) with no prior ABI done within the last 12 months **(AUC Score 6)**[1,2,3,4]

F. Evaluation of asymptomatic patient with PAD risk factors- age ≥ 65 years or Age 50-64 years with one or more risk factors for atherosclerosis (diabetes mellitus, history of smoking, hyperlipidemia, hypertension, family history of PAD) or with known atherosclerotic disease in another vascular bed (coronary, carotid, subclavian, renal, mesenteric artery stenosis, or AAA) and with no prior diagnosis of lower extremity PAD and with moderately abnormal quantified volume plethysmography (Quantaflo) result: <0.9. No prior ABI or arterial duplex done within last 6 months. **(AUC Score 6)**[2,5]

G. Rest pain associated with absent pulses with no prior ABI done within the last 6 months. **(AUC Score 9)**[1,2,3,4]

H. Surveillance ABI in asymptomatic patients after lower extremity Percutaneous or Surgical intervention can be done within 6 weeks after intervention, as a baseline. **(AUC Score 8)**[1,2,3,4]

I. Surveillance ABI in asymptomatic patients after lower extremity Surgical Intervention can be done at 6 months after baseline study. **(AUC Score 8)**[1,2,3,4]

J. Surveillance ABI in an asymptomatic patient after lower extremity Percutaneous or Surgical Intervention is appropriate annually, after the baseline study. **(AUC Score 7)**[1,2,3,4]

K. Evaluation of upper extremity with ABI is appropriate in presence of claudication, ulcer, suspected thoracic outlet syndrome, trauma, re-op radial artery harvest for CABG, presence of pulsatile mass or evidence of ischemia or bruit after vascular access with no prior ABI done within the last 6 months since onset of new symptoms and signs. **(AUC Score 8)**[1,2,3,4]

L. Evaluation of a patient who has undergone upper extremity Percutaneous or Surgical Intervention, presenting with new or worsening lifestyle-limiting claudication despite being on pharmacological therapy with no prior ABI performed since onset of new symptoms. **(AUC Score 8)**[1,2,3,4]

M. Surveillance of upper extremity PAD after revascularization is appropriate if done within one month of procedure as baseline. **(AUC Score 8)**[1,3]

N. Surveillance duplex in asymptomatic patients after upper extremity surgical intervention can be done at 6 months following baseline study post intervention. **(AUC Score 7)**[1,2,3,4]

O. Surveillance duplex in asymptomatic patients after upper extremity Percutaneous or Surgical intervention can be done annually for 3 years provided there is no change in clinical status, after baseline study post intervention. **(AUC Score 7)**[1,2,3,4]

Limitations:

A. Continuous burning of the feet is considered to be a neurologic and not a vascular symptom.

B. Non-specific leg pain in limb with normal pulses is considered too general to warrant vascular testing

C. Edema rarely occurs with arterial occlusive disease.

D. ABI is not to be utilized to follow non-invasive medical treatment regimens.

E. The use of non-invasive physiologic and imaging studies for post catheter-based or surgical intervention surveillance as per H-J and M-O above is limited to one modality i.e., either ABI or PVR or duplex ultrasound. Utilization of that chosen modality must be consistent throughout the surveillance period. Additional modalities may be utilized only if clinical or symptomatic changes are documented.

F. Requests for services that are part of a surveillance protocol for patients who are involved in a clinical trial are considered out of scope (OOS) for New Century Health and cannot be reviewed.

IV. PROCEDURE

A. In order to review a request for medical necessity, the following items must be submitted for review:

1. Cardiologist/Vascular Surgeon progress note that prompted request
2. All previous vascular studies preformed

B. Primary code appropriate for this service: 93922

V. APPROVAL AUTHORITY

A. Review – Utilization Management Department

B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

A. None

VII. REFERENCES

1. Centers for Medicare and Medicaid Services. Local Coverage Determination (LCD) (L33696). Noninvasive Physiologic Studies of Upper or Lower Extremity Arteries. Retrieved from https://www.cms.gov April 23rd, 2019.
2. Marie D. Gerhard-Herman, et al. 2016 AHA/ACC Guideline on the Management of Patients with Lower Extremity Peripheral Artery Disease: Executive Summary A Report of the American College of Cardiology/American Heart Association Task Force on Clinical Practice Guidelines; Circulation. 2017;135: e686–e725. DOI: 10.1161

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3. Heather L.Gornik MD, FACC, et al. ACCF/ACR/AIUM/ASE/ASN/ICAVL/SCAI/SCCT/SIR/SVM/SVS2012 Appropriate Use Criteria for Peripheral Vascular Ultrasound and Physiological Testing Part I: Arterial Ultrasound and Physiological Testing :A Report of the American College of Cardiology Foundation Appropriate Use Criteria Task Force, American College of Radiology, American Institute of Ultrasound in Medicine, American Society of Echocardiography, American Society of Nephrology, Inter-societal Commission for the Accreditation of Vascular Laboratories ,Society for Cardiovascular Angiography and Interventions, Society of Cardiovascular Computed Tomography, Society for Interventional Radiology, Society for Vascular Medicine, and Society for Vascular Surgery. Journal of the American College of Cardiology. July 2012, Volume 60, Issue 3, Pages 242-276.
4. Robert C.HendelMD, FACC, et al. Appropriate use of cardiovascular technology: 2013 ACCF appropriate use criteria methodology update: a report of the American College of Cardiology Foundation appropriate use criteria task force. Journal of the American College of Cardiology. March 2013, Volume 61, Issue 12, Pages 1305-1317.
5. Diage et.al Digital ankle-brachial index technology used in primary care settings to detect flow obstruction: a population-based registry study. BMC Res Notes. 2013; 6: 404.
6. NCQA UM 2022 Standards and Elements.