



# 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  
DELINEATION OF PRIVILEGES  
SPECIALTY OF RADIOLOGY

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

	YES		NO**	I have participated in direct patient care in the hospital setting within the past two (2) years.
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**\*\*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.**

Initial appointment     Reappointment     Updated DOP     Request for Clinical Privileges

**To be eligible for core privileges in Radiology, the applicant must meet the following qualifications:**

- If the applicant is not currently certified in Radiology by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA) the applicant must:
  1. Provide documentation of successful completion of an ACGME or AOA accredited Radiology training program, within the past five (5) years; **AND**
  2. Provide documentation of the performance and interpretation of at least five-thousand (5,000) imaging tests in the past two (2) years. Applicants have the burden of producing information deemed adequate by the hospital for proper evaluation of current competence, and other qualifications and for resolving any doubts; **OR**
- If the applicant is currently certified in Radiology by the American Board of Medical Specialties (ABMS) or the American Osteopathic Association (AOA), the applicant must:
  1. Provide documentation of general radiology certification from the American Board of Medical Specialties or the American Osteopathic Association (AOA); **AND**
  2. Provide documentation of the performance and interpretation of at least five-thousand (5,000) imaging tests in the past two (2) years. Applicants have the burden of producing information deemed adequate by the hospital for proper evaluation of current competence, and other qualifications and for resolving any doubts.

NOTE 1: Physicians must apply for "CORE" privileges in order to interpret imaging tests and to be eligible for clinical privileges in any of the areas below at any facility within Atrium Health.

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

NOTE 3: Applicants who wish to apply for Peripheral Endovascular Privileges may do so by requesting the Peripheral Endovascular Delineation of Privilege Form. Please contact the Medical Staff Office for further information.

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

Please check appropriate blocks when applying for privileges:

CMC	Pineville	University City	CR	Lincoln	Cabarrus	Union	Stanly	Anson	Cleveland	<b>GENERAL DIAGNOSTIC RADIOLOGY CORE PRIVILEGES</b>		Proctoring Requested
			N/A							CRAD-1	Perform general diagnostic radiology to diagnose and treat diseases of patients of all ages. Assess, stabilize, and determine disposition of patients with emergent conditions. Core privileges in this specialty include the procedures below and such other procedures that are extensions of the same techniques and skills.	

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.

Privileges include perform history and physical; routine imaging; interpretation of plain films; bone densitometry; ultrasound and vascular ultrasound; computed tomography (CT) of the head, neck, spine, body, extremity, and major joints-shoulder, knee, ankle, etc; image guided injections, biopsy and drainage procedures; diagnostic nuclear medicine of the head, neck, spine, chest including the heart, abdomen, and pelvis, extremity and their associated vasculatures; magnetic resonance imaging (MRI) of the head, neck, spine, body, extremity, and major joints-shoulder, knee, ankle, etc; myelography; arthrography; percutaneous musculoskeletal biopsy/aspiration; percutaneous facet injection; percutaneous nerve block/epidural injection; interpret non-invasive diagnostic vascular radiology, including vascular CT, MRI, and ultrasonography; mammography; Peripherally Inserted Central Catheters (PICC) lines; vascular and tunneled catheters; hysterosalpingogram; cholecystostomy; diagnostic venography; intravenous or retrograde pyelography; fluoroscopy exams; spinal puncture; lumbar puncture; computed tomography colonography imaging; PET; nephrostomy; any Radiopharmaceutical therapy, utilizing oral/IV/IA/IM administration; image guided biliary/gastrointestinal/urinary procedures; coronary calcium screening; radioiodine imaging and localization; lymphoscintigraphy imaging and localization; tomosynthesis.

**Maintenance Criteria for Continued Privileges (CRAD-1):**

For any privileges that are granted during initial credentialing, the Practitioner must interpret/perform a minimum of six hundred (600) imaging procedures having a maximum of 25% being plain films over a two (2) year period to be eligible to reapply for privileges. This will be reviewed at the time of reappointment. Physicians who would like to continue to hold 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.

It is the responsibility of the Department Chief of each facility to review representative samples of privileges listed above. Particular attention to adequate number and quality performance of CT head, MRI head, and PET are required, with the understanding that the physician may need to not exercise privileges if adequate performance cannot be maintained.

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

**CRAD-2 INTERVENTIONAL RADIOLOGY CORE PRIVILEGES:**

1. Documentation of successful completion of an ACGME or AOA accredited Interventional Radiology residency or fellowship program within the past five (5) years; **OR**
1. Documentation of subspecialty certification in Interventional Radiology by the American Board of Radiology or the American Osteopathic Board of Radiology; **AND**
2. Provide documentation of the performance and interpretation of at least one-hundred and fifty (150) Interventional procedures/tests during the past two (2) years. Applicants have the burden of producing information deemed adequate by the hospital for proper evaluation of current competence, and other qualifications and for resolving any doubts.

CMC	PVL	UNV	CR	LIN	CAB	UNN	STA	ANN	CLE	<b>INTERVENTIONAL RADIOLOGY CORE PRIVILEGES</b>	Proctoring Requested
			N/A							<b>General Diagnostic Radiology Core Privileges (CRAD-1) are included when the applicant applies for and maintains Interventional Radiology Core Privileges (CRAD-2).</b>  CRAD-2 Evaluate, diagnose, and treat patients of all ages by percutaneous methods guided by various radiologic imaging modalities. Assess, stabilize, and determine disposition of patients with emergent conditions. Core privileges in this specialty include the procedures below and such other procedures that are extensions of the same techniques and skills.	

Privileges include: Perform history and physical exam; percutaneous kyphoplasty; percutaneous vertebroplasty; image guided diagnostic and therapeutic interventions of the respiratory, hepatobiliary, gastrointestinal, urinary, reproductive, and vascular systems.

**Maintenance Criteria for Continued Privileges (CRAD-2):**

For any privileges that are granted during initial credentialing, the Practitioner must perform a minimum of forty (40) Interventional Radiology Core procedures over a two (2) year period to be eligible to reapply for privileges. This will be reviewed at the time of reappointment. Physicians who would like to continue to hold 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.

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

**CRAD-3 NEURORADIOLOGY CORE PRIVILEGES:**

1. Documentation of successful completion of an ACGME or AOA accredited Neuroradiology fellowship program within the past five (5) years; **OR**
1. Documentation of subspecialty certification in Neuroradiology by the American Board of Radiology or the American Osteopathic Board of Radiology; **AND**
2. Provide documentation of the performance and interpretation of at least one-hundred (100) Brain studies during the past two (2) years. Applicants have the burden of producing information deemed adequate by the hospital for proper evaluation of current competence, and other qualifications and for resolving any doubts.

CMC	PVL	UNV	CR	LIN	CAB	UNN	STA	ANN	CLE	NEURORADIOLOGY CORE PRIVILEGES	Proctoring Requested
			N/A							<p><b>General Diagnostic Radiology Core Privileges (CRAD-1) are included when the applicant applies for and maintains Neuroradiology Core Privileges (CRAD-3).</b></p>	
										<p>CRAD-3 Evaluate, diagnose, and treat patients of all ages with diseases of the central nervous system by use of catheter technology, radiologic imaging, and clinical expertise. Assess, stabilize, and determine disposition of patients with emergent conditions. Core privileges in this specialty include the procedures below and such other procedures that are extensions of the same techniques and skills.</p>	
<p>Privileges include perform history and physical exam; MR Spectroscopy; CSF flow studies; Brain tumor imaging to include perfusion and permeability; Functional MRI; MR vessel wall imaging; Time resolved MRA of the brain and spine; Cerebral Angiography (interpretation only).</p>											
<p><b>Maintenance Criteria for Continued Privileges (CRAD-3):</b>  For any privileges that are granted during initial credentialing, the Practitioner must perform a minimum of fifty (50) representative samples of Neuroradiology Core procedures over a two (2) year period to be eligible to reapply privileges. This will be reviewed at the time of reappointment. Physicians who would like to continue to hold 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.</p>											

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

**CRAD-4 NUCLEAR RADIOLOGY CORE PRIVILEGES:**

1. Qualify for CRAD-1 General Diagnostic Radiology Core Privileges;  
**AND**
2. Documentation of successful completion of an ACGME Nuclear Radiology fellowship program within the past five (5) years; **OR**
2. Documentation of subspecialty certification in Nuclear Radiology by the American Board of Radiology;  
**OR**
2. Documentation of successful completion of an ACGME Nuclear Medicine residency program within the past five (5) years; **OR**
2. Documentation of board certification by the American Board of Nuclear Medicine;  
**OR**
2. Documentation of successful completion of an AOA accredited Nuclear Medicine residency program within the past five (5) years; **OR**
2. Documentation of board certification by the American Osteopathic Board of Nuclear Medicine;  
**AND**
3. Provide documentation of the performance and interpretation of at least one-hundred (100) (of which no more than 25% could represent cardiac perfusion, function, blood pool, and gated imaging or cardiac PET) Nuclear procedures/ tests during the past two (2) years. Applicants have the burden of producing information deemed adequate by the hospital for proper evaluation of current competence, and other qualifications and for resolving any doubts.

CMC	PVL	UNV	CR	LIN	CAB	UNN	STA	ANN	CLE	<b>NUCLEAR RADIOLOGY CORE PRIVILEGES</b>	Proctoring Requested
										<b>General Diagnostic Radiology Core Privileges (CRAD-1) are included when the applicant applies for and maintains Nuclear Radiology Core Privileges (CRAD-4).</b>	
			N/A							CRAD-4 Any diagnostic or therapeutic procedure performed utilizing any modality in which a radiopharmaceutical is administered either in vivo or in vitro in order to acquire diagnostic images and/or therapeutic effect, utilizing standard nuclear medicine imaging methods.	
Privileges include perform history and physical exam; radioimmunotherapy and radioembolization dosimetry/imaging/therapy; intracavitary nuclear therapies; lymphoscintigraphy imaging and localization; cardiac perfusion, function, blood pool, and gated imaging; Brain SPECT imaging; cardiac PET; radioiodine imaging and localization; cerebrospinal fluid dynamics and leak analysis imaging; Endocyte dosimetry/ imaging/analysis; tumor localization utilizing radiolabeled antibodies (ex. Proscint).											
<p align="center"><b>Maintenance Criteria for Continued Privileges (CRAD-4):</b></p> <p>For any privileges that are granted during initial credentialing, the Practitioner must perform a minimum of fifty (50) representative samples of Nuclear Radiology Core procedures over a two (2) year period to be eligible to reapply for privileges. This will be reviewed at the time of reappointment. Physicians who would like to continue to hold 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.</p>											

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

**CRAD-5 MUSCULOSKELETAL CORE PRIVILEGES:**

1. Documentation of successful completion of an ACGME or AOA accredited Radiology residency program within the past five (5) years; **OR**
1. Documentation of certification in Radiology by the American Board of Radiology or the American Osteopathic Board of Radiology; **AND**
2. Provide documentation of the performance and interpretation of at least five (5) Musculoskeletal procedures/ tests during the past two (2) years. Applicants have the burden of producing information deemed adequate by the hospital for proper evaluation of current competence, and other qualifications and for resolving any doubts.

CMC	PVL	UNV	CR	LIN	CAB	UNN	STA	ANN	CLE	<b>MUSCULOSKELETAL CORE PRIVILEGES</b>		Proctoring Requested
			N/A							<b>General Diagnostic Radiology Core Privileges (CRAD-1) are included when the applicant applies for and maintains Musculoskeletal Core Privileges (CRAD-5).</b>		
										CRAD-5	Any procedure done utilizing the modality of cross sectional imaging done utilizing standard musculoskeletal imaging methods which are often utilized to portray the internal structures of the musculoskeletal system including the spine for the use of detecting and determining the extent of disease.	
Privileges include perform history and physical exam; percutaneous discography; radio-frequency ablation of bone tumors utilizing computer tomography guidance; bone grafting procedures.												
<b><u>Maintenance Criteria for Continued Privileges (CRAD-5):</u></b>												
For any privileges that are granted during initial credentialing, the Practitioner must perform a minimum of three (3) representative samples of Musculoskeletal Radiology Core procedures over a two (2) year period to be eligible to reapply for privileges. This will be reviewed at the time of reappointment. Physicians who would like to continue to hold 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.												

CMC	PVL	UNV	CR	LIN	CAB	UNN	STA	ANN	CLE	<b>CORE RADIOLOGY PRIVILEGES – REHABILITATION HOSPITAL SETTING <u>ONLY</u></b>		Proctoring Requested
N/A	N/A	N/A		N/A	N/A	N/A	N/A	N/A	N/A	CRAD-6	Privileges include evaluation, assessment, diagnosis, consultation and management, and performance of minor surgical procedures, to patients with physical and/or cognitive impairments and disability, in conjunction with the comprehensive rehabilitation goals and treatment plans.	

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

**\* 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.**

CMC	PVL	UNV	CR	LIN	CAB	UNN	STA	ANN	CLE	SPECIAL PRIVILEGES	Minimum Number Required	Number Performed Within The Past 2 Years	Location	Proctoring Requested
			N/A	N/A				N/A	N/A	Must apply for and maintain Core Privileges				
			N/A	N/A				N/A	N/A	CRAD-7*	Percutaneous Kyphoplasty	15		
			N/A	N/A				N/A	N/A	CRAD-8*	Percutaneous Vertebroplasty	10		
			N/A		N/A		N/A	N/A	N/A	CRAD-9**	Cardiac CT and Coronary CT Angiography Imaging	150		
			N/A		N/A		N/A	N/A	N/A	CRAD-10**	Cardiac Magnetic Resonance Imaging (MRI)	75		

\*CRAD-9 and CRAD-10 criteria mirror Cardiology. All revisions are vetted through Cardiology and Radiology.

REFERENCE

**PRIVILEGES REQUESTED BY:**

I have requested only those privileges for which my 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.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name

## **CRAD-7 PERCUTANEOUS KYPHOPLASTY**

### **DEFINITION:**

Vertebral compression fractures due to osteoporosis or trauma are common. They frequently result in prolonged and incapacitating pain due to the fracture and secondary kyphotic deformities. The procedure described corrects fracture deformity and diminishes pain by utilizing a percutaneous inflatable device to restore vertebral body height followed by filling of the defect in the vertebral body with acrylic bone void filler or bone graft.

### **SPECIFIC SKILLS AND TRAINING REQUIRED:**

1. Provide documentation of the successful completion of an ACGME or AOA Musculoskeletal Radiology or Neuroradiology Fellowship Training Program within the two (2) years and have written documentation from the Program Director demonstrating competency in Percutaneous Kyphoplasty; **OR**
1. Provide a minimum of fifteen (15) cases performed over the last two (2) years; **OR**
1. Submit the PERMISSION TO BE PROCTORED REQUEST FORM requesting concurrent proctoring by a physician who currently holds privileges to perform Percutaneous Kyphoplasty. You must provide documentation of proctoring for fifteen (15) procedures.

### **MAINTENANCE CRITERIA FOR CONTINUED PRIVILEGES:**

The Physician must submit a minimum of seven (7) procedures over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for special privileges. 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.

## **CRAD-8 PERCUTANEOUS VERTEBROPLASTY**

### **DEFINITION:**

Percutaneous injection of a bone cement such as PMMA (Polymethylmethacrylate) into the affected vertebral body. Primary indications include painful osteoporotic compression fractures refractory to medical therapy, and osteolytic vertebral body lesions such as metastatic cancer. Fluoroscopic or CT guidance of a transpedicular or direct corporal puncture approach is essential for patient safety, along with active fluoroscopic monitoring during the cement injection. Percutaneous techniques which involve restoration of vertebral body height (Kyphoplasty) are not part of this privilege.

### **SPECIFIC SKILLS AND TRAINING REQUIRED:**

1. Provide documentation of the successful completion of an ACGME or AOA Musculoskeletal Radiology, or Neuroradiology Fellowship Training Program within the two (2) years and have written documentation from the Program Director demonstrating competency in Percutaneous Vertebroplasty; **OR**
1. Provide a minimum of ten (10) cases performed over the last two (2) years; **OR**
1. Submit the PERMISSION TO BE PROCTORED REQUEST FORM requesting concurrent proctoring by a physician who currently holds privileges to perform Percutaneous Vertebroplasty. You must provide documentation of proctoring for ten (10) procedures.

### **MAINTENANCE CRITERIA FOR CONTINUED PRIVILEGES:**

The Physician must submit a minimum of five (5) procedures over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for special privileges. 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.

## **CRAD-9 CARDIAC CT AND CORONARY CT ANGIOGRAPHY IMAGING**

**DEFINITION:** CT is a proven and important imaging modality for the detection and characterization of cardiac disease (1). CT may be used as either the primary modality for detecting disease or as an adjunct to other imaging modalities to better characterize disease and help assess change over time. CT can be used to assess both cardiac structure and function (2,3) as well as evaluate disease processes within the field of view but outside of the heart and pericardium (4,5).

While the technical parameters and field of view of a cardiac CT examination will appropriately be tailored to help evaluate the cardiac anatomy and/or function in question, the exam will also include images reconstructed to show the entire chest at the level of the heart. These images will demonstrate adjacent anatomy including the lungs, mediastinum, spine, and upper abdomen. It has been documented that these studies often demonstrate clinically significant noncardiac findings (6,7). In addition to examining the cardiac structures of interest, the interpreting physician is responsible for examining all the visualized noncardiac structures and must report any clinically relevant abnormalities of these adjacent structures. In some cases, these structures may be seen only on localizing (scout) images.

Applications of cardiac CT include but are not limited to the following (2, 8-16): (1) detection and characterization of coronary artery occlusive lesions secondary to atherosclerosis, transplant arteriopathy, intimal dissection, and vasculitis; (2) detection and characterization of coronary artery anomalies; (3) detection and characterization of coronary artery aneurysms; (4) coronary vein mapping; (5) characterization of cardiac chamber morphology and function; (6) characterization of native and prosthetic cardiac valves; (7) detection and characterization of congenital heart diseases; (8) characterization of cardiac masses; (9) diagnosis of pericardial diseases; and (10) detection and characterization of postoperative abnormalities.

### **SPECIFIC SKILLS AND TRAINING REQUIRED:**

The radiologist who supervises and interprets cardiac CT examinations should meet the following criteria for calcium scoring: By virtue of experience and residency training, which has included cardiac anatomy and CT physics, a board-certified radiologist is qualified to perform calcium scoring of coronary arteries. It is expected that board-certified radiologists will be familiar with the indications and techniques for, as well as the interpretation of, coronary artery calcium scoring.

### **CREDENTIALS:**

1. Provide documentation of successful completion of an ACGME or AOA accredited Diagnostic Radiology Training Program within the past five (5) years; **OR**
1. Applicant must submit documentation of certification in diagnostic radiology by the American Board of Radiology or the American Osteopathic Board of Radiology; **OR**
1. Involvement in reading 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; **AND**
2. Submit documentation of fifteen (15) hours of category I CME in Cardiac CT within the past two (2) years; **AND**
3. Expectation that within two (2) years of initial credentialing, the reader become certified by the Certification Board of Cardiovascular CT (CBCCT).

**CRAD-9 CARDIAC CT AND CORONARY CT ANGIOGRAPHY IMAGING - CONTINUED**

**MAINTENANCE CRITERIA FOR CONTINUED PRIVILEGES:**

The Physician must submit a minimum of seventy-five (75) procedures over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for special privileges. 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.

REFERENCE ONLY

## **CRAD-10 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 dependant 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.

### **SPECIFIC SKILLS AND TRAINING REQUIRED:**

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:**

1. Certification in Radiology or Diagnostic Radiology by the American Board of Radiology or the American Osteopathic Board of Radiology and supervision and/or performance of, as well as interpretation and/or review or reporting of fifty (50) cardiac MRI examinations within the past two (2) years; **OR**
1. Completion of a Board Accreditation Council for Graduate Medical Education (ACGME) or American Osteopathic Association (AOA) Radiology Residency or Fellowship program; **AND**
2. Supervised interpretation of fifty (50) cardiac MRI examinations in the past two (2) years; **AND**
3. Completion of at least forty (40) hours of Category I Continuing Medical Education (CME) in cardiac imaging, including cardiac MRI, anatomy, physiology and/or pathology or documented equivalent supervised experience in a center actively performing cardiac MRI.

**CRAD-10 CARDIAC MAGNETIC RESONANCE IMAGING (MRI) - CONTINUED**

**CRITERIA FOR MAINTENANCE OF PRIVILEGES:**

The Physician must submit a minimum of twenty-five (25) procedures over the past two (2) years based on acceptable results of ongoing professional practice evaluation and outcomes to reapply for special privileges. 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.

The Physician's continuing medical education (CME) should be in accordance with the "American College of Radiology, the Society for Nuclear Medicine, and the American Board of Radiology, and the American Osteopathic Board of Radiology Practice Guidelines for Continuing Medical Education (CME)" of at least fifteen (15) hours (half of which must be Category I) CME devoted to Cardiac CT over the past two (2) years. This will be reviewed at the time of reappointment.

REFERENCE ONLY