



Job Code: 9371

Grade: 20

HCWR: N

Job Title

Cardiac MRI Technologist

Department

Cardiology

Job Summary

The Cardiac Magnetic Resonance Imaging (MRI) Technologist performs primarily Cardiac MRI exams and secondarily general body MRI exams on inpatients and outpatients. This individual processes and critiques computed tomography images ensuring high imaging quality, prepares patient records for review and interpretation by the physician, maintains MRI scanner for optimal performance, and adheres to radiology safety and regulatory standards. The primary focus of this position will be on the performance and processing of advanced cardiac imaging studies pertaining to myocardial characterization, tissue mapping, flow analysis, and cardiac function.

Typical Duties

- Works collaboratively with the entire MRI team of physicians, managers, nurses, technologists, clerks, etc.
- Performs cardiac MRI studies as part of the cardiology team under the direction of supervisor from the Division of Cardiology (primary duty)
- Performs body MRI studies as part of the radiology team under the direction of a supervisor from the Department of Radiology (secondary duty)
- Performs MRI exams including all filming, developing, and operating of suppicating equipment, and correctly applying appropriate coils of specific body parts to produce MRI images of high quality.
- Sets the appropriate scanning parameters on equipment based on the established protocol or physician orders.
- Provides magnetic resonance images to physician according to established operating clinical protocols and imaging techniques, including sending images to PACS, and/or specialized software, and entering patients in hospital employee health record (EHR).
- Analyzes patient's medical records and interviews patient to obtain relevant history as necessary including prior MRI and presence of implanted devices.
- Explains and properly positions patient for examination causing least discomfort or distress. If necessary, uses immobilization apparatus to maintain required position.
- Performs daily quality control testing on MRI system, ensures all equipment is adequately maintained and in working order, performs preventative maintenance, and reports equipment failures immediately to Clinical Engineering and supervisor.
- Educate the patient about the test.
- Communicates with patients before the test regarding special instructions or scheduling issues.
- Transports patients in the department and between departments (Cardiology/Radiology/NM) and when necessary, transports the patient between either department and the patient's room.
- Obtains IV access for administration of contrast media for MRI enhancement in accordance with department policy and physician order.
- Practices infection control techniques and adheres to MRI safety guidelines.



Typical Duties

- Provides magnetic resonance services promptly, efficiently, safely, and cost effectively while meeting divisional productivity standards.
- Maintains confidentiality of patients and employees.
- Participates in patient selection for optimal MRI protocol.
- Completes appropriate documents as required (logbooks, worksheets, screening forms, etc.).
- Enters patient data and completes appropriate documentation data in hospital EHR or other health information systems.
- Retrieves historical imaging studies, when feasible or requested, for comparison.
- Documents all allergic reactions according to department and hospital policy.
- Maintains cleanliness of work area and diagnostic and support equipment.
- Responsible for MRI related clinical instruction and orientation of students or technologists.
- Orients and trains new or junior technologists as required.
- Assists in coordination of daily schedule.
- Works cooperatively with all personnel, exhibits proper conduct, and maintains a high ethical standard.
- Maintains all necessary supplies by ordering and stocking.
- Contacts cardiologist, radiologist, nurse and/or supervisor for guidance or direction related to immediate change in patient's condition.
- Demonstrates compliance with institutional, regulatory, and legal requirements.
- Submits data to clinical registries as required.
- Collects and submits data and images for laboratory accreditation.
- Participates in laboratory quality improvement processes to help attain and maintain accreditation.
- Works weekends and/or holidays on a rotational basis.
- Works overtime when the workload and/or patient scheduling require extended hours.
- Takes call on a rotational basis for emergency studies outside working hours (when required), including nights, weekends, and holidays, and must report physically to the CT suite within sixty (60) minutes from emergency call activation.
- Must be able to take and respond to after hour calls as required.
- Must be able to travel to Cook County Health (CCH) work sites to fulfill regular and call duties.
- Covers MRI duties at other CCH sites when necessary
- Performs special examinations as instructed by medical staff, when not within the routine procedures.
- Performs other related duties as assigned.

Minimum Qualifications

- Graduate of an accredited school of Radiologic Technology or MRI
- Completed a formalized MRI course, as part of or in addition to formal education
- Registered by the American Registry of Radiologic Technologists in MRI [ARRT(MRI)] or American Registry of Magnetic Resonance Imaging Technologist (ARMRIT)
- Accredited by Illinois Emergency Management Agency (IEMA)
- Minimum of one (1) year work experience as an MRI Technologist



Minimum Qualifications

- One (1) year of experience performing cardiac MRI
- Active Basic Life Support (BLS) certification
- Able to maintain continuing education credits as required by certifying body or society

Preferred Qualifications

- Three (3) year experience in MRI
- One (1) year experience in Cardiac MRI studies, including myocardial characterization, tissue mapping, flow analysis, and cardiac function.

Knowledge, Skills, Abilities and Other Characteristics

- Complete knowledge of anatomical positioning and physiology, with additional emphasis on cardiac anatomy, so that independent selection or modification of technical factors, including parametric tissue mapping, will produce optimum results.
- Experience in independent performance of cardiac MR protocols, including cine SSFP, tissue mapping and phase contrast imaging.
- Ability to independently identify myocardial null point for accurate assessment of myocardial fibrosis on post-contrast imaging.
- Knowledge and experience in working with MRI machines from different vendors.
- Knowledge of cardiac electrode and oximeter placement as used to obtain adequate gating (ECG and /or pulse) and troubleshooting poor signal.
- Experience in imaging patients with ICD and knowledge of techniques in limiting artifact.
- Experience with CMR post-processing software and ability to perform cardiac function and flow assessment within this software.
- Recognize high electromagnetic field and infectious disease hazard, and adhere to safety precautions for self, patients, and other personnel.
- Ability to sustain extended standing, sitting, bending, and moving.
- Ability to lift a minimum of 25 lbs. and use of proper lifting mechanics to prevent injuries.
- Excellent critical thinking skills as must be able to work independently and make appropriate decisions related to any immediate and recognizable change in patient condition.
- Detail oriented with excellent verbal and written communication skills necessary to communicate with all levels of staff and a patient population composed of diverse backgrounds.
- Ability to follow written and verbal instruction, read and accurately interpret written procedures included in department manuals and professional literature.
- Participate in laboratory quality improvement processes to help attain and maintain accreditation.
- Ability to respond within sixty (60) minutes notice while on-call.
- Demonstrate professional growth and development by attending continuing education seminar and other educational related activities.



Physical and Environmental Demands

This position is functioning within a healthcare environment. The incumbent is responsible for adherence to all hospital and department specific safety requirements. This includes but is not limited to the following policies and procedures: complying with Personal Protective Equipment requirements, hand washing and sanitizing practices, complying with department specific engineering and work practice controls and any other work area safety precautions as specified by hospital wide policy and departmental procedures.

The above statements are intended to describe the general nature and level of work being performed by people assigned to this classification. They are not intended to be construed as an exhaustive list of all responsibilities, duties and skills required of the personnel so classified.

For purposes of the American with Disabilities Act, “Typical Duties” are essential job functions.