**Facility:** UPMC Shadyside  
**Specialty:** CARDIOVASCULAR SURGERY

<table>
<thead>
<tr>
<th>KNOWLEDGE</th>
<th>Successful Completion of an ACGME/AOA, accredited program</th>
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<tr>
<td>TRAINING</td>
<td>The successful completion of an approved postgraduate residency program in thoracic surgery or general surgery</td>
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<tr>
<td>CERTIFICATION</td>
<td>Satisfactory completion of Board eligibility requirements and certification by the American Board of Thoracic Surgery must be accomplished within five years of the applicant’s initial appointment.</td>
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**For Peripheral Vascular Interventional Privileges: Regional Credentialing:**  
The peripheral vasculature consists of three regions (1) Aortoiliac and Brachiocephalic vessels (2) renal and abdominal visceral vessels (3) infrainguinal vessels, as defined in Section D of the attached criteria.

To be privileged, the physician must:
- Possess appropriate cognitive skills of the region (obtained via residency training or CME courses; documentation must be provided via letter from residency program or CME certificate/letter of attestation)
- Perform the appropriate number of procedures as indicated in the criteria column below
- Once appropriate number of procedures has been met, present a letter of endorsement from the proctor or present a letter from the training program director attesting that number of procedures has been attained through training.

**Peripheral Diagnostic Angiography, Regional Credentialing:**

100 Peripheral Diagnostic Arteriograms with 50 as primary operator  
(Procedures include aorto, iliac and lower extremity.)

**Peripheral Interventions (coiling, balloon dilations or stenting of vessels):**

50 Peripheral Interventions with 25 as the primary operator
| Aortoiliac & Brachiocephalic Vessels Interventions: | 20 diagnostic arteriograms with 10 interventional as primary operator |
| Renal & Abdominal Visceral Vessels: | 20 diagnostic arteriograms with 10 interventional as primary operator |
| Infra-inguinal Vessels Interventions | 20 diagnostic arteriograms with 10 interventional as primary operator |
| Endovascular Stent Grafts (Thoracic, Abdominal Aorta) | 10 as primary operator (a vascular surgeon must be present for non-vascular specialties) 10 cases as primary operator (if privileged for abdominal aorta, then 5 cases as primary operator) (a vascular surgeon must be present for non-vascular specialties) |
| Carotid Arteriography: | May only be performed by physicians that have spent at least three (3) months in a dedicated neuro-interventional training program and approved by their respective division chief. |
| Carotid Interventions: | If criteria met for Peripheral Angiography, then 50 selective carotid arteriograms with 25 as primary operator |
| | If physician does not meet peripheral angiography criteria listed above, 100 Diagnostic angiograms with 50 as primary operator |
| | 25 Interventions with 15 as primary operator |
| | 15 diagnostic carotid studies are required prior to being the primary operator on an interventional carotid procedure. |
| PLACEMENT OF ARTERIAL LINE | Initial appointment: Documentation of having performed five successful arterial line placements within the previous two-year period or attestation from the Program Director of his/her residency training program that he/she possesses such competence. |
| | Reappointment: Documentation of f five successful procedures within the preceding two years. If the physician is not able to document this number of procedures but believes he or she is qualified, they may |
demonstrate competence by performing the procedure to the satisfaction of another member of the department who is already credentialed who will certify that this physician is competent for the procedure.

**PLACEMENT OF CENTRAL VENOUS CATHETERS**

**Initial appointment:** Documentation of having performed five successful central venous catheter placements within the previous two year period or attestation from the Program Director of his/her residency training program that he/she possesses such competence.

**Reappointment:** Documentation of successful completion of a minimum of five procedures within the preceding two years. If the physician is not able to document this number of procedures but believes he or she is qualified, they may demonstrate competence by performing the procedure to the satisfaction of another member of the department who is already credentialed who will certify that this physician is competent for the procedure.

**PERICARDIOCENTESIS**

**Initial appointment:** the physician must have completed a fellowship and/or be Board eligible or Board certified in Cardiology or possess equivalent training (such as training in Critical Care Medicine or equivalent).

**Reappointment:** the physician must be able to provide documentation of having satisfactorily performed three successful procedures within the previous two years. A physician believing that he is qualified to perform this procedure but has not done the required minimum within the previous two years may demonstrate his competency by being supervised in one procedure by the Chief of the Division of Cardiology or his designee.

**THORACENTESIS**

**Initial appointment:** At the time of initial appointment, a physician shall demonstrate competency in this procedure either by providing documentation of having performed six successful procedures within the previous two-year period or attestation from the Program Director of his/her training program that he/she possesses such competence.

**Reappointment:** At the time of Reappointment, a physician shall have satisfactorily performed a minimum of four successful procedures within the preceding two years, and must be able to provide documentation. If the physician is not able to document this number of procedures but believes he or she is qualified, they may demonstrate competence by performing the procedure to the satisfaction of another member of the department who is already credentialed who will certify that this physician is competent for
EXCIMER LASER CORONARY ANGIOPLASTY

A. Physicians must have PTCA privileges at Shadyside Hospital.

B. Physicians will adhere to the guidelines established by the Laser Safety Committee and the “Laser Credentialing Process for Shadyside Hospital.”

C. The physician should have performed at least two hundred (200) PTCA procedures during the preceding two (2) years.

D. The physician should currently be performing PTCA procedures at a rate equal to or greater than seventy-five (75) per year.

E. The physician will participate in five (5) ELCA cases as first assistant.

F. The physician will perform five (5) ELCAs with a credentialed preceptor for Shadyside Hospital’s Medical Staff.

G. Documentation of procedures will be submitted to the Division Chief for final approval.

H. Review of procedural technique and equipment usage should also be mandatory for all physicians who have not performed ELCA within one year of receiving privileges for the procedure.

I. The requirements for supervision may be waived in the case of individuals who are known within the Pittsburgh cardiology community and whose prior experience can be verified directly.

RIGHT HEART CATHETERIZATION

1. The candidate will provide documentation of the performance of at least twenty-five (25) procedures to include patient identification, date, diagnosis, indication, complications and duration of monitoring.

2. The training director in writing should confirm the cognitive and technical skills of the candidate.

TRANS[LUMINAL EXTRACTION CATHETER (TEC) ANGIOPLASTY

the procedure.
1. The physicians must have PTCA privileges at Shadyside Hospital.

2. The physicians will have performed PTCA procedures at a rate of equal to or greater than seventy-five (75) per year.

3. Physicians will retain Directional Coronary Atherectomy privileges.

4. The physicians will perform five (5) cases with a supervising preceptor who has demonstrated competence and Atherectomy techniques. Completion of the cases will be forwarded to the Division Chief for his/her review and approval.

5. The Division Chief will review the request and documentation and grant approval if he/she finds it to be adequate.

**ENDOMYOCARDIAL BIOPSY**

A. Physicians must retain cardiac catheterization privileges at Shadyside Hospital.

B. Physicians will meet total case volumes requirements as outlined in the Division of Cardiology credentialing guidelines, i.e. three (3) cases annually. If an operator does not perform the minimal volume, consideration will be given to prior experience.

C. New cardiologists must be supervised for their first twenty-five (25) cases.

D. Physicians will provide evidence in the form of documentation by their fellowship director attesting to individual competency in this procedure. The documentation must include specific case volumes performed by the operator.

E. Maintenance, clinical judgment and competency in TEC will be monitored and evaluated by the Chief of Cardiology or his/her designee.

F. Following approval, the Chief will forward the privileges to the Department Chairman for review, approval and submission to the hospital Credentialing Committee.

**PTCA CREDENTIALING REQUIREMENTS**

**Training Requirements Justification**
The training required for competence in the performance of PTCA is in accord with the recommendations of the American College of Cardiology 17th Bethesda Conference on Adult Cardiology Training, “Guidelines for Credentialing and Facilities for Performance of Coronary Angioplasty: from the Committee on Interventional Cardiology of the Society for Cardiac Angiography and Interventions, and the “Clinical Competence in Percutaneous Transluminal Coronary Angioplasty” statement from the American College of Physicians, the American College of Cardiology and the American Heart Association Task Force on Clinical Privileges in Cardiology.

Minimal Training Requirements

**Newly Trained Physicians**

Candidates will retain board eligibility or board certification in cardiovascular diseases.

Candidates should complete a full cardiovascular training program that meets the requirements of the American Board of Internal Medicine for certification in Cardiovascular Disease and conforms to the guidelines outlined in the American College of Cardiology 17th Bethesda Conference on Adult Cardiology Training.

The fellowship should include intensive and extensive experience in cardiac catheterization and coronary angiographic techniques. This includes a minimum of 12 months of full-time experience in the cardiac catheterization laboratory. The candidate should have participated in or performed a minimum of three hundred (300) coronary angiographic procedures, with documentation of two hundred (200) as a primary operator.

To acquire the specific technical skills required for the performance of PTCA, an additional one (1) year of formal training in a structured fellowship program devoted to PTCA is recommended. During this time, a minimum of one hundred twenty-five (125) coronary angioplasties, including seventy-five (75) as the primary operator, should be documented to attain competence. Certification of experience should
Physicians Already in Practice With Intention to Perform PTCA

A candidate’s prior training in Cardiology may not have included specific experience with PTCA, but may have provided overall experience in Cardiology that should contribute to eventual competence in the procedure. These individuals should meet the following requirements.

A minimum of two (2) years of experience in performing cardiac catheterization without supervision. This experience should include a minimum of five hundred (500) diagnostic catheterization procedures with documentation of complication rates that are within accepted guidelines and with certification of competence with recognition and management of serious cardiovascular complications that may occur with these procedures.

Participation in one or more formal angioplasty courses that should include a minimum of fifty (50) hours of CME Category I instruction.

Performance of a minimum of one hundred twenty-five (125) PTCA procedures, including seventy-five (75) as the primary operator under the supervision of a recognized expert. Documentation of experience should be provided with the results certified by the laboratory director or recognized expert under whom the candidate trained. Only the laboratory director may certify experience gained prior to 1989.

II. Concurrent Evaluation of Physicians with Provisional Privileges

1. Concurrent Evaluation Will Consist of the Following:

   a. The first twenty-five (25) cases will be performed under the supervision of an evaluator.
   
   b. Concurrent periodic monitoring shall be made by the evaluator with a minimum of twelve (12) additional cases
over a two (2) year period of the clinical performance of the physician.

c. The evaluator has the right and responsibility to intervene at any time if, in his/her opinion, such intervention is in the best interest of the patient.

III. Maintenance of Competence

1. Maintenance of Competence in PTCA requires ongoing performance of the procedure, judged to be a minimum of fifty (50) procedures per year performed as the primary operator. New operators should achieve this caseload within eighteen (18) months of receiving privileges to perform angioplasty.

2. Operators who fail to meet the minimal volume requirements, but perform angioplasty at other institutions are required to submit a statement from the other institution’s program director attesting to case volumes as well as morbidity and mortality statistics.

3. Operators who do not meet minimum caseload requirements may have continued certification by the Credentialing Committee, upon recommendation of the Chief of Cardiology and the Chairman of the Department of Medicine.

4. The candidate’s clinical judgment and competency will be monitored and evaluated by the Chief of Cardiology and his/her designee.

5. An operator’s rate of complications should also be within national standards.

6. The candidate must participate in ongoing CME activities—thirty (30) hours every two (2) years.

IV. Institutional Review

Retrospective audit/medical care evaluation of angioplasty procedures shall be done periodically by the members of the Division Chief and the Department of Medicine Director.

DIRECTIONAL CORONARY ATERECTOMY (DCA)

1. Candidates will retain board eligibility or board certification in Cardiovascular disease.

2. Candidates should complete a full cardiovascular training program that meets the requirements of the American Board of Internal
Medicine for certification in Cardiovascular Disease and conforms to the guidelines outlined in the American College of Cardiology 17th Bethesda Conference on Adult Cardiology Training. (attached)

3. Candidates retain coronary angiographic privileges as outlined in the Shadyside Hospital Division of Cardiology’s PTCA Credentialing Requirements and will have acceptable morbidity and mortality statistics.

4. To acquire the specific technical skills required for the performance of DCA, attendance at one approved and accredited course dedicated to coronary atherectomy techniques is recommended or approved fellowship training that has included atherectomy experience as documented by a letter from the program director stating that the physician requesting privileges has had adequate training and experience.

5. The physician will perform ten (10) cases with a supervising preceptor who had demonstrated competence in atherectomy techniques. When the physician has completed the ten (10) cases to the satisfaction of the preceptor, the preceptor will document his/her recommendation and forward it to the Division Chief. The physician will forward a list of the cases to the Chief advising him/her of his/her completion of the required caseload.

6. Maintenance of clinical judgment and competence in DCA will be monitored and evaluated by the Chief of Cardiology or his/her designee.

7. The Division Chief will review the request and documentation and grant approval if he/she finds it to be adequate.

8. Following approval, the Chief will forward the privileges to the Department Chairman for review, approval and submission to the hospital Credentialing Committee.

CARDIAC CATHETERIZATION PRIVILEGES

1. New invasive cardiologists are required to have performed two hundred (200) cardiac catheterizations as the primary operator in order to be eligible for independent catheterization privileges.

2. Physicians must have performed at least fifty Coronary Angioplasties prior to receiving these privileges.

3. Prior to receiving privileges to perform unsupervised Angioplasties, all physicians must be supervised for the first
twenty-five (25) cases.

4. Relative to the privilege to perform Endo-myocardial Biopsy:
   a. New cardiologists must be supervised for the first twenty-five (25) cases.
   b. Physicians must provide evidence in the form of documentation by their cardiology director attesting to individual competency in this procedure. The documentation must include specific case volumes performed by the operator.

5. Relative to the privilege to perform Transseptal Procedures:
   a. New cardiologists must be supervised for the first twenty-five (25) cases.
   b. Physicians must provide evidence in the form of documentation by their cardiology director attesting to individual competency in this procedure. The documentation must include specific case volumes performed by the operator.

6. Relative to the privilege to perform Excimer Laser Coronary Angioplasty:
   a. Physicians must have PTCA privileges at Shadyside Hospital.
   b. Physicians will adhere to the guidelines established by the Laser Safety Committee and the “Laser Credentialing Process for Shadyside Hospital.”
   c. The physician should have performed at least two hundred (200) PTCA procedures during the preceding two (2) years.
   d. The physician should currently be performing PTCA procedures at a rate equal to or greater than one hundred (100) per year.
   e. The physician will participate in five (5) ELCA cases as first assistant.
   f. The physician will perform five (5) ELCAs with a credentialed preceptor for Shadyside Hospital’s Medical
Staff.

g. Documentation of procedures will be submitted to the Division Chief for final approval.

7. Review of procedural technique and equipment usage should also be mandatory for all physicians who have not performed Endomyocardial Biopsy, Transseptal Catheterization or Excimer Laser Coronary Angioplasty within one year of receiving privileges for same.

8. The requirements for supervision in items 3, 4, 5 and 6 may be waived in the case of individuals who are known within the Pittsburgh cardiology community and whose prior experience can be verified directly.

**ROTATIONAL AHERECTOMY, ROTOBLATOR**

1. Physician must attend and provide documentation of attendance at a company sponsored educational seminar, which meets FDA requirements.

2. Physician must have experience performing at least fifty (50) Percutaneous Transluminal Coronary Angioplasty procedures. (PTCA)

3. Physician must perform at least three (3) procedures under the supervision of an approved preceptor.

**STRESS ECHOCARDIOLOGY**

1. Completion of an acceptable Stress Echocardiology educational program.

2. Two (2) years experience interpreting conventional 2D and Doppler Echocardiograms.

3. Board Certification in Cardiovascular Disease medicine.

4. Willingness to dedicate the time necessary to perform and interpret studies.

**INTRACORONARY STENT IMPLANTATION**

Newly trained Physicians
Physicians wishing to acquire Intracoronary Stent Implantation privileges are required to submit documentation of training and experience by their training program Director to include total case experience and educational program attendance.

**Physicians in Practice with the Intent to Perform Intracoronary Stenting**

Physicians wishing to acquire Intracoronary Stent Implantation privileges are required to submit documentation of training and experience to include total case experience and educational program attendance.

Those physicians who are unable to provide documentation will be required to perform five (5) cases with an experienced preceptor. Documentation of clinical expertise must be forwarded to the Division Chief prior to approval

**INTRAOPERATIVE TRANSESOPHAGEAL ECHOCARDIOGRAMS**

1. TEE credentialed cardiologists will perform and interpret Intracoronary Transesophageal Echocardiograms at Shadyside Hospital until such time as a credentialed anesthesiologist will be able to resume the responsibility by mutual agreement.

2. The following indications are provided as guidelines for usage of this service.

   A. Valve Repair
   B. Double Valve Replacement
   C. Single Valve Replacement if requested by a cardiac surgeon.
   D. Repairs of Ventricular Septal Defect, Papillary Muscle Rupture, Atrial Septal Defect, as indicated.
   E. High-risk patients if requested by cardiac surgeons.

3. Unless the Transesophageal echo is done on an emergency basis, cardiology notification is required at the time the case is scheduled with the operating room.

4. Pre and post operative Transesophageal echoes will be done under the supervision of TEE credentialed cardiologists.

5. Cardiology consultation is recommended for high-risk complex
cases prior to Transesophageal Echocardiography.

6. As in the past, cardiologists will be performing Intraoperative Transesophageal Echoes on their own patients as much as possible. Other TEE credentialed cardiologists on a rotational basis will attend unassigned patients. A detailed schedule will be provided in the future.

7. The technologists of the Echocardiography Department will be functioning under the guidance and supervision of the cardiologists.

**FLUOROSCOPY**

Initial Privileges
2. Successfully complete a written test (passing grade of 80%). Up to 2.5 Category 1 CME credits will be awarded for a passing score.
3. Complete and submit a CME registration and evaluation form.

For Re-certification (re-certification for fluoroscopy certification is required as part of the reappointment process):
1. Access the Fluoroscopy Rapid Deployment CME module at the following website: [http://cme.health.pitt.edu](http://cme.health.pitt.edu)

**LASER**

1. For each laser type and operative category, produce a letter from your residency chair or director stating the laser safety training and use of supervision during your residency

OR

2. For each specific laser type and operative category provide documentation of an instructional course taken to learn about this specific laser and its operative applications. Please note that the certificate must delineate the specific laser(s) involved in the course and their operative application(s).

OR

3. Complete the in-house Laser Education and Proctoring Program by: Taking the University of Iowa Health Care laser safety-training test.
a. You must read the safety course items and then click on Basic Laser Safety Exam. You need to then type in all of your personal information and take the test. Before you click on “Submit the Test” please print the test. Then hit Submit and the test will be scored for you. You will need to print this as well. You must score 100% to pass the test.

b. You will need to submit these two (2) printouts to the appropriate Medical Staff Office. The fax number for the Presbyterian Campus is 412-647-6607 while the fax number for the Shadyside Campus is 412-623-3005.

c. Completing laser proctoring at either the Presbyterian Campus or the Shadyside Campus of UPMC Presbyterian Shadyside with a colleague in your department who is recommended by your department chair as qualified. The proctor must have the laser privileges you are requesting and deem you qualified for each laser type and operative category you are requesting. The individual must proctor two (2) individual cases for each laser type and operative application requested. The proctor’s documentation must accompany the addendum and be returned to the appropriate Medical Staff Office for processing as part of your application to the Medical Staff. The Laser Safety Officer can provide further clarification regarding these policies and give you assistance arranging for a proctor.

NOTE: The request for laser privileges will not be considered unless the necessary documentation is attached.