



# Atrium Health

## IMPORTANT

Dear Applicant

Enclosed you will find the Delineation of Privileges Form specific to your specialty. This form reflects the minimum qualifications as outlined and approved by the Atrium Health Medical Staff.

- Please thoroughly review and select your desired clinical privileges. Check the box corresponding to the privileges that you are requesting. Applicants should only request those privileges where the criteria has been achieved.
- After you have selected your privileges, sign, date, and submit the **required documentation** for each privilege selected. (i.e. case logs, fellowship director letter, ACLS documentation)
- Where case logs are required, please include 1) Date of procedure, 2) Medical Record Number, 3) Procedure Type and 4) Privilege Number listed on the Delineation of Privileges Form.
- Privileges for which you have not selected or do not meet the minimum criteria cannot be performed.
- If you wish to perform privileges and do not have documentation of the minimum criteria requirements as outlined on the Delineation of Privileges Form, you will need to request permission to proctor through Medical Staff Services.
- Failure to return the Delineation of Privileges Form along with the required documentation will **delay** your start date.

If you have any questions or concerns, please contact the Medical Staff Services teammate assigned to your file.

**ATRIUM HEALTH  
CARDIOLOGY/CARDIOVASCULAR MEDICINE  
DELINEATION OF PRIVILEGES  
SPECIALTY OF INTERNAL MEDICINE**

Print Name \_\_\_\_\_

|                          |     |                          |    |   |
|--------------------------|-----|--------------------------|----|---|
| <input type="checkbox"/> | YES | <input type="checkbox"/> | NO | I have participated in direct patient care in the hospital setting within the past two (2) years. |
|--------------------------|-----|--------------------------|----|---|

**If the answer is No, please do not complete this form. Contact the Medical Staff Office at (704) 355-2147 for additional instructions regarding the required proctoring process.**

**If you would like to request Moderate Sedation (Conscious Sedation), please request the Moderate Sedation Delineation of Privileges form.**

**Initial appointment**     **Reappointment**     **Updated DOP**

To be eligible for core privileges in Cardiology/Cardiovascular Medicine, the applicant must meet the following qualifications:

- If the applicant is not currently subspecialty certified in Cardiology/Cardiovascular Medicine by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA) with a Certification of Special Qualifications (CSQ) in Cardiology, the applicant must:
  1. Provide documentation of successful completion of an ACGME or AOA accredited Cardiology/Cardiovascular Medicine Fellowship Training Program in Cardiology or Cardiovascular Medicine, within the past five (5) years; **AND**
  2. Verification from the fellowship program director that the Applicant successfully completed the program. Experience must include evidence of current clinical competence during the past two (2) years. The Applicant has the burden of producing information deemed adequate by the Hospital for a proper evaluation of current competence, and other qualifications and for resolving any doubts;
  3. Documentation of current Advanced Cardiac Life Support (ACLS) course completion card. (Refer to Note 4)
  
- If the applicant is currently subspecialty certified in Cardiology or Cardiovascular Medicine by the American Board of Medical Specialties (ABMS) or by the American Osteopathic Association, the applicant must:
  1. Provide documentation of active cardiology practice in an accredited hospital or healthcare facility for at least two (2) years;
  2. Documentation of current Advanced Cardiac Life Support (ACLS) course completion card. (Refer to Note 4)

Print Name \_\_\_\_\_

NOTE 1: Physicians must apply for "CORE" privileges in order to be eligible for clinical privileges in the specialty of Cardiology/Cardiovascular Medicine at any facility within Atrium Health.

NOTE 2: "CORE" privileges cannot be amended or altered in any way.

NOTE 3: Please note that the exercise of certain privileges enumerated herein is necessarily limited by the operational, and resource constraints of the facility. All procedures must be performed within a clinical setting with the capabilities and organizational structure required to provide appropriate support.

NOTE 4: ACLS is not required for Telemedicine **Only** Cardiologists. Continued ACLS certification will be tracked and monitored by the service line

**\* SPECIAL PRIVILEGES WITH QUALIFICATIONS AND/OR SPECIFIC CRITERIA - PROVIDE THE NUMBER OF PROCEDURES PERFORMED WITHIN THE PAST TWO YEARS AND FACILITY WHERE THE PROCEDURES WERE PERFORMED.**

Please check appropriate blocks when applying for privileges:

| CMC | Pineville | University City | CR  | Lincoln | Cabarrus | Union | Stanly | Anson | Cleveland | <b>CARDIOLOGY CORE PRIVILEGES</b>   | Proctoring Requested |
|-----|-----------|-----------------|-----|---------|----------|-------|--------|-------|-----------|---|----------------------|
|     |           |                 | N/A |         |          |       |        |       |           | CCAR-1<br>Privileges to evaluate, diagnose, treat and provide consultation to patients of all ages presenting with diseases of the heart, lungs, and blood vessels and manage complex cardiac conditions such as heart attacks, and life-threatening, abnormal heartbeat rhythms. |                      |

NOTE: Privileges include but are not limited to: advanced cardiac life support (ACLS), cardioversion, insertion and management of central venous and pulmonary artery catheters, use of thrombolytic agents, pericardiocentesis, echocardiography interpretation including stress echocardiography and transesophageal echocardiography, holter scanning, exercise stress testing, drug-induced stress testing and interpretation of radionuclide cardiac studies, temporary transvenous pacemaker placement, intra-aortic balloon pump placement, electrical cardioversion and diagnostic cardiac catheterization, implantable intravascular pressure sensor/device insertion, provide basic care and management of patients with implantation of artificial heart and mechanical devices to support or replace the heart partially or totally and implantable loop recorder implantation and removal.

These core privileges do not include any of the special procedures listed below.

| CARDIOLOGY CORE PRIVILEGES |     |     |     |     |     |     |     |     |     |   |                      |
|----------------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|----------------------|
| CMC                        | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | SPECIAL PRIVILEGE   | Proctoring Requested |
|                            |     |     |     |     |     |     |     |     |     | Must apply for and maintain Cardiology Core Privileges (CCAR-1) |                      |
|                            |     |     | N/A |     |     |     |     |     | N/A | CCAR-1(c) Endomyocardial Biopsy                                 |                      |

**CCAR-1(c) Endomyocardial Biopsy**

**Credentials Required:**

1. Apply for and meet the necessary criteria to be granted privileges for Cardiology Core Privileges (CCAR-1); **AND**
2. Provide documentation from the Cardiology or Cardiovascular Medicine fellowship program director that the Applicant completed training to include patient selection, management and care of patients who are being considered for or who require, device-based heart failure management (e.g. mechanical circulatory support devices), within the past five years; **AND**
3. Provide documentation of the management of at least six (6) endomyocardial biopsies in the past two (2) years; **OR**
3. Submit the PERMISSION TO BE PROCTORED REQUEST FORM requesting concurrent proctoring by a physician who currently holds privileges to perform Endomyocardial Biopsy. You must provide documentation of proctoring for ten (10) procedures.

**OR**

1. Apply for and meet the necessary criteria to be granted privileges for Cardiology Core Privileges (CCAR-1); **AND**
2. Provide documentation of the management of at least six (6) endomyocardial biopsies in the past two (2) years; **OR**
2. Submit the PERMISSION TO BE PROCTORED REQUEST FORM requesting concurrent proctoring by a physician who currently holds privileges to perform Endomyocardial Biopsy. You must provide documentation of proctoring for ten (10) procedures.

**Reappointment Criteria for Continued Privileges – Endomyocardial Biopsy (CCAR-1(c)):**

The Physician must provide documentation of at least two (2) cases over a two (2) year period to be eligible to reapply for privileges. This will be reviewed at the time of the physician's reappointment. Physicians who would like to continue to hold endomyocardial biopsy privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for the privilege and submit a Request to Be Proctored Form.

| CMC | PVL | UNV | CR | LIN | CAB | UNN | STA | ANN | CLE | CORE CARDIOLOGY/CARDIOVASCULAR MEDICINE PRIVILEGES – REHABILITATION HOSPITAL SETTING ONLY   | Proctoring Requested |
|-----|-----|-----|----|-----|-----|-----|-----|-----|-----|---|----------------------|
| N/A | N/A | N/A |    | N/A | N/A | N/A | N/A | N/A | N/A | CCAR-9 Privileges include evaluation and management, as well as procedures approved for performance within the acute rehabilitation setting, in conjunction with the comprehensive rehabilitation treatment plan. |                      |

Print Name

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | <b>Ventricular Assist Device (VAD)</b><br>Must apply for and maintain Cardiology Core Privileges (CCAR-1)   | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|----------------------|
|     |     |     | N/A |     |     |     |     |     |     | CCAR-1(a) Provide advanced care and management of complex patients with implantation of artificial heart and mechanical devices to support or replace the heart partially or totally. |                      |

**CCAR-1(a) Ventricular Assist Device (VAD)**

Ventricular Assist Device (VAD) is a mechanical circulatory device that is used to partially or completely replace the function of a failing heart. The mechanical pump is used to support heart function and blood flow in patients who have weakened hearts. A VAD can help support the heart during or after surgery until the heart recovers, while waiting for a heart transplant, and for patients who are not eligible for a heart transplant, can be a long-term solution to help the heart work better.

**Credentials Required:**

1. Apply for and meet the necessary criteria to be granted privileges for Cardiology Core Privileges (CCAR-1); **AND**
2. Documentation of current subspecialty certification in Advanced Heart Failure and Transplant Cardiology from the American Board of Medical Specialties; **OR**
2. Provide documentation from the Cardiology or Cardiovascular Medicine fellowship program director that the Applicant completed training to include patient selection, management and care of patients who are being considered for or who require, device-based heart failure management (e.g. mechanical circulatory support devices), within the past five (5) years; **AND**
3. Provide documentation of the management of at least six (6) Ventricular Assist Devices (VAD) in the past two (2) years; **OR**
3. Submit the PERMISSION TO BE PROCTORED REQUEST FORM requesting concurrent proctoring by a physician who currently holds privileges to perform Ventricular Assist Device. You must provide documentation of proctoring for six (6) procedures.

**OR**

1. Apply for and meet the necessary criteria to be granted privileges for Cardiology Core Privileges (CCAR-1); **AND**
2. Documentation of current subspecialty certification in Advance Heart Failure and Transplant Cardiology from the American Board of Medical Specialties; **AND**
3. Provide documentation of the management of at least six (6) Ventricular Assist Devices (VAD) in the past two (2) years; **OR**
3. Submit the PERMISSION TO BE PROCTORED REQUEST FORM requesting concurrent proctoring by a physician who currently holds privileges to perform Ventricular Assist Device. You must provide documentation of proctoring for six (6) procedures.

**Reappointment Criteria for Continued Privileges - Ventricular Assist Device (VAD) (CCAR-1(a)):**

The Physician must provide documentation that they have participated in the care of these patients over a two (2) year period to be eligible to reapply for Ventricular Assist Device (VAD) privileges. Acceptable results of ongoing professional practice evaluation and outcomes will be considered to reapply for VAD. The physician must also provide documentation of current subspecialty certification in Advanced Heart Failure and Transplant Cardiology from the American Board of Medical Specialties. This will be reviewed at the time of reappointment. Physicians who would like to continue to hold any special privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for such privileges and to complete the necessary proctoring forms.

EXCEPTION: patients with a Ventricular Assist Device who are receiving Hospice and Palliative Care are not required to be managed by a Cardiologist.

Print Name \_\_\_\_\_

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | <b>CARDIOVASCULAR DISEASE OUTPATIENT CORE PRIVILEGES</b> |   | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|---|----------------------|
| N/A | N/A | N/A | N/A | N/A |     | N/A | N/A | N/A | N/A | CCAR-1(b)  | Privileges include but are not limited to providing medical services involving the care of outpatients in the Heart Success Clinic, and the hospital clinics that are on the hospital license, when their participation is requested by the respective Chief or designee of the Department. These privileges shall - include management of clinical problems which fall within the purview of Cardiovascular Disease. |                      |

**Reappointment Criteria for Continued Privileges (CCAR-1(b))**

For any privileges that are granted during initial credentialing the Appointee must provide the following at the time of reappointment:

1. The Physician must provide documentation from their outpatient practice setting to include a minimum of three (3) cases managed in the most recent two (2) years; **AND**
2. Submission of a Peer Review Evaluation Form completed by one of the Applicant's peers that refers patients to Appointee.

This will be reviewed at the time of reappointment. Physicians who would like to continue to hold Cardiovascular Disease Outpatient Core Privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for such privileges and to complete the necessary proctoring forms.

Reference

Print Name \_\_\_\_\_

To be eligible for core privileges in Interventional Cardiology Core Privileges, the applicant must meet the following qualifications:

- If the applicant is not currently subspecialty certified in Interventional Cardiology by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA) the applicant must:
  1. Provide documentation of certification in Internal Medicine; **AND**
  2. Provide documentation of an additional one (1) year accredited program in Interventional Cardiology within the past two (2) years with verification of competence by the Director of the training program.

**OR**

- If the applicant is currently subspecialty certified in Interventional Cardiology by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA), the applicant must:
  1. Provide documentation of subspecialty certification in Interventional Cardiology from the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA); **AND**
  2. Submit documentation of a minimum number of one-hundred and fifty (150) interventional cases for the past two (2) years.\*

\*Alternatively, for applicants that do not meet a threshold of one-hundred and fifty (150) interventional cases for the past two (2) years; applicants may submit the total number of cases in a lifetime career for review and consideration of a proctoring process by a high volume interventionalist with privileges. This will be at the discretion of the medical director of the cardiovascular diagnostic laboratory in conjunction with the chief/section chief of the department of internal medicine (applicants will need to contact the medical staff office for instructions for permission to be proctored request forms).

Please check appropriate blocks when applying for privileges:

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | INTERVENTIONAL CARDIOLOGY CORE PRIVILEGES |  | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|--|----------------------|
|     |     |     | N/A | N/A |     |     | N/A | N/A |     | CCAR-2 *                                  | Privileges to evaluate and treat disease in the coronary arteries, cardiac valves or cardiac chambers to include, but not limited to, embolectomy, thrombectomy, coronary angioplasty, endomyocardial biopsy, cardiac valvuloplasty, ASD closures, catheter directed thrombolysis of the pulmonary arteries, septal ablation or any cardiac interventional procedure as outlined/defined under American College of Cardiology (ACC), American Heart Association (AHA), or the Society for Cardiovascular Angiography and Interventions (SCAI) protocols or guidelines that are FDA approved devices. Supplemental certification may be required for low volume procedures as dictated by FDA or other regulatory agencies or at the discretion of the Medical Director of the Cardiovascular Diagnostic Laboratory.<br><br>Devices that are under Investigational Review Board (IRB) supervision (FDA-IRB) devices under this category may only be performed by CAR-2 privileged physicians who meet the criteria as specified by their respective IRB protocol. |                      |
|     |     |     |     |     |     |     |     |     |     | <b>Minimum Number Required</b>            | <b>Number Performed Within The Past 2 Years</b>  | <b>Location</b>      |
|     |     |     |     |     |     |     |     |     |     | 150                                       |  |                      |

\_\_\_\_\_  
 Print Name

**REAPPOINTMENT CRITERIA FOR CONTINUED PRIVILEGES – INTERVENTIONAL CARDIOLOGY CORE PRIVILEGES (CCAR-2):**

**CASES:** The Physician must submit a minimum of one hundred and fifty (150) representative samples of interventional cardiology procedures over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for interventional cardiology privileges. This will be reviewed at the time of reappointment. Physicians who do not meet the one hundred and fifty (150) representative samples of interventional cardiology procedures over a two (2) year period consideration of reappointment will be at the discretion of the Medical Director of the Cardiovascular Diagnostic Laboratory in conjunction with the Chief/Section Chief of the Specialty.

**CME:** To maintain a cognitive knowledge base, it is recommended that individual operators attend at least twenty (20) hours of interventional cardiology continuing medical education (CME) every two (2) years. This could include a catheterization conference and PCI meetings in addition to expanding the use of simulation cases for procedure use and competence.

**OTHER CRITERIA:** The continued performance of these procedures will be assessed for clinical competence as these procedures require considerable experience and judgment. The type(s) of information that may be included in this review are; quality benchmarks, mortality related to the procedure, stroke, MI related to the procedure, Ischemia requiring emergency CABG either as a result of the procedure failure or a procedure complication, vascular access site complications, contrast agent nephropathy, excessive bleeding, requiring treatment and other data such as coronary perforation and tamponade.

Please check appropriate blocks when applying for privileges:

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | <b>INTERVENTIONAL CARDIOLOGY – SPECIAL PRIVILEGES</b>                          |  | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|----------------------|
|     |     |     |     |     |     |     |     |     |     | Must apply for and maintain Interventional Cardiology Core Privileges (CCAR-2) |  |                      |
|     | N/A | N/A | N/A | N/A |     | N/A | N/A | N/A | N/A | CCAR-2(a) *  | Trans-Catheter Aortic Valve Replacement (TAVR) |                      |
|     |     | N/A | N/A | N/A |     |     | N/A | N/A | N/A | CCAR-2(b)  | Renal Denervation                              |                      |

**CCAR-2(a) TRANS-CATHETER AORTIC VALVE REPLACEMENT (TAVR)**

Transcatheter valve replacement is similar from an operator viewpoint to the currently performed balloon aortic valvuloplasty. In that procedure, a balloon is delivered via a transarterial approach and used to dilate the stenotic aortic valve. With TAVR, similar techniques are used to deliver and implant the stent-based prosthetic valve in the site of the native aortic valve. The cognitive base and catheter skills of interventional cardiology are therefore required. However, the procedure differs from balloon aortic valvuloplasty in several important respects. These include the following:

1. TAVR is often performed via a femoral artery cut down, a procedure necessarily performed by a cardiovascular surgeon.
2. Given the significant incidence of emergent life-threatening complications such as valve embolization (unique to TAVR) and/or aortic rupture, a credentialed cardiovascular surgeon is required to be a member of the implant team. These complications, if they occur may require immediate surgical intervention. Thus, a credentialed cardiovascular surgeon, who holds the TAVR privilege, must be scrubbed in at the table ready for emergency surgical intervention during the critical portions of the procedure.

\_\_\_\_\_  
Print Name

**CCAR-2(a) TRANS-CATHETER AORTIC VALVE REPLACEMENT (TAVR) – continued**

**NO PRIOR EXPERIENCE/TRAINING IN TAVR DEVICE USE**

1. Apply for and meet the necessary criteria to be granted privileges for Interventional Cardiology Core Privileges (CCAR-2); **AND**
2. Provide documentation of subspecialty certification in Interventional Cardiology by the American Board of Internal Medicine or the American Osteopathic Association; **OR**
2. Provide documentation for the successful completion of an industry sponsored training program; **AND**
3. Submit documentation of successful completion of twenty (20) cases which were performed under the guidance of an approved proctor who is trained in the TAVR device procedure.

**OR**

**CURRENTLY EXPERIENCED AND PERFORMING TAVR DEVICE PROCEDURES**

1. Provide documentation of subspecialty certification in Interventional Cardiology by the American Board of Internal Medicine or the American Osteopathic Association; **AND**
2. Apply for and meet the necessary criteria to granted privileges for Interventional Cardiology Core Privileges (CCAR-2); **AND**
3. Submit documentation of successful completion of twenty (20) TAVR procedures, which were performed within the past two (2) years, with acceptable outcomes. (Please note: these cases will be reviewed by the Cardiovascular Diagnostic Laboratory Committee)

**PLEASE NOTE:** If the proctoring is to occur at Cabarrus or Carolinas Medical Center, contact the Medical Staff Office to obtain the POLICY AND THE PERMISSION TO BE PROCTORED REQUEST FORM. This process must be completed before you apply for the privilege. It is noted that the proctoring for the TAVR device will occur at Carolinas Medical Center. The definition of a proctor is listed below.

\* For the TAVR procedure a proctor is defined as a thoracic and cardiovascular surgeon and/or interventional cardiologist who has met the above outlined qualifications for credentialing and has practice experience in successful use of the TAVR device. The proctor must submit a letter from their institution where they currently hold the privileges, attesting to experience and satisfactory outcomes using the TAVR device. Additionally, the proctor shall be approved by the Chief of the Department. PLEASE NOTE: The TAVR procedure is performed as a team with one Interventional Cardiologist and one Thoracic and Cardiovascular Surgeon; therefore, both the Interventional Cardiologist and the Thoracic and Cardiovascular Surgeon would receive credit for being proctored.

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Print Name

### **CCAR-2(a) TRANS-CATHETER AORTIC VALVE REPLACEMENT (TAVR) – continued**

#### **Reappointment Criteria for Continued Privileges – TAVR (CCAR-2(a)):**

The Physician must submit a representative sample of a minimum of twenty (20) cases over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for Trans-catheter Aortic Valve Replacement (TAVR). This will be reviewed at the time of reappointment. Physicians who would like to continue to hold any special privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for such privileges and to complete the necessary proctoring forms.

### **CCAR-2(b) RENAL DENERVATION**

#### **Credentials Required:**

1. Apply for and meet the necessary criteria to be granted privileges for Interventional Cardiology Core Privileges (CCAR-2); **AND**
2. Provide documentation of at least ten (10) Renal Denervation cases in the past two (2) years; **OR**
3. Submit the PERMISSION TO BE PROCTORED REQUEST FORM requesting concurrent proctoring by a physician who currently holds privileges to perform Renal Denervation. You must provide documentation of proctoring for ten (10) procedures.

#### **Reappointment Criteria for Continued Privileges – Renal Denervation (CCAR-2(b)):**

The Physician must provide documentation of at least ten (10) renal denervation cases over a two (2) year period to be eligible to reapply for privileges. This will be reviewed at the time of the physician's reappointment. Physicians who would like to continue to hold renal denervation privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for the privilege and submit a Request to Be Proctored Form.

\_\_\_\_\_  
 Print Name

The following Clinical Cardiac Electrophysiology Core Privileges may be requested only by applicants who meet the entry level criteria and who have completed an accredited program in clinical cardiac electrophysiology; **AND**

Completion of an additional one (1) year accredited program in Clinical Cardiac Electrophysiology Cardiology or subspecialty certification in Clinical Cardiac Electrophysiology Cardiology with verification of competence in the requested procedure by the Directory of the training program; **OR**

Applicants who completed their training program greater than two (2) years ago and are currently practicing Clinical Cardiac Electrophysiology may submit a minimum number of three hundred (300) Electrophysiology cases for the past two (2) years, **OR**

Alternatively, for applicants that do not meet a threshold of three hundred (300) Electrophysiology cases for the past two (2) years; applicants may submit the total number of cases in a lifetime career for review and consideration of a proctoring process by a high-volume Cardiac Electrophysiologist with privileges. This will be at the discretion of the medical director of the cardiovascular diagnostic laboratory in conjunction with the chief/section chief of the department of internal medicine (applicants will need to contact the medical staff office for instructions for permission to be proctored request forms).

Please check appropriate blocks when applying for privileges:

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | <b>CLINICAL CARDIAC ELECTROPHYSIOLOGY CORE PRIVILEGES</b> |  | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|--|----------------------|
|     |     | N/A | N/A | N/A |     |     | N/A | N/A |     | CCAR-3 *  | Privileges to evaluate, treat and provide consultation to acute and chronically ill patients of all ages with a variety of heart rhythm disorders. Care of patients before and after an electrophysiologic procedure; with permanent pacemakers; Cardiac Resynchronization Therapy (CRT); with postoperative arrhythmias and care of patients with ICDs. |                      |
|     |     |     |     |     |     |     |     |     |     | <b>Minimum Number Required</b>                            | <b>Number Performed Within The Past 2 Years</b>  | <b>Location</b>      |
|     |     |     |     |     |     |     |     |     |     | 300   |  |                      |

**NOTE:** Privileges include sinus node dysfunction, atrioventricular (AV) and intraventricular block, and supraventricular and ventricular tachyarrhythmias; clinical conditions of unexplained syncope, aborted sudden cardiac death, palpitations, Wolff-Parkinson-White (WPW) syndrome, and long QT syndrome and implantable loop recorder implantation and removal.

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Print Name

**Reappointment Criteria for Continued Privileges – Clinical Cardiac Electrophysiology Core Privileges (CCAR-3):**

**CASES:** The Physician must submit a minimum of one hundred and fifty (150) representative samples of clinical cardiac electrophysiology procedures over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for clinical cardiac electrophysiology privileges. This will be reviewed at the time of reappointment. Physicians who do not meet the one hundred and fifty (150) representative samples of electrophysiology cardiology procedures over a two (2) year period consideration of reappointment will be at the discretion of the Medical Director of the Cardiovascular Diagnostic Laboratory in conjunction with the Chief/Section Chief of the Specialty.

**CME:** To maintain a cognitive knowledge base, it is recommended that individual operators attend at least twenty (20) hours of clinical cardiac electrophysiology continuing medical education (CME) every two (2) years.

**OTHER CRITERIA:**

The continued performance of these procedures will be assessed for clinical competence as these procedures require considerable experience and judgment. The type(s) of information that may be included in this review are quality benchmarks, mortality related to the procedure, and periprocedural complications including but not limited to vascular site complications, cardiac perforation, cardiac device infection, and procedure related pneumothorax.

Print Name \_\_\_\_\_

- SPECIAL PRIVILEGES (SEE QUALIFICATIONS AND/OR SPECIFIC CRITERIA) – PROVIDE THE NUMBER OF PROCEDURES PERFORMED WITHIN THE PAST TWO YEARS AND FACILITY WHERE THE PROCEDURES WERE PERFORMED.**

Please check appropriate blocks when applying for privileges:

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | CLINICAL CARDIAC ELECTROPHYSIOLOGY – SPECIAL PRIVILEGES  | Number Performed Within The Past 2 Years | Location | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|--|----------|----------------------|
|     |     |     |     |     |     |     |     |     |     | Must apply for and maintain Cardiology or Interventional Cardiology Core Privileges (CCAR-1 or CCAR-2)   |  |          |                      |
|     |     |     |     |     |     |     |     |     |     | CCAR-4 *<br>Cardiac Pacing and Arrhythmia Management<br><b>Please Note:</b> that Cardiac Pacing and Arrhythmia Management (CCAR-4) privileges are included in Clinical Cardiac Electrophysiology Core Privileges (CCAR-3). CCAR-4 privileges are reserved for physicians who can meet the approved initial and Reappointment Criteria but have not completed a fellowship in Clinical Cardiac Electrophysiology. |  |          |                      |
|     |     | N/A | N/A |     |     |     |     | N/A | N/A | CCAR-4(a)<br>Permanent Pacemakers *  |  |          |                      |
|     |     | N/A | N/A | N/A |     |     |     | N/A | N/A | CCAR-4(b)<br>Implantable Cardioverter-defibrillators (ICD) *   |  |          |                      |
|     |     | N/A | N/A | N/A |     |     |     | N/A | N/A | CCAR-4(c)<br>Cardiac Resynchronization Therapy (CRT) *   |  |          |                      |

**CCAR-4 CARDIAC PACING AND ARRHYTHMIA MANAGEMENT**

Cardiac pacing and arrhythmia management involves implanting electronic devices such as pacemakers or implantable cardioverter-defibrillators (ICD). These devices are designed to detect arrhythmia (i.e., abnormal heart rhythms), when the heart beats too slowly (i.e., bradycardia) or too rapidly (i.e., tachycardia) and deliver a shock to restore normal rhythm.

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Print Name

**CCAR-4(a) PERMANENT PACEMAKERS**

The Applicant should provide documentation of the following:

1. Documentation of current certification by the American Board of Medical Specialties or the American Osteopathic Board of Cardiology; **OR**
1. Documentation of successful completion, within the past five (5) years of an ACGME or AOA accredited fellowship training program in Cardiovascular Diseases; **AND**
2. Provide documentation of successful completion of the International Board of Heart Rhythm Examiners (IBHRE) exam certification; **AND**
3. Provide documentation of at least fifty (50) primary implantations of transvenous pacemakers and twenty (20) pacemaker system revisions or replacements. (At least half of the implantations should involve dual-chamber pacemakers). The Applicant must also have participated in the follow-up of at least one hundred (100) pacemaker patient visits and acquire proficiency in the advanced pacemaker electrocardiography, interrogation, and programming of complex pacemakers.

**CCAR-4(b) IMPLANTABLE CARDIOVERTER-DEFIBRILLATORS (ICD)**

The Applicant should provide documentation of the following:

1. Apply for and meet the criteria requirements for permanent pacemakers (CCAR-4(a)); **AND**
2. Provide documentation of successful completion of the International Board of Heart Rhythm Examiners (IBHRE) exam certification; **AND**
3. Provide documentation of at least twenty-five (25) ICDs with defibrillation threshold testing with at least ten (10) of these being revisions/replacements.

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Print Name

**CCAR-4(c) CARDIAC RESYNCHRONIZATION THERAPY (CRT)**

The Applicant should provide documentation of the following:

1. Apply for and meet the criteria requirements for implantable cardioverter-defibrillators (ICD), (CCAR-4(b)); **AND**
2. Provide documentation of successful completion of the International Board of Heart Rhythm Examiners (IBHRE) exam certification; **AND**
3. Provide documentation of at least twenty (20) CRT device implantations.

**Reappointment Criteria for Continued Privileges – Clinical Cardiac Electrophysiology Special Privileges:**

**Cases:** The Physician must submit a representative sample of a minimum of twenty-four (24) Cardiac Pacing and Arrhythmia Management procedures and ten (10) revision(s)/replacement(s) procedures over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for Cardiac Pacing and Arrhythmia Management (CCAR-4(A) – CCAR-4(C)) privileges. This will be reviewed at the time of reappointment. Please note that at least ten (10) of the procedures submitted, to meet the Reappointment Criteria, must be in the top level of the privileges requested, i.e., CCAR-4 (c) would require at least 10 of the 24 maintenance procedures to be a CRT-D device, CCAR-4 (b) would require at least 10 of the 24 maintenance procedures to be an ICD device, etc. Physicians who would like to continue to hold any special privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for such privileges and to complete the necessary proctoring forms.

**OTHER CRITERIA:**

The continued performance of these procedures will be assessed for clinical competence as these procedures require considerable experience and judgment. The type(s) of information that may be included in this review are quality benchmarks, mortality related to the procedure, and periprocedural complications including but not limited to vascular site complications, cardiac perforation, cardiac device infection, and procedure related pneumothorax.

Print Name \_\_\_\_\_

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | <b>SPECIAL PRIVILEGE - ECMO</b><br>Must apply for and maintain Core Privileges | Minimum Number Required | Number Performed Within The Past 2 Years | Location | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--|-------------------------|--|----------|----------------------|
|     | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | CCAR-10 Extracorporeal Membrane Oxygenation (ECMO) Management                  | 4                       |  |          |                      |

**CCAR-10 EXTRACORPOREAL MEMBRANE OXYGENATION (ECMO) MANAGEMENT**

**SHORT DEFINITION:** ECMO is the specialized technique of mechanical extracorporeal cardiac and/or respiratory support for patients with life-threatening failure of heart or lung function.

**SKILLS AND TRAINING NEEDED:**

1. Provide verification from the fellowship program director that the Applicant has been trained in ECMO and has participated in the management of four (4) cases within the past two (2) years;

**OR**

1. Provide documentation of certification of attendance at an ECMO Management Course indicating the completion of didactic and simulation training exercise within the past two (2) years; **AND**
2. Upon documentation of above, the Applicant must complete the Permission to be Proctored Request Form requesting to be proctored for four (4) cases of active ECMO management;

**OR**

1. Provide verification from the Chief/Chairman of the Applicant's Department that the Applicant has performed active ECMO management within the past two (2) years; **AND**
2. Provide case log documentation of successful active ECMO management of four (4) cases within the past two (2) years.

**REAPPOINTMENT CRITERIA FOR CONTINUED PRIVILEGES (CCAR-10):**

The Physician must provide documentation of ECMO management of four (4) cases over a two (2) year period to be eligible to reapply for ECMO privileges. This will be reviewed at the time of the physician's reappointment. Physicians who would like to continue to hold ECMO privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for the privilege and submit a Request to Be Proctored Form.

| CMC | PVL | UNV | CR  | LIN | CAB | UNN | STA | ANN | CLE | <b>CARDIAC MAGNETIC RESONANCE (MRI)/CARDIAC CT PRIVILEGES FOR CARDIOLOGISTS</b> | Minimum Number Required   | Number Performed Within The Past 2 Years | Location | Proctoring Requested |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|---|--|----------|----------------------|
|     |     |     | N/A |     |     |     |     |     |     | Must apply for and maintain Core Privileges                                     |   |  |          |                      |
|     |     |     | N/A |     |     |     |     |     |     | CCAR-7*   | Cardiac CT and Coronary CT Angiography Imaging for Cardiologist | 150                                      |          |                      |
|     |     |     | N/A | N/A |     |     | N/A | N/A | N/A | CCAR-8*   | Cardiac Magnetic Resonance Imaging (MRI) for Cardiologist       | 50                                       |          |                      |

\*CCAR-7 and CCAR-8 criteria mirror Radiology. All revisions are vetted through Cardiology and Radiology.

**CCAR-7 CARDIAC CT AND CORONARY CT ANGIOGRAPHY IMAGING**

SHORT DEFINITION: Computed tomography (CT) is a proven and important imaging modality for the detection and characterization of cardiovascular disease (1). This technology has undergone a dramatic evolution since its introduction into clinical practice in 1973. Multiple-detector units, with advanced spatial and temporal resolution, can provide detailed anatomic and functional information regarding the heart, great vessels, and coronary circulation. Such information can greatly facilitate the diagnosis and management of a wide range on cardiovascular conditions and, in some circumstances, obviate the need for invasive procedures. Clinical applications of cardiac CT (CCT) encompass non-contrast (coronary calcium evaluation) and contrast (CT angiography) studies (2).

Medical specialists trained in the distinct disciplines of cardiovascular medicine, radiology, and nuclear medicine are all involved in the imaging of cardiovascular diseases, albeit from differing perspectives. These perspectives, however, also share many common features, emphasizing the importance of a broadly based, multi-disciplinary approach for management (2). Cardiovascular specialists, by virtue of their knowledge of cardiovascular disease processes, and expertise with other cardiovascular imaging/therapeutic modalities (i.e., invasive angiography, radionuclide imaging techniques, and cardiovascular ultrasound) have been integral in the technological developments and clinical applications of cardiac CT.

The joint bodies of the American College of Cardiology, American Heart Association, and American College of Physicians have recently issued guidelines for training and maintenance of clinical competence in cardiac CT (2,3). Specific training pathways have been recommended for those currently in fellowship training programs, as well as for those who have already obtained board certification and are active practicing clinicians. The American College of Radiology has issued a separate guideline statement relevant to the training and certification of qualified Radiologists (4). The respective societies' guidelines are not intended to exclude qualified practitioners from "the other side of the fence" but rather assure that their own specialists adhere to the highest standards. Programs that can successfully integrate the complementary expertise of both specialties will certainly enhance patient care and outcomes.

**Skills and Training Needed - Cardiac CT and Coronary CT Angiography Imaging:** The applicant must meet the following:

1. Provide documentation of successful completion of an ACGME accredited Cardiovascular Disease or AOA accredited Cardiology Training Program within the past five (5) years, **OR**
1. Applicant must submit documentation of subspecialty certification in Cardiovascular Disease by the American Board of Internal Medicine or American Osteopathic Board of Internal Medicine; **AND**
2. Involvement in reading one hundred and fifty (150) or more contrast cardiac CT studies with a minimum of fifty (50) studies in which the applicant participated in the acquisition of the scan (can be achieved by any of the 3 methods below):
  - a) Documentation of Fellowship Training Course to include evidence of involvement in reading  $\geq$  one hundred and fifty (150) contrast cardiac CT studies with a minimum of fifty (50) studies in which the applicant participated in the acquisition of the scan; **OR**
  - b) Level II Course Documentation to include evidence of involvement in reading  $\geq$  one hundred and fifty (150) contrast cardiac CT studies with a minimum of fifty (50) studies in which the applicant participated in the acquisition of the scan; **OR**
  - c) If 2a or 2b was completed greater than two (2) years ago, the applicant must provide documentation of at least one hundred and fifty (150) contract cardiac CT studies; **OR**
  - d) Submit the PERMISSION TO BE PROCTORED REQUEST FORM upon completion of proctoring have a document/attestation letter from the proctor indicating supervision of  $\geq$  150 CCTAs with presence for  $\geq$  50 studies; **AND**
3. Submit documentation of fifteen (15) hours of category I CME in cardiac CT.

**Reappointment Criteria for Continued Privileges - CARDIAC CT AND CORONARY CT ANGIOGRAPHY IMAGING (CCAR-7):**

The Physician must submit a minimum of one hundred (100) contrast Computed Tomography Angiography (CTA) examinations over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for Cardiac Ct and Coronary Ct Angiography Imaging. This will be reviewed at the time of reappointment. Physicians who would like to continue to hold any special privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for such privileges and to complete the necessary proctoring forms.

## **CAR-8 CARDIAC MAGNETIC RESONANCE IMAGING (MRI)**

**DEFINITION:** MRI uses large magnets and radio-frequency waves to produce high-quality still and moving pictures of the body's internal structures. No X-ray exposure is involved. The scan monitors energy changes in tissues reacting to magnetic forces. A computer analyzes these changes and creates a composite image of the tissues. The images can be shown in two or three spatial dimensions in either static or dynamic (cine) mode.

This combination of unique capabilities has made MRI a commonly used imaging procedure for evaluating cardiac problems. Cardiac MRI is well established in clinical practice for the diagnosis and management of a wide spectrum of cardiovascular disease, including ischemic heart disease, myocardial disease, right ventricular abnormalities, pericardial disease, cardiac tumors, valvular disease, thoracic aortic disease, pulmonary artery disease and congenital heart disease before and after surgical repair. The latter category is especially well suited to MRI as images of the cardiovascular systems can be obtained from many angles.

There are many advantages to Cardiac MRI when compared to other noninvasive imaging modalities such as ultrasound and CT. Since MRI does not use ionizing radiation, it can be used in children and pregnant women. MRI contrast media does not have as high a risk of allergic reaction or contrast media induced nephropathy as iodinated contrast media. Unlike echocardiography, MRI can produce images of cardiovascular structures without interference from adjacent bone or air, a limitation of echocardiography. MRI is also less operator dependent than echocardiography. Specific MRI sequences (SSFP) can be used to assess global and regional ventricular contractile function, including the more difficult to assess right ventricle. Velocity encoded techniques permit measurement of blood flow. MRI does not have the weakness of geometric assumptions (as does angiography) in assessing ventricular volumes.

Limitations of MRI include occasional claustrophobia during the exam; longer examination time compared to CT; physical isolation of the patient and incompatibility of MRI with various medical devices including cardiac pacemakers and cochlear implants. The presence of intraocular or intracranial metal is also a contraindication for MRI.

**SKILLS AND TRAINING NEEDED:** The physician involved in the supervision and interpretation of Cardiac MRI examinations shall have the responsibility for all aspects of the study including reviewing all indications for the examination, specifying the pulse sequences to be performed, specifying the use and dosage of contrast agents, interpreting images, generating written reports, and assuring the quality of both the images and interpretations. Physicians performing pharmacologic stress testing as part of the Cardiac MRI imaging must be knowledgeable about the administration, risks and contraindications of pharmacologic agents used for stress testing. They must be capable of monitoring the patient throughout the procedure.

### **CREDENTIALS:**

A physician supervising and/or interpreting MRI examinations will be required to meet the following minimum criteria:

1. Certification in cardiology by the American Board of Internal Medicine or American Board of Pediatrics with completion of Level II or higher.
  - a. Board certification or eligibility, valid medical license and completion of a three (3) month (cumulative) specialty residency \* or fellowship in Cardiac MRI; **AND**
  - b. One Hundred and fifty (150) Cardiac MRI examinations; \*\* fifty (50) in which the candidate is physically present and involved in the acquisition and supervised interpretation of the case; **AND**
  - c. Completion of thirty (30) hours of courses related to MRI in general and/or Cardiac MRI in particular.

**Reappointment Criteria for Continued Privileges - CCAR-8 Cardiac Magnetic Resonance Imaging (MRI) (CCAR-):**

- The Physician must submit a minimum of fifty (50) cardiac MRI examinations over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for Cardiac Magnetic Resonance Imaging (MRI). This will be reviewed at the time of reappointment. Physicians who would like to continue to hold any special privileges but are unable to document the minimal number will be requested to voluntarily withdraw their request for such privileges and to complete the necessary proctoring forms.
- **CME:** Cardiologists must have earned at least thirty (30) hours of coursework in Cardiac MRI in the prior thirty-six (36) month period in accordance with Level II requirements.

\* This represents cumulative time spent interpreting, performing and learning Cardiac MRI and need not be a consecutive block of time. At least fifty (50) % of the time should represent supervised laboratory experience with a Level II or Level III mentor. This can include time spent on educational courses on the topic. Training time is defined as a minimum of thirty-five (35) hours per week.

\* \* The caseload recommendations may include studies from an established teaching file, previous Cardiac MRI cases and electronic/on-line CME.

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Reference

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 Atrium Health 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.

I attest that I am not currently a user of illegal drugs or do not currently abuse the use of legal drugs.

I attest that I do not have a physical or mental condition which could affect my motor skills or ability to exercise the clinical privileges requested or that I require an accommodation in order to exercise the privileges requested safely and competently.

\_\_\_\_\_, M.D. \_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Print Name  
=====

**CASE LOG**

Physician's Name: \_\_\_\_\_

Date: \_\_\_\_\_

|    | DATE | MEDICAL RECORD NUMBER | PROCEDURE TYPE | Name of procedure<br>(as listed on DOP, e.g. CCAR-1(a)) |
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|    |      |                       | <b>TOTAL</b>   |   |

Reference Only