2014 PROCEDURE INCLUSION/EXCLUSION CRITERIA

The VQI includes procedures performed for patients who were between the ages of 18 and 110 at the time of the procedure.

- **Carotid Artery Stent:**

Inclusion: Carotid artery stents that involve the carotid bifurcation or are isolated to the internal or common carotid artery that may be performed by percutaneous or open (cut down) approach. Both primary and redo stenting is included. Unlike other procedures, stenting for trauma is also included. Typically, the carotid bifurcation or internal carotid artery is treated, but sometimes an isolated common carotid stenosis is treated alone, or in combination with a bifurcation/internal carotid stent. The data entry form allows either or both locations to be recorded for compliance with CMS Carotid Stent reporting.

Exclusions:
- External Carotid Artery, Intracranial Carotid Artery stents (above C1)

- **Carotid Endarterectomy:**

Inclusion: Conventional or eversion endarterectomy of the carotid bifurcation that extends into the internal carotid artery. Both primary and redo operations are included, and specified on the data form. Concomitant procedures such as CABG or proximal carotid stenting are specified on the data form.

Exclusions:
- Isolated common or external carotid endarterectomy that does not involve the internal carotid artery, or bypass grafts for carotid disease. Such procedures are infrequently performed and should not be grouped with carotid Endarterectomy. Infected patches are excluded unless a distinct Endarterectomy is performed at the same surgical session.

- **Endovascular AAA Repair:**

Inclusion: Primary endovascular repair of degenerative infrarenal aortic aneurysms that may include iliac aneurysms. Uncovered stent grafts extending above the renal arteries are included.

Exclusions:
- Revision of previous endografts (which is captured on the follow-up form for that procedure).
- Supra-renal covered stents with renal fenestrations or branches (which are entered under TEVAR/Complex EVAR).
- Isolated iliac aneurysms if the endograft is not placed within the aorta, which are captured as peripheral vascular interventions.
- Operations done for infected aneurysms.
- Operations done for anastomotic aneurysm (Pseudoaneurysm) after previous open repair.
- EVAR performed for non-aneurysmal infrarenal pathology, such as isolated dissection or atherosclerotic occlusive disease (the latter is captured under PVI, the former is not captured in the VQI registry).
- Repair done for trauma

- **Hemodialysis Access:**

Inclusion: Arterio-venous fistulas or grafts. This includes A-V fistulas using transposed veins and A-V grafts using autogenous, prosthetic or biological material. Note: The second stage of a Hemodialysis Access procedure (ie. basilic transposition) should be captured on the early follow-up form for the original procedure entered in VQI.

Exclusions:
- Insertion of temporary cannulas that are not tunneled
- Tunneled Catheters
- Thrombectomy or revision of existing access (which is captured on follow-up form from initial access procedure)
- Percutaneous thrombectomy, angioplasty or stenting of existing access (which is captured on follow-up form from initial access procedure)
- DRIL or other procedure performed for ischemia related to existing access (which is captured on follow-up form from initial access procedure)

- **IVC Filter:**

Inclusion: Insertion of Inferior Vena Cava (IVC) filter, endovascular approach only, temporary or permanent. Placement can be in the iliacs or any portion of the inferior vena cava. The IVC Filter follow-up form should be completed at the time of filter retrieval. If the filter is not retrieved, follow-up should be done greater than 9 months from the procedure date.

Exclusions:
- Superior Vena Cava IVC filter
- Open insertion of IVC filter
- Repositioning or Retrieval of IVC filter (this is captured on the follow-up form)

- **Lower Extremity Amputation:**

Inclusion: All lower extremity amputations beginning at the pelvis (hindquarter), through the hip, femur, knee, tibia, fibula, ankle and ending with a transmetatarsal (TMA) through the foot. Also, includes disarticulation amputations when applicable. Amputation indications can be due to ischemic rest pain, ischemic tissue loss (ulcers/gangrene), acute ischemia, uncontrolled infection, or neuropathic tissue loss. Revisions at the same level of the amputation performed at a subsequent visit are only captured on the follow-up form. Any revision at a higher level performed at a subsequent visit would be recorded both on the follow-up form for the original amputation and as a new Lower Extremity Amputation procedure.

Exclusions:
- Toe amputations
- Trauma
- Frostbite
- Debilitating paralysis
- Tumors of the Musculoskeletal system
- Acute compartment syndrome

- **Lower Extremity Bypass-Infra-inguinal:**

Inclusion: Autogenous or prosthetic bypass in the leg that originates at or distal to the external iliac artery and terminates distal to the ipsilateral common femoris artery, that is performed for occlusive or true aneurysm disease. (Most infra-inguinal grafts originate at or distal to the common femoral artery, but occasionally the external iliac artery may be used for the proximal anastomosis, such as cases where extensive scar or infection exists at the CFA site) Both primary and redo bypass grafts are included. Redo bypass grafts do not include a portion of a previous infra-inguinal graft (see exclusions).

Exclusions:

- Bypass done for pseudoaneurysm or trauma
- Isolated femoral endarterectomy (femoral endarterectomy combined with PVI is captured on PVI form)
- Thrombectomy or embolectomy
- Bypass originating more proximal than the external iliac artery, (which are recorded as supra-inguinal).
- Revisions (open or endovascular) of previous bypass grafts (this treatment is captured on the follow-up form for the original bypass). Revisions are defined as surgery that maintains a portion of the original bypass graft.
- Infected aneurysm
- Redo bypass for infected graft

- **Lower Extremity Bypass-Supra-inguinal:**

Inclusion: Autogenous or prosthetic bypass that originates proximal to the external iliac artery or any cross-over bypass grafts that are performed for arterial occlusive disease. Both primary and redo bypass grafts are included. This category includes axillo, throaco, aorto and ilio femoral bypass, cross-over femoral or iliac bypass, and also grafts originating proximal to the external iliac that terminate in the leg.

Exclusions:

- Bypass done for trauma, dissection, or pseudoaneurysm
- Thrombectomy or embolectomy
- Isolated endarterectomy
- Bypass done to treat aortic or iliac aneurysms (aortic aneurysm are captured on the Open AAA form while isolated open iliac aneurysm repair is not captured, since these are so infrequent)
- Bypass originating at or distal to the external iliac artery which terminates in the ipsilateral leg (which are recorded as infra-inguinal).
- Revisions (open or endovascular) of previous bypass grafts (this treatment is captured as follow-up data from the original bypass). Revisions are defined as surgery that maintains a portion of the original bypass graft.
- Infected aneurysm
- Redo bypass for infected graft

- **Open AAA Repair:**

Inclusion: Primary open and conversion from endovascular repair of infra-renal aortic aneurysms that may include iliac aneurysm repair by abdominal surgery with the proximal anastomosis distal to the renal arteries. Suprarenal clamping is recorded, as is renal bypass for occlusive disease. Note that AAAs that are below the main renal arteries that require ligation of a small accessory renal artery are included.

Exclusions:

- Aortic aneurysms that involve a major renal artery such that the proximal aortic anastomosis is above at least one major renal artery so that re-implantation or bypass of a renal artery is required. Note that infra-renal AAA repair with renal bypass was done for renal artery occlusive disease is included and the renal bypass is captured as a concomitant procedure.
- Revisions of previous abdominal aortic aneurysm open repairs.
- Isolated iliac aneurysm that does not involve anastomosis to the aorta.
- Repairs done for infected aneurysms
- Repair done for trauma
- Operations done for anastomotic aneurysm(Pseudoaneurysm) as this is not a primary repair

- **Peripheral Vascular Intervention:**

Inclusion: Percutaneous and/or cut-down interventional procedures of native leg arteries from the infrarenal aorta distally, both primary and secondary interventions (same site), including balloon angioplasty, stenting, and atherectomy for occlusive disease of the infrarenal aorta or distal arteries and true aneurysms of the iliac or distal arteries. Note that attempted interventional procedures that were technically unsuccessful because the lesion could not be crossed should be entered. Note that isolated thrombolysis or mechanical clot extraction are not captured, unless lysis is done as an adjunct to primary treatment of an atherosclerotic lesion.

Exclusions:

- Treatment of vein or prosthetic grafts (this treatment is captured on the follow-up form for the original bypass)
- Abdominal aortic aneurysms (which are captured under EVAR).
- Mesenteric or renal peripheral vascular interventions. (PVI is limited to lower extremity peripheral vascular interventions.)
- Internal Iliac interventions
- Diagnostic procedures not associated with interventions
- Isolated endarterectomy, thrombolysis or mechanical thrombectomy
- Treatment of an infected aneurysm
- Intervention done for trauma
- Pseudoaneurysm

- **Thoracic and Complex EVAR:**

Inclusion: Primary endovascular repair of thoracic aortic pathology, including aneurysm, dissection, aneurysm from dissection, trauma, Penetrating Ulcer (PAU), Intramural Hematoma (IMH), PAU with IMH or Aortic Thrombus. Also included is thoraco-abdominal (type 1-4/5) and supra-renal AAA, including visceral/renal/great vessels managed with fenestration, branch graft, or de-branching bypass.

Exclusions:
- Repairs done for infected aneurysms or pseudoaneurysm
- Infra-renal AAA (captured in EVAR module)
- Revisions of prior open or endovascular thoracic aortic and thoraco-abdominal repairs in the same anatomical area
- All repairs done for infectious etiologies (eg, mycotic aneurysms, aortoesophageal fistula, aortobronchial fistula, aortogastric fistula)