Neuro-Vascular Intervention
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General Recommendations for Physician Dictations

• State the history, medical necessity, reasons for repeat diagnostic study after prior catheter angiography/CTA/MRA
• State the vascular access site(s)
• State the vessels catheterized, describing the catheter tip location, and any variant anatomy
• State the vessels injected, the areas imaged (for medical necessity), interpretation of findings, specific documentation of AVM, aneurysm, percentage stenosis, exact anatomic location of the lesions, spasm vs atherosclerotic stenoses. Thrombus removed or dissolved. CNS vs Extracranial work
• State the interventions and adjunctive procedures performed. Also any complications or additional treatments provided. Follow-up angiography after infusion or embolotherapy.
• State the specific devices and specialty supplies used during the procedure
Catheter Placement Codes

Selective codes

• Arteries above the diaphragm
  – 36215 – First order selective catheterization in a vascular family
  – 36216 – Second order selective catheterization in a vascular family
  – 36217 – Third order or higher selective catheterization in a vascular family
  – 36218 – Each additional second order or higher selective catheterization in a vascular family

• Arteries below the diaphragm
  – 36245 – First order selective catheterization in a vascular family
  – 36246 – Second order selective catheterization in a vascular family
  – 36247 – Third order or higher selective catheterization in a vascular family
  – 36248 – Each additional second order or higher selective catheterization in a vascular family
Coding Rules

• Concept of Vascular Families (separate trunks off the aorta or access vessel and all its branches)
• Do code to where the tip of the catheter is.
• Do code 36200 (aorta catheter placement) over other non-selective codes (36140, 36120).
• Do code each of the four separate vascular systems separately: arterial, venous, portal and pulmonary.
• Do code each vascular family separately, using modifiers to distinguish the different vessels.
Coding Rules

• Do not code for reforming catheters
• Do not code access site separately (sheath)
• Do not code for where the tip of the wire is
• Do not code for catheter placement in the aorta once a selective catheterization has occurred (unless there has been a separate puncture)
• Do not use -50 modifier for above diaphragm selective catheter placement codes 36215, 36216 or 36217
• Do not use code 36100
Procedures That Include Some Catheter Placements

- 37215 - Cervical carotid artery stent with distal protection
- 37216 - Cervical carotid artery stent without distal protection
- 0075T - Extracranial vertebral or intrathoracic carotid stent
- 0076T - Extracranial vertebral or intrathoracic stent - each additional vessel
- 61623 - Endovascular temporary balloon occlusion
- 61630 - Balloon angioplasty, intracranial
- 61635 - Intravascular stent(s), intracranial
- 61640 - Balloon dilation, intracranial vasospasm
- 61641 - Balloon dilation, each additional vessel - same vascular family
- 61642 - Balloon dilation, each additional vessel - different vascular family
3D Reconstructions

- 76376 – 3-Dimensional reconstructions of CT, MR, ultrasound including catheter based angiography not requiring an independent workstation
- 76377 – 3-Dimensional reconstructions of CT, MR, ultrasound including catheter based angiography which does require image post-processing on an independent workstation
- Need treating physician to order 3-D reconstructions
Spinal Angiography

• 75705 – *Per each artery imaged*
• 36215 – *Selective catheter placement above the diaphragm*
• 36245 – *Selective catheter placement below the diaphragm*
• 75726 – *Bronchial imaging (includes thoracic aortography)*
Spinal Angiography/Embolization Case 1: Unexplained subarachnoid hemorrhage: Selective bilateral bronchial (separate origins) off the aorta), selective injection of the ascending branch to the cervical cord off the right bronchial, selective injection and imaging of bilateral L-1 thru L3 lumbar arteries with additional selection and imaging of the artery of Adamkowicz off the right L-2 lumbar artery. AVM is supplied by this artery and is embolized after placement of a microcatheter into a third order branch. Two follow-up angiograms are necessary to complete the study.

36215-59
36216
36247
36245-5950 x 2
36245-59
75726
75726-59
75705
75705-59 x 6
75774
61624
75984
75898
75898-59
Spinal Angiography/Embolization Case 2:

Patient with L-2 osseous metastasis with back pain. A sheath is placed in the left common femoral artery. A selective catheter is advanced into both the right and left lumbar arteries at the L-1, L-2 and L-3 levels with diagnostic angiography performed. The L1 and L-2 left sided lumbar arteries supplied a hypervascular L-2 vertebral body metastasis. No AV shunting was seen and there appeared to be no supply to the cord. The other four vessels appeared normal with the Artery of Adamkowicz arising from L-1 on the right. A catheter is advanced into a second order branch of both the L-1 and L-2 vessels for selective embolization. Embolization is performed with a chemoembolic mixture until there is stasis of flow. Follow-up angiography from each vessel shows complete occlusion of flow to the tumor.
Embolization Case 2 Codes:

75705 – L-1 right spinal angiography, S&I
75705-59 x 5 – L-1 left, bilateral L-2 and L-3 spinal angiography, S&I
36245-59 x 4 – 1st order selective catheter placements
36246 – 2nd order selective catheter placement
36246-59 – 2nd order selective catheter placement
37204 – non-neuro embolization of vertebral body
75894 – embolization, S&I
75898 – follow-up angiography after embolization
Cervicocerebral

- Innominate artery = Brachiocephalic artery
- Variant anatomy includes bovine arch, common origin of the right brachiocephalic and the left common carotid, left vertebral originating directly off the arch, aberrant right subclavian and any combination of these variants
- The common and internal carotid arteries as well as the non-selective external carotid arteries are all included as a part of the cervical carotid angiography S&I codes (75676, 75680)
- Arch injection includes the transverse aorta, the proximal subclavian, vertebral and carotid arteries (not the carotid bifurcations or complete cervical vertebrals or complete extremities)
Cervicocerebral Case 3:
Arch injection with cervicocerebral arch, bilateral carotid cervical, bilateral carotid cerebral and bilateral vertebral imaging

36200 – *Catheter placement aorta*
75650 – *Arch aortogram S&I*
75671 – *Bilateral cerebral carotids, S&I*
75680 – *Bilateral cervical carotids S&I*
75685 – *Vertebral S&I*
75685-59 – *Vertebral S&I*
Cervicocerebral Case 4:
Arch, followed by selective bilateral carotid cervical and carotid cerebral imaging with selective left vertebral imaging. Normal anatomy.

36215-59 – 1\textsuperscript{st} order selective above diaphragm
36216-59 – 2\textsuperscript{nd} order selective above diaphragm
36216 – 2\textsuperscript{nd} order selective above diaphragm
75650 – Cervicocerebral arch, S&I
75680 – Bilateral cervical carotid angiogram, S&I
75671 – Bilateral cerebral carotid angiogram, S&I
75685 – Vertebral angiogram, S&I
Cervicocerebral Case 5:
Selective bilateral carotid cervical and carotid cerebral imaging with selective right vertebral catheter placement and imaging, bovine arch.

36218 – *Ea addtl selective above diaphragm*
36218 – *Ea addtl selective above diaphragm*
36217 – 3rd order selective above diaphragm
75680 – *Bilateral cervical carotid angiogram, S&I*
75671 – *Bilateral cerebral carotid angiogram, S&I*
75685 – *Vertebral angiogram, S&I*
Cervicocerebral Case 6:
Arch followed by selective bilateral internal carotid, bilateral external carotid and bilateral vertebral artery catheter placement with cerebral imaging (aneurysm work-up, left vertebral arises directly from the arch)

36215-59 – 1st order selective above diaphragm
36216-59 – 2nd order selective above diaphragm
36218 – Ea addtl 2nd or higher selective above diaphragm
36217 – 3rd order selective above diaphragm
36218 x 2 – Ea addtl 2nd or higher selective above diaphragm
75650 – Cervicocerebral arch, S&I
75671 – Bilateral cerebral carotid angiogram, S&I
75662 – Bilateral selective external carotid angiogram, S&I
75685 – Vertebral angiogram, S&I
75685-59 – Vertebral angiogram, S&I
Cervicocerebral Case 7:
Cervicocerebral arch imaging followed by selective bilateral carotid cervical and carotid cerebral imaging, right and left subclavian (arm) imaging on patient with an aberrant right subclavian artery origin. Bilateral 90% stenoses are present in the external carotid arteries.

36215 (1st order) 75650 (Arch)
36215-59 (1st order) 75680 (Bilat cervical carotids)
36215-59 (1st order) 75671 (Bilat cerebral carotids)
36215-59 (1st order) 75716 (Bilat extremities)
Venous Head and Neck Case 8:
Patient with abnormal signal in the superior sagittal sinus (SSS) suggesting thrombosis. Catheter was advanced from the femoral vein, up the right jugular, then a microcatheter was advanced through the transverse sinus into the SSS. Imaging of the jugular vein and SSS were separately performed with a normal jugular vein and thrombus in the SSS. Thrombolysis was initiated with TPA and the patient was sent to ICU.

36012 – Catheter placement into the SSS
75860 – Jugular venogram, S&I
75870 – Superior Sagittal Sinus venogram, S&I
37201 – Infusion thrombolysis
75896 – Infusion thrombolysis S&I
Venous Head and Neck Case 9:

30yo post MVA with suspected carotid cavernous fistula and weeping exophthalmos. Via bilateral femoral vein punctures, catheters are advanced up the jugular veins into the cavernous sinus bilaterally. A catheter is placed via the femoral artery into both internal carotid arteries. Arterial imaging shows the fistula on the right and good cerebral filling without thrombus or occlusion and bilateral venous imaging showing retrograde filling of the ophthalmic veins and rapid washout via the right side. The right side of the cavernous sinus is packed with coils to obliterate the fistula. Three follow-up images are necessary. These show safe coil placement and no residual flow in the fistula.
Venous Head and Neck Case 9 Codes:

36012-50 – *Bilateral venous catheter placement*
36216 -59 – *Left ICA catheter placement*
36217 – *Right ICA catheter placement*
75671 – *Bilateral cerebral angiography*
75860, 75860-59 – *Bilateral jugular venography*
61624 – *Intracranial embolization*
75894 – *Embolization S&I*
75898,75898-59 x 2 – *Follow-up embolotherapy per injection for cerebral therapy*
Carotid and Vertebral artery angioplasty without stent placement are non-covered services for Medicare patients. (CMS states the carotid artery is not a peripheral artery so do not use 75962, implies not to use 35475). Discuss this with your payer.

Brachiocephalic refers to the vessels arising from the cervicocerebral arch, including the upper extremities. The code 35475 applies to the right brachiocephalic artery, the right and left subclavian, axillary, brachial, radial and ulnar arteries of the upper extremities.
Intracranial angioplasty and intracranial stent placement are non-covered services by CMS. In 2006, new CPT codes were created for treatment of atherosclerosis and vasospasm. *Effective 2/2007 CMS recommends 37799 for intracranial angioplasty and stent placement for atherosclerotic stenoses but the physician and hospital must be part of Class B IDE study and the treatment is limited to atherosclerotic stenoses >50%. This was reconfirmed in 2008.

- 61630 – *Intracranial angioplasty for atherosclerosis*
- 61635 – *Intracranial stent for atherosclerosis (includes preliminary angioplasty)*

(These codes include ipsilateral catheter placement, initial and follow-up imaging, along with the intervention. If the diagnostic study shows that the intervention is not indicated, bill the diagnostic studies and catheter placements only. Most of the time the patient will already have a diagnostic study.)

*Medicare Claims Processing Manual*, Chapter 32 – Billing Requirements for Special Services, 161C – Intracranial PTA with Stenting, 1/5/07
Intracranial Angioplasty

- 61640 – Intracranial balloon angioplasty for vasospasm, initial vessel
- 61641 – Intracranial balloon angioplasty for vasospasm, each additional vessel in the same vascular family
- 61642 – Intracranial balloon angioplasty for vasospasm, each additional vessel in a different vascular family

(These codes include catheter placement, intra-procedural imaging, roadmapping, vessel measurements, and guidance, along with the intervention and follow-up imaging. If a diagnostic study is needed the day of the intervention, it is separately billable even if performed on the same date of service. Due to the rapidly changing clinical status in these patients it is common to have to perform repeat diagnostic studies. These codes also are non-covered by Medicare at this time).

For Medicare, consider coding the catheter placements and imaging procedures along with the non-covered code with -52 modifier attached (SIR website, 9/23/2007). This should be discussed with your MAC.)
Angioplasty Case 10:

48 year old patient with TIAs. Via right femoral approach an initial evaluation of the cerebral vasculature was performed with arch, bilateral cervical and cerebral angiography performed by selective common carotid catheter placements. This shows normal arch and left carotid cervical and cerebral vessels. The right M1 segment of the MCA shows a 90% atherosclerotic stenosis. This was treated initially with balloon dilation, showing suboptimal results, requiring stent placement. A Wingspan stent apparatus was initially deployed at 1.5mm in size but required subsequent further balloon dilation to 2.0mm. Stenosis in the right anterior cerebral artery was separately treated with the Gateway balloon for angioplasty alone without the need for stent placement. Follow-up angiography at 10 minutes showed no thrombus and patent vessels. Catheters were removed.
Angioplasty Case 10 Codes:

36215-59 - 1st order above diaphragm catheter placement, left common carotid

75650 – Cervicocerebral arch, S&I

75676 – Unilateral carotid cervical, S&I

75665 – Unilateral carotid cerebral, S&I

61630-59 – Balloon angioplasty, intracranial, initial vessel
(use 37799 for Medicare patients if criteria met and Class B IDE study participation)

61635 – Intracranial stent placement
(use 37799 for Medicare patients if criteria met and Class B IDE study participation)
Angioplasty Case 11:

28 year old with recent subarachnoid hemorrhage, now with decreasing mental status. Via right femoral puncture, a catheter was advanced into the right and left internal carotid and both vertebral arteries. Diagnostic angiography was performed. Vasospasm was seen in the right internal carotid circulation. Intracranial angioplasty for vasospasm was determined to be the best course of action. This was performed in the supraclinoid internal carotid artery, in the right middle cerebral artery M2 segment and in the right anterior cerebral artery. Follow-up angiography at 10 and 20 minutes showed excellent perfusion of distal carotid and cerebral vasculature.
Angioplasty Case 11 Codes:

36217 – 3rd order selective catheter placement - R vertebral
36216-59 – 2nd order selective catheter placement – L-carotid
36216-59 – 2nd order selective catheter placement – L- vertebral
75685 – Vertebral angiography, S&I
75685-59 – Vertebral angiography, S&I
75671 – Bilateral carotid cerebral angiography, S&I
61640 – Balloon dilation of intracranial vasospasm, initial vessel
61641 – Balloon dilation of intracranial vasospasm, each additional vessel in the same vascular family
61641 – Balloon dilation of intracranial vasospasm, each additional vessel in the same vascular family

61640 and 61641 are non-covered services for Medicare at this time.
Carotid Stent Placement

- 37215 – Carotid cervical stent placement with distal embolic protection
- 37216 – Carotid cervical stent placement without distal embolic protection

- 37215 & 37216 include:
  - Ipsilateral selective catheterization
  - Ipsilateral carotid cervical and cerebral artery S&I
  - All other related S&I during stent placement procedure
  - All road-mapping, guiding shots and follow-up images
  - All angioplasties within the region of stent deployment
  - 37215 remains an inpatient C-status indicator procedure (1/2010)

- Medicare expects you to abandon the case if EPD not possible
- Code 75962 not appropriate as the carotid artery is not a peripheral artery
Common Carotid and Vertebral Stent Placement

– 0075T – Percutaneous placement extracranial **vertebral or common carotid** stent, **initial vessel**
  – Includes radiological S&I, imaging and catheter placement

– 0076T – Percutaneous placement of **vertebral or common carotid** stent, each **additional vessel**
  – Includes radiological S&I, imaging and catheter placement
  – This is an add-on code to 0075T
Stent Placement Case 12:

Patient with Doppler stenoses of the left carotid and left vertebral arteries. Via femoral approach, arch exam followed by selective catheter placements with injection of contrast, imaging and findings via the right and left common carotid arteries and left vertebral arteries with imaging of the head and neck is performed. Arch, right cervical and cerebral arteries and basilar arteries are normal. The left proximal internal carotid and left vertebral origin are 90% stenosed. Using distal embolic protection, stents were placed in both vessels. Follow-up imaging is normal.
Stent Placement Case 12 Codes:

37215 – Cervical carotid stent placement
0075T – Vertebral artery stent placement
36216 – Right common carotid cath placement
75650 – Cervicocerebral arch S&I
75676 – Right cervical carotid S&I
75665 – Right cerebral carotid S&I

*This is an inpatient only procedure
Thrombolytic Infusion with Thrombectomy  Case 13:

43 year old patient presents with two hour history of left hemispheric stroke. Initial CT scan shows no intracranial bleed. Via a right femoral approach, arch, bilateral selective common carotid catheter placement with imaging of the cervical and cerebral vessels was performed. This demonstrated normal carotid bifurcations and normal left cerebral vessels. Right cerebral angiogram showed thrombus and occlusion of the M-1 and M2 segments of the MCA with some clot seen in two branches. Intracranial thrombolysis was initiated for 20 minutes (after balloon maceration) with follow-up angiography showing some improvement, however MERCI device was necessary to remove significant clot in the M2 segment and the two branches off the M1 segment. Follow-up showed further improvement. Thrombolysis was continued for another 20 minutes with 8mg TPA. The M1 and M2 segments of the middle cerebral artery along with two branches were selected with the microcatheter during the exam while imaging was used for guidance in these vessels. Symptoms were significantly improved as was intracranial flow on follow-up imaging. The sheath was removed and hemostasis obtained. Cardiology was consulted to evaluate for PFO. 22mm PFO was found on TEE and 1 week later the PFO was closed with a PFO occluder device.
Thrombolytic Infusion with Thrombectomy Case 13:

36217 – catheter placement in the M2 segment of right carotid
36218 x 2 – catheter placement into two branches of the M1 segment
36215-59 – catheter placement into the left common carotid
37201-59 – intracranial thrombolysis in the right brain
37184 – MERCI retrieval thrombectomy in the M2 segment right carotid
37185 – MERCI retrieval thrombectomy in two separate M1 segment branches
75650 – Cervicocerebral arch S&I
75671 – Bilateral cerebral angiography S&I
75680 – Bilateral carotid cervical angiography S&I
75896 – thrombolysis S&I
75898 – follow-up angiography after thrombolysis S&I
75898-59 – additional follow-up angiography after thrombolysis S&I

The PFO closure would be reported with code 93580 at the later session with Cardiology.
Non-Thrombolytic Infusion Therapy

- Papaverine, Verapamil, Vasopressin
- 37202, 75896 per separate vascular distribution (some payers allow only once per session)
- 37202 requires -59 modifier due to CCI edits with most procedures
- Add selective catheter placement codes
- Add diagnostic imaging performed
- Follow up angiography – 75898 (-59 for each additional)
- Do not use 37202 for injection of drugs (such as nitroglycerin, heparin or priscoline) into vessel
- Do not use 37202 for infusion of chemotherapy into liver.
- Do not use 37202 for infusion of Fenoldopam with Benephit catheter (LCD Medical Necessity issue)
- Use codes for balloon dilation of vasospasm if applicable (61640/41/42)
Non-Thrombolytic Infusion Case 14:

23 year old patient initially presented with a ruptured aneurysm and intracranial bleed treated with surgical clipping. He now has decreased level of consciousness suggesting vasospasm. Arch angiography demonstrates bovine configuration. No FMD or proximal vessel disease. Bilateral selective internal carotid and bilateral vertebral catheter placement with imaging demonstrated severe narrowing of the carotid cerebral vessels bilaterally. The vertebral cervical and cerebral arteries were normal. Selective Verapamil infusion was started for 30 minutes in each carotid vessel due to this severe vasospasm. Follow-up angiography shows improved flow in the intracranial vessels bilaterally.
Non-Thrombolytic Infusion Case 14 Codes:

36217  37202-59
36218 x 2  75896-59
36216-59  75898-59
75650
75671
75685
75685-59
Embolization

• Peripheral
  – 37204, 75894 (use all-inclusive code 37210 for fibroid embolization)
  – Per surgical site
  – Add selective catheter placement codes
  – Add diagnostic imaging performed
  – Follow up angiography – 75898 (use 75898 only once per surgical site for completion study)
Embolization

• Head and Neck – Non-central nervous system
  – 61626, 75894
  – Per surgical site
  – Add selective catheter placement codes
  – Add diagnostic imaging performed
  – Follow up angiography – 75898 (use 75898 only once per surgical site for completion study)
Embolization

• Head and Neck – Central nervous system (brain/spinal cord)
  – 61624, 75894
  – Per surgical site
  – Add selective catheter placement codes
  – Add diagnostic imaging performed
  – Follow up angiography – 75898 (use 75898 as often as deemed necessary to safely complete the procedure in head and neck, may need to use multiple times in the same vessel for complex embolizations, e.g., aneurysms)
Embolization

• Head and Neck – Central nervous system (brain/spinal cord)
  - 61624, 75894
  - Wide mouthed aneurysms may require use of a specialized stent to prevent reflux of coils out of the aneurysm and into the intracerebral vessels
  - These stents are the Neuroform and Enterprise
  - They are considered part of the embolization if performed at the same setting as the coil deployment. If done a couple weeks earlier, use code 61635 (but NOT for Medicare) to describe the procedure.
Embolization

• Carotid Test Occlusion – 61623
  – Includes (may not be billed separately)
    ♦ Selective catheterization of vessel to be occluded
    ♦ Monitoring
    ♦ Balloon inflation
  – Does not include (may be billed separately)
    ♦ Selective catheterization and angiography of other arteries
    ♦ Diagnostic angiography of the test vessel if initial diagnostic study performed immediately prior to occlusion
Intracranial Aneurysm Case 15:

39yo post subarachnoid hemorrhage with suspected aneurysm. A catheter is placed via the femoral artery into both internal carotid and both vertebral arteries. Bilateral cervical and cerebral angiograms were performed demonstrating a wide necked 4mm aneurysm in the supraclinoid right ICA. A base guide sheath was placed in the right proximal ICA, followed by placement of an Enterprise stent apparatus. This was deployed across the aneurysm, followed by placement of numerous helical platinum coils. Follow-up angiography was necessary and was performed after each of the following 14 coils that were placed. Coil positioning, flow dynamics and distal vasculature were evaluated prior to and after each coil detachment. Complete occlusion of the aneurysm was obtained.
Intracranial Aneurysm 15 Codes:

36217 – Catheter placement right ICA aneurysm
36216-59 – Catheter placement left ICA
36216-59 – Catheter placement left vertebral
36218 – Catheter placement right vertebral
75671 – Bilateral cerebral angiography S&I
75685, 75685-59 – Bilateral vertebral angiography S&I
61624 – Intracranial embolization (includes stent)
75894 – Embolization S&I
75898,75898-59 x 13 – Follow-up embolo/therapy per injection for cerebral therapy
Head and Neck Embolization Case 16:

70yo patient with nose bleed. Via transfemoral puncture, a catheter was placed in the aortic arch for imaging, followed by bilateral common carotid cervical imaging. The arch vessels were normal and there was no significant carotid disease. The external carotid arteries were selected and imaged bilaterally showing tortuous vessels but no stenoses. Super-selective catheter placement through both internal maxillary arteries into the sphenopalatine arteries was performed with imaging of the sphenopalatine arteries. These studies showed hypervascularity on the right and no intracranial collateralization. Embolization with 300-500 micron particles was performed. Follow-up angiography on each side showed decreased flow to the nasal region. The catheter and sheath were removed and the patient discharged home six hours later.
Head and Neck Embolization Case 16 Codes:

36017 – Right sphenopalatine catheter placement
36217-59 – Left sphenopalatine catheter placement
75650 – Cervicocerebral arch angiography S&I
75680 – Bilateral cervical carotid angiography S&I
75662 – Bilateral external carotid angiography S&I
75774 x 2 – Bilateral sphenopalatine artery angiography S&I
61626 – Head and neck embolization
75894 – Embolization S&I
75898 – Follow-up emboloetherapy per surgical site

61626 is an outpatient procedure
Embolization Case 17:

70yo patient with large falx meningioma. Via transfemoral puncture, a catheter was placed in the aortic arch for imaging, followed by bilateral common carotid cervical imaging. The arch vessels were normal and there was no significant carotid disease. The external carotid arteries were selected and imaged bilaterally showing tortuous vessels but no stenoses. Super-selective catheter placement through both internal maxillary arteries into the middle meningeal arteries was performed followed by diagnostic imaging of both the anterior and posterior divisions bilaterally after selective catheterization of each branch. These studies showed hypervascularility of the tumor from both anterior division vessels. There was no collateralization to non-target vessels. Embolization with 150-200 micron particles was performed bilaterally. Follow-up angiography on each side showed decreased flow to the tumor. The catheter and sheath were removed.
Embolization Case 17 Codes:

36217 – Right middle meningeal anterior division cath
36217-59 – Left middle meningeal anterior division cath
36218 x 2 – Right and left middle meningeal posterior division
75650 – Cervicocerebral arch angiography S&I
75680 – Bilateral cervical carotid angiography S&I
75662 – Bilateral external carotid angiography S&I
75774 x 4 – Bilateral anterior and posterior branch middle meningeal artery diagnostic angiography S&I
61624 – Intracranial tumor embolization
75894 – Embolization S&I
75898 x 2 – Follow-up embolotherapy as medically necessary for intracranial embolization

61624 is an inpatient procedure. This tumor is intracranial although the approach is via the external carotid artery.