

CAROLINAS HEALTHCARE SYSTEM
(CAROLINAS MEDICAL CENTERS - CHARLOTTE)
DELINEATION OF PRIVILEGES
PERIPHERAL ENDOVASCULAR PRIVILEGES

Print Name _____

SECTION I. THESE PROCEDURES MAY BE APPLIED FOR BY PHYSICIANS IN THE SPECIALTIES OF INTERNAL MEDICINE (CARDIOLOGY), GENERAL SURGERY, NEUROSURGERY, RADIOLOGY AND THORACIC AND CARDIOVASCULAR SURGERY.

Applicants or Appointees in the above listed specialties, sub-specialized privileges in Peripheral Endovascular procedures shall present documentation that they possess the training, experience, and ability necessary to perform the procedures competently and also that their training included emphasis on quality control and procedural techniques involved in performing special procedures. It should be noted that the documentation for these sub-specialized privileges should include letters from the Chief of the Department in which they took their residency and from the Chief of the Section of Endovascular, Angiography, or other appropriate section or laboratory in which they received their angiographic, invasive procedure, or Doppler training. In addition, the applicant must present evidence that he/she has completed the required number of satisfactory procedures as indicated below in each requested category.

The Applicant or Appointee must also have approval by his/her Chief/Chairman/Section Chief of the Department/Section, Carolinas Medical Center, Carolinas Medical Center-University, and Carolinas Medical Center-Pineville, that he/she is qualified for the procedures requested.

CMC	PVL	UNIV		CORE PERIPHERAL ENDOVASCULAR PRIVILEGES
			PEV-1*	Privileges to admit; evaluate; diagnose; consult; provide pre-operative; intra-operative and post-operative care; and perform procedures for patients of all ages, except where specifically excluded from practice and except for those special privileges listed below for management of peripheral vascular disease via catheter manipulation into secondary or tertiary branches.

NOTE: Privileges include, but are not limited to, arterial and venous balloon angioplasty, arterial and venous stent placement, venous filter placement and removal, venous endograft placement, catheter directed thrombolysis of native arteries, veins, and bypass grafts, catheter directed thromboembolectomies of native arteries and bypass grafts, percutaneous diagnostic angiography (CO2 and liquid contrast), angiосcopy, arterial occlusion techniques, percutaneous thrombectomy, thrombolysis, angioplasty, stenting of and endovascular interventional upon established hemodialysis access grafts, intravascular ultrasound, duplex ultrasonography, Atherectomy and vessel closure devices, pulmonary angiograms, and peripheral laser.

THIS PRIVILEGE EXCLUDES THE CORONARY CIRCULATION AND INTRACRANIAL CIRCULATION.

CMC	PVL	UNIV		NUMBER	YEAR	LOCATION
			PEV-2*	Extracranial Carotid Angiographic Procedures		

PLEASE NOTE: If you are granted privileges to perform PEV-10 you are not required to apply for PEV-2 separately

		N/A	PEV-3*	Carotid Stenting Interventions		
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PLEASE NOTE- THESE PRIVILEGES - (PEV-4) LISTED BELOW ARE INTENDED FOR PHYSICIANS WHO ARE NOT APPLYING FOR PERIPHERAL ENDOVASCULAR “CORE” PRIVILEGES (PEV-1). (THESE PROCEDURES ARE CONSIDERED TO BE A PART OF THE CORE PRIVILEGES FOR PEV-1.)

THESE PROCEDURES MAY BE APPLIED FOR BY PHYSICIANS IN THE SPECIALTIES OF INTERNAL MEDICINE (CARDIOLOGY), GENERAL SURGERY, RADIOLOGY AND THORACIC AND CARDIOVASCULAR SURGERY.

CMC	PVL	UNIV		NUMBER	YEAR	LOCATION
			PEV-4 *	Venous Filter		
			PEV-4(a)	Placement		
			PEV-4(b)	Removal		

PLEASE NOTE: If you are granted privileges in PEV-1 you are not required to apply for PEV-4(a) OR PEV-4(b) separately.

PEV-4(a) VENOUS FILTER PLACEMENT

Definition of Privileged Procedure:

Percutaneous placement of a venous filter by access of the appropriate vein, the ability to cannulate and pass a catheter through the venous system, ability to use and interpret x-ray equipment and contrast studies of the target vein and ability to use the filter delivery system.

Specific Skills and Training Required:

1. In order to perform venous filter placement procedures physicians must be board certified or board eligible (the term “board eligible” shall mean those physicians who have completed training requirements for certification by their respective American Specialty Board (ABMS) or their respective American Osteopathic Association (AOA) in Radiology, Internal Medicine (Cardiology), Surgery (General) or Thoracic and Cardiovascular Surgery; **AND**
2. Successfully completed an Accreditation Council for Graduate Medical Education (ACGME) or American Osteopathic Association (AOA) accredited twelve (12) month Surgical Critical Care fellowship training program; **OR**

 Successfully completed an ACGME or AOA accredited twelve (12) month Interventional Radiology fellowship training program; **OR**

 Successfully completed an ACGME or AOA accredited twelve (12) month Cardiology fellowship training program; **AND**
3. Verified by the Director of their training program or his/her designee to have demonstrated the sufficient experience in venous filter placement procedures to include documentation as the primary interventionist that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes, in at least five (5) venous filter placements on five (5) separate patients;

Maintenance Criteria for Continued Privileges:

- Must perform five (5) cases venous filter placement cases over a twenty-four (24) month period to be eligible to reapply for Venous Filter Placement privileges. This will be reviewed at the time of reappointment; **AND**
- All cases performed will be screened against quality indicators (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform venous filter placement procedures.

Print Name

PEV-4(b) VENOUS FILTER REMOVAL

Definition of Privileged Procedure:

Percutaneous removal of a venous filter by access of the appropriate vein, the ability to cannulate and pass a catheter through the venous system, ability to use and interpret x-ray equipment and contrast studies of the target vein and ability to use the filter delivery system.

Specific Skills and Training Required:

1. In order to perform venous filter removal procedures physicians must be board certified or board eligible (the term “board eligible” shall mean those physicians who have completed training requirements for certification by their respective American Specialty Board (ABMS) or their respective American Osteopathic Association (AOA) in Radiology, Internal Medicine (Cardiology), Surgery (General) or Thoracic and Cardiovascular Surgery; **AND**
2. Successfully completed an Accreditation Council for Graduate Medical Education (ACGME) or American Osteopathic Association (AOA) accredited twelve (12) month Surgical Critical Care fellowship training program;
OR
2. Successfully completed an ACGME or AOA accredited twelve (12) month Interventional Radiology fellowship training program; **OR**
2. Successfully completed an ACGME or AOA accredited twelve (12) month Cardiology fellowship training program; **AND**
3. Verified by the Director of their training program or his/her designee to have demonstrated the sufficient experience in venous filter removal procedures to include documentation as the primary interventionist that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes, in at least five (5) venous filter removals on five (5) separate patients;

Maintenance Criteria for Continued Privileges:

- Must perform five (5) venous filter removal cases over a twenty-four (24) month period to be eligible to reapply for Venous Filter Removal privileges. This will be reviewed at the time of reappointment; **AND**
- All cases performed will be screened against quality indicators (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform venous filter placement procedures.

Print Name _____

SECTION II. THESE PROCEDURES MAY BE APPLIED FOR BY PHYSICIANS IN THE SPECIALTIES OF INTERNAL MEDICINE (CARDIOLOGY), GENERAL SURGERY, RADIOLOGY AND THORACIC AND CARDIOVASCULAR SURGERY.

CMC	PVL	UNIV		NUMBER	YEAR	LOCATION
			PEV-5 *	Insertion of Aortic Endograft		
			PEV-15*	Thoracic Endovascular Aortic/Aneurysm Repair (TEVAR)		

SECTION III. THESE PROCEDURES MAY BE APPLIED FOR BY PHYSICIANS IN THE SPECIALTIES OF NEUROLOGICAL SURGERY AND RADIOLOGY.

CMC	PVL	UNIV		NUMBER	YEAR	LOCATION
			PEV-10 *	Cerebral Diagnostic Intracranial Angiographic Procedures		
PLEASE NOTE: If you are granted privileges to perform PEV-10 you are not required to apply for PEV-2 separately.						
			PEV-11 *	Neuro Endovascular Interventional Procedures		
	N/A	N/A	PEV-14*	Treatment of Acute Ischemic Stroke		

SECTION IV. THESE PROCEDURES MAY BE APPLIED FOR BY PHYSICIANS IN THE SPECIALTIES OF INTERNAL MEDICINE (CARDIOLOGY) AND RADIOLOGY.

CMC	PVL	UNIV		NUMBER	YEAR	LOCATION
			PEV-13*	Peripheral Diagnostic Angiographic Procedures		

PRIVILEGES REQUESTED BY:

I have requested only those privileges for which by education, training, current experience, and demonstrated performance I am qualified to perform, and that I wish to exercise at Carolinas HealthCare System (Carolinas Medical Centers-Charlotte), and;

I understand that:

- a. In exercising any clinical privileges granted, I am constrained by hospital and medical staff policies and rules applicable generally and any applicable to the particular situation.
- b. Any restriction on the clinical privileges granted to me is waived in an emergency situation and in such a situation my actions are governed by the applicable section of the medical staff bylaws or related documents.

Signature

Date

Print Name

Approval by the Medical Executive Committee:

Carolinas Medical Centers-Charlotte: 03/19/09; 08/20/09; 05/20/2010; 08/16/2012; 08/22/2013; 05/15/2014; 11/12/2015

Carolinas Medical Center: 12/14/04; 08/09/05; 02/14/06; 06/12/07

Carolinas Medical Center-Mercy: 12/13/04; 08/08/05; 03/13/06; 05/14/07; 09/08/08

Carolinas Medical Center-University: 12/13/04; 08/09/05; 02/07/06; 05/08/07

Approval by the Board of Commissioners: 03/08/05; 09/13/05; 03/14/06; 09/11/07; 12/02/08' 06/09/09; 09/08/09; 06/15/2010; 09/11/2012; 09/10/2013; 06/10/2014; 12/08/2015

PEV-1 PERIPHERAL ENDOVASCULAR PRIVILEGES

To be eligible for CORE PRIVILEGES in Peripheral Endovascular, the applicant must select one of the options below and satisfy all of the requirements listed for that option:

- If the applicant does not hold a General Specialty Certificate in Vascular Surgery by the American Board of Surgery or certification by the American Osteopathic Association, the applicant must:
1. Provide documentation of successful completion, within the past five (5) years, of an ACGME or AOA accredited residency training program commissioned by the American Board of Surgery or the American Osteopathic Association, which renders the physician eligible for certification examination for a General Specialty Certificate in Vascular Surgery; **OR**
 2. Physicians who were fellowship trained prior to 1984 would be considered eligible for Certification of Special Qualification in General Vascular Surgery; **AND**
 3. Apply for and meet the necessary criteria to be granted privileges for Peripheral Vascular Surgery (SUR-2) (Provide evidence and statements from the director of my training in peripheral vascular surgery or from the American Board of Surgery or the American Osteopathic Association, to substantiate my statements that I have performed at least 70 major procedures upon the peripheral arterial system, including at least 20 procedures upon the abdominal aorta and excluding hemo-access vascular procedures); **AND**
 4. Demonstrate sufficient experience in Peripheral Endovascular skills to safely undertake the full spectrum of Endovascular diagnostic and therapeutic procedures. Experience must include:
 - a. senior-level participation in at least one-hundred (100) catheterizations performed under *Direct Supervision, (fifty {50} percent should be selective to specific first order vessels or greater and at least seventy-five {75} percent should be arterial with no more than twenty-five {25} percent being venous or no more than twenty-five {25} percent being cerebral); **AND**
 - b. Fifty (50) therapeutic interventions; **AND**
 - c. Must have served as primary interventionist on at least seventy-five (75) percent of the procedures and have been no less involved than a first assistant on the remainder of procedures;

OR

- If the applicant does currently hold a certificate in General Vascular Surgery by the American Board of Surgery or certification by the American Osteopathic Association, the applicant must:
1. Present documentation of certification of a General Vascular Surgery Certificate by the American Board of Surgery or certification by the American Osteopathic Association, the applicant must (Documentation of a Certification of Special Qualification in General Vascular Surgery for those physician fellowship trained prior to 1984 shall satisfy this requirement); **AND**
 2. Apply for and meet the necessary criteria to be granted privileges for Peripheral Vascular Surgery (SUR-2) (Provide evidence and statements from the director of my training in peripheral vascular surgery or from the American Board of Surgery or the American Osteopathic Association to substantiate my statements that I have performed at least 70 major procedures upon the peripheral arterial system, including at least 20 procedures upon the abdominal aorta and excluding hemo-access vascular procedures); **AND**
 3. Demonstrate sufficient experience in Peripheral Endovascular skills to safely undertake the full spectrum of Endovascular diagnostic and therapeutic procedures. Experience must include:
 - a. senior-level participation in at least one-hundred (100) catheterizations performed under *Direct Supervision, (fifty {50} percent should be selective to specific first order vessels or greater and at least seventy-five {75} percent should be arterial with no more than twenty-five {25} percent being venous or no more than twenty-five {25} percent being cerebral); **AND**
 - b. Fifty (50) therapeutic interventions; **AND**
 - c. Must have served as primary interventionist on at least seventy-five (75) percent of the procedures and have been no less involved than a first assistant on the remainder of procedures;

OR

PEV-1 PERIPHERAL ENDOVASCULAR PRIVILEGES

If the applicant is not currently certified by their respective American Specialty Board (ABMS) or their respective American Osteopathic Association (AOA), the applicant must:

1. Provide documentation of successful completion, within the past five (5) years, of an ACGME or AOA accredited residency training program in Radiology, Neurosurgery, Internal Medicine (Cardiology) or Thoracic and Cardiovascular Surgery; **AND**
2. Demonstrate sufficient experience in Peripheral Endovascular skills to safely undertake the full spectrum of Endovascular diagnostic and therapeutic procedures. Experience must include:
 - a. senior-level participation in at least one-hundred (100) catheterizations performed under *Direct Supervision, (fifty {50} percent should be selective to specific first order vessels or greater and at least seventy-five {75} percent should be arterial with no more than twenty-five {25} percent being venous or no more than twenty-five {25} percent being cerebral); **AND**
 - b. Fifty (50) therapeutic interventions; **AND**
 - c. Must have served as primary interventionist on at least seventy-five (75) percent of the procedures and have been no less involved than a first assistant on the remainder of procedures;

OR

If the applicant is currently certified by certification by their respective American Board of Medical Specialties (ABMS) or their respective American Osteopathic Association (AOA), the applicant must:

1. Provide documentation of certification from the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA) in Radiology, Neurosurgery, Internal Medicine (Cardiology) or Thoracic and Cardiovascular Surgery; **AND**
2. Demonstrate sufficient experience in Peripheral Endovascular skills to safely undertake the full spectrum of Endovascular diagnostic and therapeutic procedures. Experience must include:
 - a. senior-level participation in at least one-hundred (100) catheterizations performed under *Direct Supervision, (fifty {50} percent should be selective to specific first order vessels or greater and at least seventy-five {75} percent should be arterial with no more than twenty-five {25} percent being venous or no more than twenty-five {25} percent being cerebral); **AND**
 - b. Fifty (50) therapeutic interventions; **AND**
 - c. Must have served as primary interventionist on at least seventy-five (75) percent of the procedures and have been no less involved than a first assistant on the remainder of procedures

* DIRECT SUPERVISION SHALL MEAN THE PHYSICAL PRESENCE OF THE SUPERVISING PHYSICIAN IN THE ROOM DURING THE MAJOR PORTION OF THE PROCEDURE.

Maintenance Criteria for Continued Privileges:

- Must perform thirty (30) angiographic cases, including arterial cases, venous cases, and dialysis access cases, fifteen (15) of which must be interventional, defined as angioplasty, angioplasty and stent or atherectomy over a twenty-four (24) month period to be eligible to reapply for Core Peripheral Endovascular privileges. This will be reviewed at the time of reappointment; **AND**
- Provide documentation of attendance or participation in ongoing Category I Continuing Medical Education in the areas of Peripheral Vascular disease, diagnosis and management and endovascular techniques; **AND**
- All cases performed will be screened against quality indicators (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform Peripheral Endovascular procedures.

* Clarification of a “case”, for the purposes of documentation can be both intervention and an angiography. Cases counting toward interventions under Peripheral Endovascular Privileges (PEV-1) can include cases under all other PEV headings, i.e., PEV-5, PEV-6, etc. These will also count toward the cases required at reappointment for that PEV privilege. Multiple interventions in a single case will count as a single intervention under the applicable PEV privilege.

PEV-2 EXTRACRANIAL CAROTID ANGIOGRAPHIC PROCEDURES

PLEASE NOTE- THESE PRIVILEGES - (PEV-2) LISTED BELOW ARE INTENDED FOR PHYSICIANS WHO ARE NOT APPLYING FOR PRIVILEGES TO PERFORM CEREBRAL DIAGNOSTIC INTRACRANIAL ANGIOGRAPHIC PROCEDURES (PEV-10). (If you are granted privileges to perform PEV-10 you are not required to apply for PEV-2 separately).

Definition of Privileged Procedure: Any procedure in which percutaneous passage of a catheter is made into an artery or vein communicating with the extracranial vascular structures using needles, guidewires, and fluoroscopic guidance with subsequent contrast injection and serial filming over the anatomic distribution of the vessel injected. The filming may be done using conventional film screen technique or by digital imaging. In addition appropriate selective catheter placement and radiographic technique should be used to minimize contrast dose and radiation exposure, while producing a study sufficient to answer the diagnostic questions.

Minimum Angiographic Capabilities Required: High quality digital subtraction angiography equipment is required for Extracranial Carotid Angiographic procedures.

Specific Skills and Training Required: The procedures must be performed by a physician with knowledge and experience in the particular imaging methods which are utilized for extracranial angiographic studies. Radiation physics and radiation safety training is essential. The complexities of vascular and organ access procedures further mandates extensive training in the disease processes being diagnosed or treated; relevant patient management skills, alternative medical and surgical therapies, and percutaneous procedural techniques.

Credentials Required:

1. Apply for and meet the necessary criteria to be granted privileges for Peripheral Endovascular Surgery (PEV -1);
AND
 2. Demonstrate sufficient experience in extracranial carotid angiographic procedures to include documentation as the primary angiographer that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes, in at least twenty (20) carotid arteriograms on twenty (20) separate patients;
OR
- If the applicant is not currently certified by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA), the applicant must:
1. Provide documentation of successful completion, within the past five (5) years, of an ACGME or AOA accredited residency training program in Radiology, Neurosurgery, Internal Medicine (Cardiology) or Thoracic and Cardiovascular Surgery; **AND**
 2. Demonstrate sufficient experience in extracranial carotid angiographic procedures to include documentation as the primary interventionist that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes, in at least one-hundred (100) carotid arteriograms on one-hundred (100) separate patients;
- OR**
- If the applicant is currently certified by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA), the applicant must:
1. Provide documentation of certification from their respective American Board of Medical Specialties (ABMS) or their respective American Osteopathic Association (AOA) in Radiology, Neurosurgery, Internal Medicine (Cardiology) or Thoracic and Cardiovascular Surgery; **AND**
 2. Demonstrate sufficient experience in extracranial carotid angiographic procedures to include documentation as the primary interventionist that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes, in at least one-hundred (100) carotid arteriograms on one-hundred (100) separate patients.

It is acknowledged that Extracranial Carotid Angiographic procedure also results in the imaging of intracranial vessels. Interpretation of the intracranial portion of the exam must be performed by a physician credentialed to do so, in a timely manner but during the same workday.

PEV-2 EXTRACRANIAL CAROTID ANGIOGRAPHIC PROCEDURES

Maintenance Criteria for Continued Privileges:

- Must maintain Peripheral Endovascular Privileges (PEV-1) at all times in order to have continued privileges in Extracranial Carotid Angiographic Procedures (PEV-2); **AND**
- Must perform four (4) cases over a twenty-four (24) month period to be eligible to reapply for Extracranial Carotid Angiographic privileges. This will be reviewed at the time of reappointment; **AND**
- All cases performed will be screened against quality indicators (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform extracranial carotid angiographic procedures.

PEV-3 CAROTID STENTING INTERVENTIONS

Definition of Privileged Procedure:

Stents are approved for use in opening blocked arteries in the neck. The stent is intended to prevent stroke by treating blockages in the carotid artery. Stenting of the carotid were approved for use in patients who have had symptoms of a stroke or whose carotid artery is at least eighty percent blocked, and who are not good candidates for the surgical alternative.

Credentials Required:

1. Apply for and meet the necessary criteria to be granted privileges for Extracranial Carotid Angiographic (PEV-2); **AND**
 2. Demonstrate sufficient experience in carotid stenting interventional procedures to include documentation as the primary interventionist that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes, in at least twenty (20) carotid stents on twenty (20) separate arteries; **AND**
 3. Submit documentation of successful completion of an industry sponsored training module
- OR**
1. Apply for and meet the necessary criteria to be granted privileges for Extracranial Carotid Angiographic (PEV-2); **AND**
 2. Apply for and meet the necessary criteria to be granted privileges for Neuro Endovascular Interventional Procedures (PEV-11)

It is noted that maintenance criteria for continued privileges will be to maintain current privileges in both PEV-2 and PEV-11.

If the physician does not have current privileges to perform Intracranial procedures and you are performing Carotid Stenting Interventional procedures that you have a physician available (either a Neurosurgeon or an Interventional Radiologist) to assist you should the patient require an Intracranial procedure.

Maintenance Criteria for Continued Privileges:

- Must maintain Extracranial Carotid Angiographic Procedures (PEV-2) at all times in order to have continued privileges in Carotid Stenting Interventions (PEV-3); **AND**
- Must perform four (4) cases over a twenty-four (24) month period to be eligible to reapply for Carotid Stenting Intervention privileges. This will be reviewed at the time of reappointment; **AND**
- Provide documentation of attendance or participation in ongoing Category I Continuing Medical Education in the areas of carotid intervention; **AND**
- 100% of all cases performed will be reviewed by quality assurance (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform carotid stenting interventional procedures.

PEV-5 INSERTION OF AORTIC ENDOGRAFT

Insertion of aortic endograft is the procedure for endovascular repair of AAA or aortoiliac aneurysmal disease. Utilizing one of the commercially available guidance/placement systems, an endograft is placed into the aortic or aortoiliac position via a femoral artery access.

1. Board Certification by the American Board of Surgery or the American Osteopathic Association, with an ACGME or AOA accredited fellowship training program in General Vascular Surgery or Board certification by the American Board of Thoracic and Cardiovascular Surgery or the American Osteopathic Association (AOA) in Thoracic and Cardiovascular Surgery; **AND**
2. Apply for and meet the necessary criteria to be granted privileges in core peripheral endovascular privileges (PEV-1); **AND**
3. Documentation from the training program director of completion of five (5) cases being performed during fellowship training.

Note: This procedure may be performed independently only by General Surgery and Thoracic and Cardiovascular Surgery or Surgeons who qualify as above. The procedure is done in the operating room or an O.R. compatible angiography suite under general or regional anesthesia and all members of the team must be present during the major portion of the case.

OR

1. Board certification by the American Board of Radiology or the American Osteopathic Association (AOA) in radiology, with an ACGME or AOA accredited fellowship training program in Cardiovascular/Interventional Radiology or Board certification by the American Board of Internal Medicine or the American Osteopathic Association, with an ACGME or AOA accredited fellowship training program in Cardiovascular/Interventional Cardiology; **AND**
2. Apply for and meet the necessary criteria to be granted privileges in core peripheral endovascular privileges (PEV-1);
AND
3. Documentation of successful completion of a course in for the application of the endograft system for abdominal aortic aneurysm repair; **AND**
4. Demonstrate sufficient experience in the insertion of aortic endograft procedures to include documentation as the primary operator that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes, on five (5) cases within the past twenty-four (24) months.

Note: This procedure must be done with a team. The procedure is done in the operating room or O.R. compatible angiography suite under general or regional anesthesia and all members of the team must be present during the major portion of the case. The Team Shall Include:

- Peripheral Vascular Surgeon - who has current privileges to perform Peripheral Vascular Surgery (The surgeon will be available to perform the cutdown and/or the ability to convert the procedure to an open procedure, if necessary. *It is noted that the Peripheral Vascular surgeon is not required to have privileges to perform Insertion of Aortic Endograft to serve on this team.*
- Interventional Radiologist OR Cardiologist
- Anesthesiologist
- Technologist - Radiology or Cardiac Catheterization Laboratory
- Operating Room Personnel

Maintenance Criteria for Continued Privileges:

- Must maintain Peripheral Endovascular Privileges (PEV-1) at all times in order to have continued privileges in Insertion of Aortic Endograft (PEV-5); **AND**
- Must perform five (5) cases over a twenty-four (24) month period to be eligible to reapply for Insertion of Aortic Endograft privileges. This will be reviewed at the time of reappointment; **AND**
- 100% of all cases performed will be reviewed by quality assurance (the review will be conducted at least every six months and will include outcome data reviewed by a joint quality assessment committee for all departments authorized to perform Insertion of Aortic Endograft procedures.

PEV-10 CEREBRAL DIAGNOSTIC INTRACRANIAL ANGIOGRAPHIC PROCEDURES

Definition of Privileged Procedure:

Any procedure in which percutaneous passage of a catheter is made into an artery or vein communicating with the intracranial vascular structures using needles, guidewires, and fluoroscopic guidance with subsequent contrast injection and serial filming over the anatomic distribution of the vessel injected. The filming may be done using conventional film screen technique or by digital imaging. In addition, appropriate selective catheter placement and radiographic technique should be used to minimize contrast dose and radiation exposure, while producing a study sufficient to answer the diagnostic questions.

Minimum Angiographic Capabilities Required:

High quality digital subtraction angiography equipment with roadmap capability is required for Neuro Endovascular Interventional procedures.

Specific Skills and Training Required:

The procedures must be performed by a physician with knowledge and experience in the particular imaging methods which are utilized for intracerebral angiographic studies. Radiation physics and radiation safety training is essential. The complexities of vascular and organ access procedures further mandates extensive training in the disease processes being diagnosed or treated; relevant patient management skills, alternative medical and surgical therapies, and percutaneous procedural techniques.

Credentials Required:

- If the applicant is not currently certified by the American Board of Medical Specialties or the American Osteopathic Association the applicant must:
1. Provide documentation of successful completion, within the past five (5) years, of an ACGME or AOA accredited residency training program in Radiology or Neurosurgery; **AND**
 2. Neurosurgeons must have successfully completed a twelve (12) month Neuroendovascular fellowship training program; **OR**
 3. Radiologists must have successfully completed a twelve (12) month Neuroradiology fellowship training program; **AND**
 4. Verified by the Director of their training program or his/her designee to have demonstrated the specific skills and training listed above; **AND**
 5. Verified by the Director of their training program or his designee to have satisfactory skills in the evaluation of patients to determine appropriateness for intracerebral angiographic studies and the inherent and relevant risks; **AND**
 6. Verified by the Director of their training program or his designee to have satisfactorily performed intracerebral angiographic studies using the appropriate imaging techniques, needles, catheters, and guidewires under supervision and present documentation of supervised experience with at least fifty (50) Neuro-angiographic procedures; **OR**

PEV-10 CEREBRAL DIAGNOSTIC INTRACRANIAL ANGIOGRAPHIC PROCEDURES

If the applicant is currently certified by the American Board of Medical Specialties or the American Osteopathic Association, the applicant must:

1. Provide documentation of certification from the American Board of Medical Specialties (ABMS) or American Osteopathic Association (AOA) in Radiology or Neurosurgery; **AND**
2. Neurosurgeons must have successfully completed a twelve (12) month Neuroendovascular fellowship training program; **OR**
3. Radiologists must have successfully completed a twelve (12) month Neuroradiology fellowship training program; **AND**
4. Verified by the Director of their training program or his/her designee to have demonstrated the specific skills and training listed above; **AND**
5. Verified by the Director of their training program or his designee to have satisfactory skills in the evaluation of patients to determine appropriateness for intracerebral angiographic studies and the inherent and relevant risks; **AND**
6. Verified by the Director of their training program or his designee to have satisfactorily performed intracerebral angiographic studies using the appropriate imaging techniques, needles, catheters, and guidewires under supervision and present documentation of supervised experience with at least fifty (50) Neuro-angiographic procedures;

OR

1. Hold current privileges at Carolinas Medical Center to perform (N-11) Cerebral Arteriography with Interpretation in the Department of Internal Medicine, Section of Neurology as of September 14, 2004; **AND**
2. Provide documentation of a minimum of one hundred and fifty (150) matched satisfactory readings for review by the Credentials Committee;

OR

1. Hold current privileges at Carolinas Medical Center to perform (RAD-42) Diagnostic Intracerebral Angiographic Procedures as of March 8, 2005.

Maintenance Criteria for Continued Privileges:

- Must perform five (5) cases over a twenty-four (24) month period to be eligible to reapply for Cerebral Diagnostic Intracranial Angiographic privileges. This will be reviewed at the time of reappointment.
- All cases performed will be screened against quality indicators (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform cerebral diagnostic intracranial angiographic procedures.

PEV-11 NEURO ENDOVASCULAR INTERVENTIONAL PROCEDURES:

Definition of Privileged Procedure:

An angiographic case in which either a pharmacologic agent is instilled for therapeutic effect, or revascularization, devascularization or foreign body removal is effected via endovascular methods within the spinal or cerebral endovascular system.

Minimum Angiographic Capabilities Required:

High quality digital subtraction angiography equipment with roadmap capability is required for Neuro Endovascular Interventional procedures.

Specific Skills and Training Required:

The procedures must be performed by a physician with knowledge and experience in neuro imaging methods which are utilized for intracerebral angiographic studies. Radiation physics and radiation safety training is essential. The complexities of vascular and organ access procedures further mandates extensive training in the disease processes being diagnosed or treated; relevant patient management skills, alternative medical and surgical therapies, and percutaneous procedural techniques. Training in neuro anatomy and neuro physiology must be part of their training.

Credentials Required:

- If the applicant is not currently certified by the American Board of Medical Specialties or the American Osteopathic Association, the applicant must:
 1. Provide documentation of successful completion, within the past five (5) years, of an ACGME or AOA accredited residency training program in Radiology or Neurosurgery; **AND**
 2. In order to perform Neuro Endovascular Interventional procedures physicians must be board certified or board eligible (the term “board eligible” shall mean those physicians who have completed training requirements for certification by their respective American Specialty Board) in Radiology or Neurosurgery; **AND**
 3. Radiologists must have successfully completed a twenty-four (24) month Neuroradiology fellowship training program, which will include a minimum of twelve (12) months of Neuro Endovascular Interventional Radiology; **OR**
 4. Neurosurgeons must have successfully completed a twelve (12) month Neuroendovascular Interventional Fellowship; **AND**
 5. Verified by the Director of their training program or his/her designee to have demonstrated the specific skills and training listed above; **AND**
 6. Verified by the Director of their training program or his designee to have satisfactory skills in the evaluation of patients to determine appropriateness for intracerebral angiographic studies and the inherent and relevant risks; **AND**
 7. Verified by the Director of their training program or his designee to have satisfactorily performed 150 Neuro Endovascular interventions that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes; **OR**

PEV-11 NEURO ENDOVASCULAR INTERVENTIONAL PROCEDURES:

- If the applicant is currently certified by the American Board of Medical Specialties or the American Osteopathic Association, the applicant must:
1. Provide documentation of certification from the American Board of Radiology or Neurosurgery; **AND**
 2. In order to perform Neuro Endovascular Interventional procedures physicians must be board certified or board eligible (the term “board eligible” shall mean those physicians who have completed training requirements for certification by their respective American Specialty Board) in Radiology or Neurosurgery; **AND**
 3. Radiologists must have successfully completed a twenty-four (24) month Neuroradiology fellowship training program, which will include a minimum of twelve (12) months of Neuro Endovascular Interventional Radiology; **OR**
 4. Neurosurgeons must have successfully completed a twelve (12) month Neuroendovascular Interventional Fellowship; **AND**
 5. Verified by the Director of their training program or his/her designee to have demonstrated the specific skills and training listed above; **AND**
 6. Verified by the Director of their training program or his designee to have satisfactory skills in the evaluation of patients to determine appropriateness for intracerebral angiographic studies and the inherent and relevant risks; **AND**
 7. Verified by the Director of their training program or his designee to have satisfactorily performed 150 Neuro Endovascular interventions that demonstrates proficiency as evidenced by quality data, i.e., case log to include outcomes.

Maintenance Criteria for Continued Privileges:

- Must perform ten (10) cases over a twenty-four (24) month period to be eligible to reapply for Neuro Endovascular Interventional privileges. This will be reviewed at the time of reappointment; **AND**
- Provide documentation of attendance or participation in ten (10) hours of in ongoing Category I Continuing Medical Education in the areas of Neuro Radiology or Neurosurgery; **AND**
- 100% of all cases performed will be reviewed by quality assurance (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform Neuro Endovascular Interventional procedures.

PEV-13 PERIPHERAL DIAGNOSTIC ANGIOGRAPHIC PROCEDURES

Definition of Privileged Procedure:

Procedures in which percutaneous passage of a catheter is made into an artery or vein using needles, guidewires and fluoroscopic guidance with subsequent contrast injection and serial filming over the anatomic distribution of the vessel selectively injected. The filming may be done using conventional film screen technique or by digital imaging. In addition, appropriate selective catheter placement and radiographic technique should be used to minimize contrast dose and radiation exposure, while producing a study sufficient to answer the diagnostic questions. Intravascular pressures are a useful adjunct, and may be necessary to help assess the physiologic significance of vascular disease and physiologic function in selected cases.

Qualifications:

If the Physician holds current privileges to perform one of the following, it is recommended that he/she be granted PEV-13 at the respective facility where he/she currently holds privileges as of March 8, 2005:

Carolinas Medical Center:

- (C-11) Peripheral Angiograms
- (RAD-20) Diagnostic Vascular Angiographic Procedures

Carolinas Medical Center-Pineville:

- (C-25) Peripheral Angiograms
- (RAD-20) Diagnostic Vascular Angiographic Procedures

Carolinas Medical Center-University:

- (CAR-15) Peripheral Angiograms
- (RAD-20) Diagnostic Vascular Angiographic Procedures

It is acknowledged that Peripheral Diagnostic Angiographic procedures may result in the imaging of intracranial vessels. Interpretation of the intracranial portion of the exam must be performed by a physician credentialed to do so, in a timely manner but during the same workday.

Maintenance Criteria for Continued Privileges:

- Must perform five (5) cases over a twenty-four (24) month period to be eligible to reapply for Peripheral Diagnostic Angiographic privileges. This will be reviewed at the time of reappointment.
- 100% of all cases performed will be reviewed by quality assurance (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform pulmonary angiogram procedures.

PEV-14 TREATMENT OF ACUTE ISCHEMIC STROKE

Definition of Privileged Procedure:

An angiographic case in which either a pharmacologic agent is instilled for therapeutic effect or mechanical revascularization is affected via endovascular methods for the treatment of acute or impending cerebral ischemic symptoms. This entails the use of thrombolytic agents and mechanical thrombectomy devices for acute arterial occlusions, as well as angioplasty and vasodilator agents for cerebral vasospasm. This is intended for those individuals who do not already hold Neuro Endovascular Interventional Procedures (PEV -11).

Credentials Required:

- If the applicant is not currently certified by the American Board of Medical Specialties or the American Osteopathic Association, the applicant must:
1. Apply for and meet the necessary criteria to be granted privileges for either Core Peripheral Endovascular Privileges (PEV-1) **AND**
 2. Provide documentation of successful completion, within the past five (5) years, of an ACGME or AOA accredited residency training program in Neurological Surgery, Internal Medicine, or Radiology; **AND**
 3. Neurosurgeons must have successfully completed a twelve (12) month Neuroendovascular fellowship training program; **OR**
 4. Cardiologists must have successfully completed a twelve (12) month Cardiovascular Medicine (Cardiology) fellowship training program; **OR**
 5. Radiologists must have successfully completed a twelve (12) month Neuroradiology or Interventional Radiology fellowship training program; **AND**
 6. Verification from the Director of their training program or his/her designee to have demonstrated the specific skills and training in the treatment of acute ischemic stroke, including, but not limited to, skills in the evaluation of patients to determine appropriateness for angiographic studies and the inherent and relevant risks, use of the appropriate imaging techniques, needles, catheters, and guidewires under the supervision; **AND**
 7. Demonstrate sufficient experience in interpretation of Cerebral CT Angiography / Cerebral Perfusion in at least ten (10) separate patients; **AND**
 8. Provide documentation of current clinical activity in acute stroke interventional procedures from at least eight (8) stroke interventions within the past twenty-four (24) months; **OR**
 9. Provide documentation that you were proctored by a physician who is currently credentialed to perform treatment of acute ischemic stroke procedures at one of the Carolinas Medical Centers-Charlotte facilities for at least eight (8) stroke interventions.

OR

PEV-14 TREATMENT OF ACUTE ISCHEMIC STROKE – continued:

- If the applicant is currently certified by the American Board of Medical Specialties or the American Osteopathic Association, the applicant must:
 1. Apply for and meet the necessary criteria to be granted privileges for Core Peripheral Endovascular Privileges (PEV-1); **AND**
 2. Provide documentation of certification from the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA) in Neurological Surgery, Internal Medicine or Radiology; **AND**
 3. Neurosurgeons must have successfully completed a twelve (12) month Interventional Neuroendovascular fellowship training program; **OR**
 4. Cardiologist must have successfully completed a twelve (12) month Interventional Cardiovascular Medicine (Cardiology) fellowship training program; **OR**
 5. Radiologists must have successfully completed a twelve (12) month Interventional Neuroradiology fellowship training program; **OR**
 6. Radiologists must have successfully completed a twelve (12) month Interventional Radiology Fellowship training program; **AND**
 7. Demonstrate sufficient experience in interpretation of Cerebral CT Angiography / Cerebral Perfusion in at least ten (10) separate patients; **AND**
 8. Demonstrate certificate of completion of at least twenty-four (24) hours of Category I Continuing Medical Education related to acute stroke intervention; **AND**
 9. Demonstrate sufficient experience in intracranial interventional procedures to include documentation as the primary interventionist or proctored primary interventionist in at least eight (8) interventions with a microcatheter, with or without use of TPA or mechanical devices with a minimum of four (4) acute stroke interventions. (Proctor must have current PEV-14 or PEV-11 at Carolinas Medical Center)

Maintenance Criteria for Continued Privileges:

- Attendance or participation in ongoing Category I Continuing Medical Education in the areas of Acute Stroke Intervention
- 100% of all cases performed will be reviewed by quality assurance (the review will be conducted at least every six months) and will include indications, short and long term success rates and complications reviewed by a joint quality assessment committee for all departments authorized to perform carotid Acute stroke interventional procedures.

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PEV-15 THORACIC ENDOVASCULAR AORTIC/ANEURYSM REPAIR (TEVAR):

SHORT DEFINITION - Describe the privilege or procedure succinctly and include a bibliography and/or selected references: Thoracic Endovascular Aortic/Aneurysm Repair (TEVAR) is a minimally invasive approach to repair thoracic aortic aneurysms. The technique and devices were developed to treat patients who could not tolerate open surgical repair because of multiple medical problems. TEVAR stent graft repair is a treatment for aneurysms of the descending thoracic aorta. It is similar to the approach used for a cardiac catheterization of the coronary arteries. This procedure requires only small incisions in the groin. The surgeon inserts a catheter through the femoral artery in the groin and with the use of x-ray guidance and specially-designed instruments, the aneurysm can be repaired from inside the aorta by inserting a tube, called a stent-graft. This is possible because the tube, or stent graft, is delivered through the catheter in a collapsed state and then expanded at the site of the aneurysm. The tube replaces and reinforces the diseased aortic wall, ensuring continuity of blood flow while preventing further expansion of the aorta, aortic rupture, and/or aortic dissection. The potential benefits of the procedure include greatly reduced risk, a shorter hospital stay, and a more rapid recovery.

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PEV-15 THORACIC ENDOVASCULAR AORTIC/ANEURYSM REPAIR (TEVAR):

SKILLS AND TRAINING NEEDED - Describe the skills and training needed to perform this privilege (be specific): Selective catheterization skills are needed to optimize precise graft deployment and endoluminal intervention skills are needed to restore perfusion to inadvertently covered or embolized vessels. Expertise with fluoroscopic guidance, radiographics technique, acquisition projections, and image postprocessing will ensure optimal endograft placement and recognition of relevant complicating factors. Open vascular access, repair and bypass skills are needed to assure vascular access and maintain perfusion of critical organs in the event of planned or inadvertent coverage.

CREDENTIALS: State the credentials needed to perform the "new" privilege, include alternative methods of credentials and documentation needed to confirm competence. If a "grandfather" clause is appropriate, define the date, names of individuals currently on staff, and any documentation that will be required from those not currently on staff at the facility designated above, who may qualify by virtue of similar privileges at another institution before the "grandfather" clause date:

1. Provide documentation of board certification by:
 - i. Subspecialty certification in Vascular and Interventional Radiology by the American Board of Radiology or the American Osteopathic Association (AOA); **OR**
 - ii. Subspecialty certification in Cardiovascular Disease or Interventional Cardiology by the American Board of Internal Medicine or the American Osteopathic Association (AOA); **OR**
 - iii. Certification in Thoracic and Cardiovascular Surgery by the American Board of Thoracic and Cardiovascular Surgery or the American Osteopathic Association (AOA); **OR**
 - iv. Certification in Vascular Surgery by the American Board of Surgery or the American Osteopathic Association (AOA); **AND**
2. Apply for and meet the necessary criteria to be granted privileges for Peripheral Endovascular Surgery (PEV -1); **AND**
3. Provide documentation of at least ten (10) Thoracic Endovascular Aortic/Aneurysm Repair (TEVAR) Implantations within the past twenty-four (24) months.

Note: These implantations should be either as the primary interventionalist or under the direct supervision of a credentialed interventionalist. The Applicant will be required to certify the performance of the planning and sizing, as well as, the imaging and deployment of the procedure; **OR**

4. Provide documentation of at twenty-five (25) Endovascular Aortic Repair (EVAR) Implantations during the Applicant's career and five (5) TEVAR implantations within the past twenty-four (24) months.

Note: These implantations should be either as the primary interventionalist or under the direct supervision of a credentialed interventionalist. The Applicant will be required to certify the performance of the planning and sizing, as well as, the imaging and deployment of the endograft.

PEV-15 THORACIC ENDOVASCULAR AORTIC/ANEURYSM REPAIR (TEVAR)-CONTINUED:

ADDITIONAL CRITERIA:

This procedure may be performed independently only by the peripheral vascular or cardiothoracic surgeon. The procedure is performed in the operating room under an O.R. compatible angiography suite using general or regional anesthesia and all members of the team must be present during the major portion of the case; OR

If the procedure is being performed by the interventional radiologist or the interventional cardiologist, this procedure must be performed with a team, in the operating room or O.R. compatible angiography suite using general or regional anesthesia and all members of the team must be present during the major portion of the case. The Team shall include:

- Peripheral Vascular or Cardiothoracic Surgeon
- Interventional Radiologist or Cardiologist
- Anesthesiologist
- Technologist – Radiology or Cardiology
- Operating Room personnel

Criteria for Maintenance of Privileges:

- Must maintain Peripheral Endovascular Privileges (PEV-1) at all times in order to have continued privileges for Thoracic Endovascular Aortic/Aneurysm Repair (TEVAR) (PEV-6). This will be reviewed at the time of reappointment; **AND**
- Must perform five (5) TEVAR implantation cases over a twenty-four (24) month to be eligible to reapply for Thoracic Endovascular Aortic Aneurysm Repair (PEV-6) which will also be reviewed at the time of reappointment; **AND**
- All cases performed will be reviewed by quality assurance for outcomes within the standard of care.