

INPATIENT & ER PATIENT MRI EXAMINATIONS

PURPOSE

- To standardize the ordering, appropriateness and performance of MRI on inpatients and ER patients.
- To reduce the delays in inpatients and ER patients undergoing MRI by shifting examinations that can be appropriately performed as outpatient examinations to one of the more numerous outpatient MRI scanners.
- This policy was initiated by Hospital Administration and approved by Medical Executive Committees.

MRI NORMAL HOURS OF OPERATION

	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Riverside	7:00 am to 7:00 pm	7:00 am to 7:00 pm	7:00 am to 7:00 pm	7:00 am to 7:00 pm	7:00 am to 7:00 pm	7:00 am to 5:00 pm	7:00 am to 5:00 pm
Southside	7:00 am to 7:30 pm	7:00 am to 7:30 pm	7:00 am to 7:30 pm	7:00 am to 7:30 pm	7:00 am to 7:30 pm	7:00 am to 7:30 pm	on call
Clay	7:00 am to 7:30 pm	7:00 am to 7:30 pm	7:00 am to 7:30 pm	7:00 am to 7:30 pm	7:00 am to 7:30 pm	8:00 am to 12:00 pm	8:00 am to 12:00 pm
St Johns	7:00 am to 5:30 pm	7:00 am to 5:30 pm	7:00 am to 5:30 pm	7:00 am to 5:30 pm	7:00 am to 5:30 pm	on call	on call

- On-call hours are defined as hours outside of the times listed above when the MRI technologist must be called in.
- St Vincents observed holidays are treated as on-call hours.

ORDERING OF INPATIENT MRI EXAMINATIONS DURING NORMAL HOURS

- The following are approved indications for an **inpatient** MRI during **normal hours** and **do not require radiologist approval**:
 - Neurologic Conditions
 - 1) Further evaluation of stroke or suspected stroke
 - 2) Suspected meningitis/encephalitis, brain abscess, epidural abscess or subdural empyema
 - 3) Determine chronicity of intracranial hemorrhage
 - 4) Determine whether questionable hemorrhage on CT is real
 - 5) First-time seizure
 - 6) Suspect acute multiple sclerosis or other demyelinating process
 - 7) Follow-up brain tumor (requires an acute change in neurological status)
 - 8) Post op brain lesion resection (within 24-48 hours to assess for residual neoplasm)

- 9) Suspect intracranial neoplasm or AVM underlying intraparenchymal hemorrhage
 - 10) Suspect diffuse axonal injury
 - 11) MR venography for suspected dural sinus thrombosis
 - 12) Further evaluation of orbital asymmetry, proptosis, ophthalmoplegia or vision loss
- Spine Conditions
 - 1) New or progressive myelopathy, radiculopathy or stenosis
 - 2) Suspected epidural abscess and/or spondylodiscitis
 - 3) Suspected acute multiple sclerosis, other demyelinating process or acute inflammatory process
 - 4) Suspected spinal cord compression, ischemia or traumatic injury
 - 5) Suspected spinal instability (ligamentous injury)
 - 6) Follow-up spine tumor (requires acute change in neurological status)
 - Abdomen/Pelvis Conditions
 - 1) MRCP for suspected biliary obstruction, choledocholithiasis or cholecystitis
 - 2) Pregnant patient with equivocal examination for appendicitis or other acute abdominopelvic condition
 - Musculoskeletal Conditions
 - 1) Suspected osteomyelitis, septic arthritis or soft tissue abscess
 - 2) Suspected acute hip fracture when CT is equivocal
 - Vascular Conditions (when CTA is contraindicated)
 - 1) Suspected acute aortic dissection or aortitis
 - 2) Suspected renal artery stenosis
 - 3) Suspected mesenteric ischemia
 - 4) Suspected portal vein thrombosis
 - 5) Suspected hemodynamically significant arterial stenosis or occlusion in lower extremity arteries
- All other indications require radiologist approval and ordering provider to radiologist discussion before the MRI will be performed. The indication INP Other must be selected from the drop-down list under Reason for Exam. The indication and name of the radiologist who approved the MRI must be noted in the Other Reason for Exam section of the order.
 - Proper documentation regarding the appropriateness of the MRI must be in the patient's chart.

ORDERING OF INPATIENT MRI EXAMINATIONS DURING ON-CALL HOURS

- Only **truly emergent** MRIs that will **immediately affect patient management** will be performed during on-call hours.
- All on-call MRIs require radiologist approval and ordering provider to radiologist discussion before the MRI will be performed.
- Only **radiology personnel** are to call in the MRI technologist (other technologist, radiology assistant, radiologist or radiology manager).

- The following are approved indications for on-call MRI:
 - Spinal cord compression
 - Pregnant patient with equivocal examination for appendicitis or other acute abdominopelvic condition
 - Other indications which will immediately affect patient management
- The following are examples of inappropriate indications for on-call MRI:
 - Routine evaluation of suspected stroke, meningitis/encephalitis and brain tumor
 - Spine conditions other than cord compression
 - Suspected osteomyelitis, septic arthritis or soft tissue abscess
 - Any examination for surgical planning in which the surgery will not be performed immediately after the MRI. A next morning surgery is not an acceptable indication for an on-call hours MRI.
- The indication INP Other must be selected from the drop-down list under Reason for Exam. The indication and name of the radiologist who approved the MRI must be noted in the Other Reason for Exam section of the order.
- Proper documentation regarding the appropriateness of the MRI must be in the patient's chart.

ORDERING OF ER PATIENT MRI EXAMINATIONS

- Only **radiology personnel** are to call in the MRI technologist (other technologist, radiology assistant, radiologist or radiology manager).
- The only MRI that can be ordered by ER personnel without radiologist approval is **MRI Brain w/o Contrast** provided the following conditions are met:
 - Ordering by an ER attending
 - Ordered during normal hours of operation
 - Ordered for evaluation of stroke-like symptoms
- All other ER MRIs (regardless of order, indication or time of day) require an ER attending to radiologist discussion.
- The indication INP Other must be selected from the drop-down list under Reason for Exam. The indication and name of the radiologist who approved the MRI must be noted in the Other Reason for Exam section of the order.
- Proper documentation regarding the appropriateness of the MRI must be in the patient's chart.

PROCESS FOR CALLING IN THE MRI TECHNOLOGIST ON-CALL HOURS

- Only **radiology personnel** are to call in the MRI technologist (other technologist, radiology assistant, radiologist or radiology manager).
- If the MRI technologist is called in, he/she will call the RN taking care of the patient to make sure the EMR safety form has been completed (either by the patient or his/her next-of-kin or

POA). The safety form must be reviewed by the MRI technologist and the RN prior to the technologist coming in to make sure patient can proceed with the MRI.

- If the patient qualifies for the MRI from a safety standpoint, the MRI technologist will communicate with the RN regarding his/her ETA and question if the patient needs pre-medication.
- If the patient does not qualify from a safety standpoint, the technologist will communicate this to the RN and inform him/her to notify the ordering clinician as to why the patient does not qualify for the MRI.