

# Cardio Policy:

## Catheter Based Carotid Artery Digital Angiography

<b>POLICY NUMBER</b> UM CARDIO_1169	<b>SUBJECT</b> Catheter Based Carotid Artery Digital Angiography		<b>DEPT/PROGRAM</b> UM Dept	<b>PAGE 1 OF 4</b>
<b>DATES COMMITTEE REVIEWED</b> 09/09/11, 01/09/13, 08/22/13, 06/30/14, 08/12/15, 11/28/16, 12/21/16, 10/10/17, 01/20/18, 03/08/19, 05/08/19, 12/11/19, 05/13/20, 05/12/21, 08/11/21, 01/12/22, 01/11/23, 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> 09/09/11, 01/09/13, 08/22/13, 06/30/14, 08/12/15, 11/28/16, 12/21/16, 10/10/17, 01/20/18, 03/08/19, 05/08/19, 12/11/19, 05/13/20, 05/12/21, 08/11/21, 01/12/22, 01/11/23, 05/10/23, 12/20/23	
<b>PRIMARY BUSINESS OWNER:</b> UM		<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 Catheter Based Carotid Artery Digital Angiography.

### II. DEFINITIONS

Digital subtraction carotid artery angiography is a procedure performed in order to visualize the arterial supply to the brain and to ascertain presence of blockage in the extra cranial carotid arteries.

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. When an extra cranial source of ischemia is not identified in patients with transient retinal or hemispheric neurological symptoms of suspected ischemic origin, angiography can be useful to search for intracranial vascular disease. **(AUC Score 6)**<sup>1,2,3,4</sup>

- B. When intervention for significant carotid stenosis detected by carotid duplex ultrasonography is planned, catheter-based contrast angiography can be useful to evaluate the severity of stenosis and to identify intrathoracic or intracranial vascular lesions that are not adequately assessed by duplex ultrasonography. **(AUC Score 6)**<sup>1,2,3,4</sup>
- C. When noninvasive imaging is inconclusive or not feasible because of technical limitations or contraindications in patients with transient retinal or hemispheric neurological symptoms of suspected ischemic origin, or when noninvasive imaging studies yield discordant results, it is reasonable to perform catheter-based contrast angiography to detect and characterize extra cranial and/or intracranial cerebrovascular disease. **(AUC Score 5)**<sup>1,2,3,4</sup>
- D. Catheter-based angiography may be necessary in some cases for definitive diagnosis or to resolve discordance between non-invasive imaging findings **(AUC Score 5)**<sup>1,2,3,4</sup>
- E. Angiography may be the preferred method for evaluation of extra cranial vascular disease (ECVD) when obesity, renal dysfunction, or in dwelling ferromagnetic material renders CTA or MRA technically inadequate or impossible. **(AUC Score 4)**<sup>1,2,3,4</sup>
- F. Subclavian Angiography can be performed at the time of carotid angiography if medical history is consistent with upper extremity claudication, acute or chronic arterial trauma, thoracic outlet obstruction disease, certain vasculitis, and / or subclavian steal syndrome. **(AUC Score 5)**<sup>1,2,3,4</sup>
- G. Subclavian Angiography can be performed at the time of left heart diagnostic catheterization if medical history strongly indicates medical necessity for CABG (Subclavian Angiography is performed to identify Internal Mammary artery anatomy prior to CABG). **(AUC Score 6)**<sup>1,2,3,4</sup>
- H. Follow-up carotid angiogram can be performed in patients for surveillance who undergo intracranial intervention at 3 months, 6 months, 24 months, and then once in 3-5 years to assess the patency of intervened vessel. **(AUC Score 7)**<sup>4,6</sup>

**Limitations:**

- A. Catheter-based angiography is unnecessary for diagnostic evaluation of most patients with extra cranial vascular disease (ECVD) and is used increasingly as a therapeutic revascularization maneuver in conjunction with stent deployment. *This procedure cannot be reported if performed at the same setting along with Carotid stenting 37215 or 37216.*
- B. Carotid Angiogram when performed with Subclavian Angiography needs to be reported as 36225. No additional Carotid Angiogram codes needs to be reported.
- C. 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. Progress note that prompted request
  - 2. Carotid duplex/CTA/MRA Carotid report
- B. Primary codes appropriate for this service:
  - 36215 - Selective Catheter placement, arterial system, first order, (Thoracic or Brachiocephalic)
  - 36216 - Selective Catheter placement, arterial system, second order, (Thoracic or Brachiocephalic)

36217 - Selective Catheter placement, arterial system, third order, (Thoracic or Brachiocephalic)  
 36218 - Additional Second order and beyond, (Thoracic or Brachiocephalic)  
 36221 - non-selective catheter placement, Thoracic Aorta, with angiography of the extracranial carotid, vertebral and/or intracranial vessels  
 36222 - Carotid Angiography Selective Catheter placement – Common Carotid, unilateral  
 36223 - Selective Catheter placement – Common Carotid, unilateral, with angiography of the ipsilateral extracranial carotid circulation  
 36224 - Selective Catheter placement – Internal Carotid, unilateral, with angiography of the ipsilateral intracranial carotid circulation  
 36225 - Selective Catheter placement – Subclavian, unilateral, with angiography of the ipsilateral external carotid circulation  
 36226 - Selective Catheter placement – Vertebral artery, unilateral, with angiography of the ipsilateral vertebral circulation  
 36227 - Selective Catheter placement – External Carotid artery, unilateral, with angiography of the ipsilateral external carotid circulation

## V. APPROVAL AUTHORITY

- A. Review – Utilization Management Department
- B. Final Approval – Utilization Management Committee

## VI. ATTACHMENTS

- A. None

## VII. REFERENCES

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4. 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 1305-1317.
5. NCQA UM 2023 Standards and Elements.

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