

# Cardio Policy:

## Abdominal Aortic Ultrasound

<b>POLICY NUMBER</b> UM CARDIO_1126	<b>SUBJECT</b> Abdominal Aortic Ultrasound		<b>DEPT/PROGRAM</b> UM Dept	<b>PAGE 1 OF 4</b>
<b>DATES COMMITTEE REVIEWED</b> 07/22/11, 12/12/12, 03/10/14, 06/16/14, 02/19/15, 08/12/15, 11/28/16, 12/21/16, 10/10/17, 02/13/19, 03/08/19, 05/08/19, 12/11/19, 05/13/20, 10/14/20, 04/14/21, 06/09/21, 08/11/21, 08/10/22, 12/14/22, 05/10/23, 12/20/23	<b>APPROVAL DATE</b> December 20, 2023	<b>EFFECTIVE DATE</b> December 22, 2023	<b>COMMITTEE APPROVAL DATES</b> 07/22/11, 12/12/12, 03/10/14, 06/16/14, 02/19/15, 08/12/15, 11/28/16, 12/21/16, 10/10/17, 02/13/19, 03/08/19, 05/08/19, 12/11/19, 05/13/20, 10/14/20, 04/14/21, 06/09/21, 08/11/21, 08/10/22, 12/14/22, 05/10/23, 12/20/23	
<b>PRIMARY BUSINESS OWNER: UM</b>		<b>COMMITTEE/BOARD APPROVAL</b> Utilization Management Committee		
<b>URAC STANDARDS</b> HUM v8: UM 1-2; UM 2-1	<b>NCQA STANDARDS</b> UM 2		<b>ADDITIONAL AREAS OF IMPACT</b>	
<b>CMS REQUIREMENTS</b>	<b>STATE/FEDERAL REQUIREMENTS</b>		<b>APPLICABLE LINES OF BUSINESS</b> Commercial, Exchange, Medicaid	

### I. PURPOSE

Indications for determining medical necessity for an abdominal aortic ultrasound.

### II. DEFINITIONS

An abdominal ultrasound uses reflected sound waves to obtain anatomic and physiologic information of the abdominal aorta. It is commonly performed to diagnose an abdominal aortic aneurysm. An abdominal aortic aneurysm is defined as an increased internal diameter of the abdominal aorta of 3 cm or greater.

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 approving a request for medical necessity are:**

- A. Evaluation of a patient who has sustained trauma to the abdominal, pelvic, and/or retroperitoneal area resulting in a possible injury to the arterial inflow and/or venous outflow of the abdominal, pelvic, and/or retroperitoneal organs. **(AUC Score 7)**<sup>1,5,6</sup>

- B. Evaluation of a patient with an abdominal bruit. **(AUC Score 7)<sup>1,2,3,7,8</sup>**
- C. Confirm a suspicion of an abdominal or iliac aneurysm raised by a physical examination or noted as an incidental finding on another radiological examination. The physical examination usually reveals a palpable, pulsatile, and non-tender abdominal mass. **(AUC Score 7)<sup>1,2,3,7,8</sup>**
- D. Surveillance of known Iliac artery aneurysm with duplex:
  - 1. Less than 3.0 cm does not require surveillance
  - 2. 3.0 to 3.5 cm, follow-up with ultrasound initially at 6 months, then yearly if stable **(AUC Score 7)<sup>6</sup>**
  - 3. Greater than 3.5 cm, follow up with ultrasound every 3-6 months until intervention **(AUC Score 7)<sup>6</sup>**
- E. Surveillance of known AAA with duplex:
  - 1. Aortic diameter less than 2.5 cm is inappropriate
  - 2. Aortic diameter 2.5 to 2.9 cm, can follow-up with ultrasound in 10 years **(AUC Score 7)<sup>5</sup>**
  - 3. 3.0 to 3.9 cm, follow-up with ultrasound scan every 3 years **(AUC Score 7)<sup>5</sup>**
  - 4. 4.0 to 4.9 cm, once every year **(AUC Score 7)<sup>5</sup>**
  - 5. Greater than or equal to 5.0 cm, once every 6 months **(AUC Score 7)<sup>5</sup>**
  - 6. Any size AAA with new or worsening symptoms **(AUC Score 7)<sup>1,2,3,7,8</sup>**
- F. Surveillance after AAA intervention (Stents or Surgical repair):
  - 1. Any new or worsening lower extremity symptoms post intervention. **(AUC Score 8)<sup>1,2,3,7,8</sup>**
  - 2. Duplex after aortic and/or iliac endograft or stent can be done within 1 month after intervention, as a baseline. **(AUC Score 8)<sup>1,2,3,7,8</sup>**
  - 3. Duplex for Aortic endograft leak and /or increasing residual aneurysm sac size can be done at 6 months after baseline study. **(AUC Score 8)<sup>1,2,3,7,8</sup>**
  - 4. Duplex for Aortic endograft or open repair without endo leak and/or increasing residual aneurysm sac size is appropriate annually, after the baseline study. **(AUC Score 7)<sup>1,2,3,7,8</sup>**
- G. Evaluate patients for AAA, presenting with signs and symptoms of thoracic aneurysm measuring greater than or equal to 4.0cm. **(AUC Score 8)<sup>1,2,3,7,8</sup>**
- H. One-time Screening in asymptomatic patients:
  - 1. Men age 65-75 years who have ever smoked. **(AUC Score 8)<sup>3,8</sup>**
  - 2. Men age 65-75 years who have never smoked but have first degree relative with an AAA. **(AUC Score 7)<sup>3,8</sup>**  
*\*Screening is not recommended in men or women of any age who have neither smoking history nor a family history of AAA.*
- I. Initial evaluation of a patient presenting with signs and symptoms such as intermittent claudication in the calf muscles, thighs and/or buttocks, rest pain, weakness in legs or feeling of tiredness in the buttocks, etc. which may suggest occlusive disease of the aorta and iliac arteries. **(AUC Score 6)<sup>1,2,3,7,8</sup>**
- J. To evaluate patients presenting with complaints of pain in the calf or thigh, slight swelling in the involved leg, tenderness of the iliac vein, etc. which may suggest phlebitis or thrombophlebitis of the iliac vein or IVC. **(AUC Score 6)<sup>1,2,3,7,8</sup>**

- K. Abdominal Duplex is appropriate to perform, to evaluate retroperitoneal vasculature structures as initial workup, prior to any organ transplant, no prior ultrasound within the last 6 months. **(AUC Score 7)**<sup>10,11,12,13</sup>

**Limitations:**

- A. Surveillance with AAA duplex for Aortic diameter less than 3.0 cm is inappropriate
- B. Screening for AAA is not routinely recommended in men aged 65-75 years who have never smoked as evidence indicate that the net benefit of screening all men in this group is small. To determine whether this service is appropriate, patients and clinicians should consider the patient's medical history, family history for AAA, other risk factors, and personal values
- C. USPSTF recommends against routine screening for AAA with ultrasonography in women who have never smoked and have no family history of AAA.
- D. USPSTF recommends against routine screening for AAA in women aged 65-75 years who have ever smoked or have a family history of AAA due to insufficient evidence to assess the balance of benefits and harms for screening for AAA.
- E. Duplex testing should be reserved for specific indications for which the precise anatomic information obtained by this technique is likely to be useful. Therefore, it would be rare to see duplex scanning being performed for conditions in which another diagnostic test is recommended (e.g., an aortic dissection is better diagnosed with a chest x-ray, Trans esophageal echocardiogram or aortography).
- 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. To review a request for medical necessity, the following items must be submitted for review
  - 1. Cardiologist or Vascular Surgeon's note that prompted the request
  - 2. Previous AAA duplex/CTA/MRA aorta/Angiogram or AAA operative report
- B. Primary codes appropriate for this service: 93978- (complete duplex scan of abdominal vasculature including aorta, IVC, illiacs, or bypass grafts), 93979- (limited duplex scan for abdominal aorta or IVC or illiacs or bypass grafts only), 76706- (Screening for AAA – once in a patient lifetime if criteria for screening are met).

#### **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. Florida Local Coverage Determination (LCD) (L33674). Duplex Scanning. Retrieved from <https://www.cms.gov> [Accessed December 19, 2023].

2. Centers for Medicare and Medicaid Services. Michigan Local Coverage Determination (LCD) (L35755). Duplex Scanning. Retrieved from <https://www.cms.gov> [Accessed December 19, 2023].
3. Centers for Medicare and Medicaid Services. Illinois Local Coverage Determination (LCD) (L33627). Duplex Scanning. Retrieved from <https://www.cms.gov> [Accessed December 19, 2023].
4. U.S. Preventive Services Task Force Screening for Abdominal Aortic Aneurysm: Recommendation Statement. December 2019-  
<https://uspreventiveservicestaskforce.org/uspstf/recommendation/abdominal-aortic-aneurysm-screening>
5. Elliot Chaikof, et al. The Society for Vascular Surgery practice guidelines on the care of patients with an abdominal aortic aneurysm. *J Vasc Surg* 2018; 67(1):2-77.
6. Faisal Khosa, et al. Managing Incidental Findings on Abdominal and Pelvic CT and MRI, Part 2: White Paper of the ACR Incidental Findings Committee II on Vascular Findings. *J of Am Col Rad*. Vol 10, No. 10 Oct 2013, pp 789-794
7. Mohler III et al. ACCF/ACR/AIUM/ASE/ASN/ICAVL/SCAI/SCCT/SIR/SVM/SVS 2012 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, Intersocietal 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. *JACC* Vol. 60, No. 3, 2012, Pages 242-276.
8. Robert C. Hendel MD, FACC, FAHA, 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 1305-131
9. NCQA UM 2023 Standards and Elements.
10. Pre-Renal Transplant Risk Stratification. *J Am Coll Cardiol Img*. 2018 Jun, 11 (6) 855–858. <https://doi.org/10.1016/j.jcmg.2017.08.001>
11. DeBolle SA, Ochieng IA, Saha AK, Sung RS. Evaluation of the Effectiveness of Screening for Iliac Arterial Calcification in Kidney Transplant Candidates. *Ann Transplant*. 2020 Sep 15;25:e922178. doi: 10.12659/AOT.922178. PMID: 32929057; PMCID: PMC7518019.
12. Chadban, Steven J. BMed, PhD1Gregory A. MD, MSc15,\* . KDIGO Clinical Practice Guideline on the Evaluation and Management of Candidates for Kidney Transplantation. *Transplantation*: April 2020 - Volume 104 - Issue 4S1 - p S11-S103
13. Martin, P., DiMartini, A., Feng, S., Brown, R., Jr. and Fallon, M. (2014), Evaluation for liver transplantation in adults: 2013 practice guideline by the American Association for the Study of Liver Diseases and the American Society of Transplantation. *Hepatology*, 59: 1144-1165. <https://doi.org/10.1002/hep.26972>