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, 12/14/22, 05/10/23, 12/20/23	APPROVAL DATE December 20, 2023	EFFECTIVE DATE December 22, 2023	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, 12/14/22, 05/10/23, 12/20/23	
PRIMARY BUSINESS OWNER: UM		COMMITTEE/BOARD APPROVAL Utilization Management Committee		
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)**[1,2,3,4,5,6]

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)**[1,2,3,4,5,6]

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)**[1,2,3,4,5,6]

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)**[1,2,3,4,5,6]

E. Asymptomatic/Symptomatic patients with no prior established diagnosis of PAD but is at increased risk for PAD (age greater than 50years, presence of Diabetes Mellitus and/or history of smoking) with no prior ABI done within the last 12 months **(AUC Score 6)**[1,2,3,4,5,6]

F. Evaluation of asymptomatic patient with PAD risk factors age greater than or equal to 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: less than 0.9. No prior ABI or arterial duplex done within last 6 months. **(AUC Score 6)**[4,7]

G. Rest pain associated with absent pulses with no prior ABI done within the last 6 months. **(AUC Score 9)**[1,2,3,4,5,6]

H. An initial surveillance duplex in asymptomatic patients after lower extremity percutaneous or surgical intervention can be done as a baseline. **(AUC Score 8)**[1,2,3,4,5,6]

I. Surveillance ABI in asymptomatic patients after lower extremity Surgical Intervention can be done at 6 months after baseline study. **(AUC Score 8)**[1,2,3,4,5,6]

J. Surveillance ABI in an asymptomatic patient after lower extremity Percutaneous or Surgical Intervention is appropriate annually, after the baseline study. **(AUC Score 7)**[1,2,3,4,5,6]

K. Evaluation of upper extremity with ABI is appropriate in presence of claudication, ulcer, suspected thoracic outlet syndrome, trauma, pre-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)**[1,2,3,4,5,6]

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)**[1,2,3,4,5,6]

M. Surveillance of upper extremity PAD after revascularization is appropriate if done within one month of procedure as baseline. **(AUC Score 8)**[1,2,3,5]

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)**[1,2,3,4,5,6]

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)**[1,2,3,4,5,6]

P. ABI is considered appropriate to perform, to screen for peripheral arterial insufficiency as initial work up, prior to any organ transplant, no prior ABI within the last 6 months. **(AUC Score 7)**[9]

Q. Exercise ABI may be an appropriate test in patients with PAD risk factors, with either prior normal resting ABI within the last 6 months or no resting ABI has been done. Performing resting ABI will not give additional information to the physician. **(AUC Score 7)**[10,11]

R. Exercise ABI is helpful in symptomatic patients with prior aortoiliac interventions suggestive for progression of Aorto-iliac arterial disease. **(AUC Score 8)**[12]

S. Exercise ABI can be performed for post Aorto-iliac artery intervention if resting ABI is inconclusive, at 1, 6, and 12 months post intervention. **(AUC Score 7)**[12]

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. It is preferred that 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. It is also preferred that utilization of that chosen modality be consistent throughout the surveillance period. Additional modalities may be utilized only if clinical or symptomatic changes are documented.

F. The use of non-invasive physiologic and imaging studies for screening, or initial workup as per I-J and N-O above is limited to one modality i.e., either ABI or PVR or duplex ultrasound.

G. 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 –Rest ABI

   93924 – Exercise ABI

V. APPROVAL AUTHORITY

A. Review – Utilization Management Department

B. Final Approval – Utilization Management Committee

VI. ATTACHMENTS

A. None

VII. REFERENCES

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