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## Summary of the ARRT's Clinical Experience Requirements for MRI Effective for Examinations Beginning January 2003

Periodic Review completed 2009 - No changes

The ARRT has adopted a set of Clinical Experience Requirements which must be met before a technologist is eligible to sit for the ARRT Magnetic Resonance Exam.

To obtain a complete set of Magnetic Resonance Clinical Experience Requirements including all necessary forms and revisions or if you have any questions, contact the ARRT at 651-687-0048.

#### Overview

In order to satisfy the clinical experience requirements, there are five steps which must be followed:

- 1. Performance—During the 24 months preceding your application for examination, perform the required number of repetitions for each procedure as listed in the charts that follow. An examination on one patient may be used to address several procedures.
- Documentation—Document the performance of each repetition using the Magnetic Resonance Imaging Clinical
  Experience Documentation Form available from the ARRT. Each repetition must be initialed by a Registered
  Technologist or a licensed physician.
- 3. Exam Application—Complete the Application Verification Section on the examination application to indicate that you have completed the requirements.
- 4. Record Maintenance—Maintain records of performance of the procedures for at least 24 months following submission of the application for examination.
- 5. Audits—Random audits will be conducted. If you are audited, you must send a copy of the documentation detailed above to the ARRT. If the ARRT determines that this documentation is false, they may revoke all current registrations and make you ineligible for any future registrations.

#### **Specific Procedural Requirements**

- The Clinical Experience Requirements for MRI consist of the 53 procedures in the 7 different categories as shown on the back of this summary.
- Applicants must complete and document the performance of a subset of these 53 procedures according to the following 4 rules:
  - 1. Choose at least 5 categories
  - 2. Choose at least 4 different procedures from each of the selected categories
  - 3. Complete at least 3 and not more than 10 repetitions of each of the chosen procedures
  - 4. Complete a total of at least 120 repetitions across all of the chosen procedures

#### **General Guidelines**

- evaluation of requisition and/or medical record
- identification of patient and documentation of patient history including allergies
- safety screening and patient education concerning the procedure
- patient care and assessment
- preparation of examination room
- selection of optimal imaging coil and positioning of patient
- selection of protocol and parameters
- display, filming and archiving of images
- documentation of procedure and patient data in appropriate records
- discharge of patient with post-procedure instructions
- universal precautions
- MRI safety procedures and precautions
- evaluation of resulting images for the following:
- image quality
- optimal demonstration of anatomic region
- proper identification of images and patient data
- exam completeness

### **Magnetic Resonance Imaging Clinical Experience Requirement Procedures**

Categories	Procedures
A. Head & Neck	<ol> <li>routine brain</li> <li>internal auditory canal</li> <li>orbit</li> <li>pituitary</li> <li>vascular head</li> <li>cranial nerves</li> <li>posterior fossa</li> <li>head trauma</li> <li>sinuses</li> <li>soft tissue neck</li> <li>vascular neck</li> </ol>
B. Spine	<ol> <li>thoracic</li> <li>lumbar</li> <li>cervical</li> <li>sacrum/coccyx</li> <li>spinal trauma</li> <li>bony pelvis</li> </ol>
C. Thorax	<ol> <li>brachial plexus</li> <li>mediastinum</li> <li>cardiovascular</li> <li>breast</li> <li>aorta</li> <li>heart and great vessels</li> </ol>
D. Abdomen/Pelvis	<ol> <li>liver or spleen or pancreas*</li> <li>kidneys</li> <li>adrenals</li> <li>MRCP</li> <li>vascular</li> <li>male pelvis</li> <li>female pelvis</li> </ol>
E. Musculoskeletal	<ol> <li>elbow</li> <li>wrist/hand</li> <li>hip</li> <li>ankle</li> <li>shoulder</li> <li>foot</li> <li>long bones</li> <li>knee</li> </ol>
F. Special Imaging Procedures	1. MRV 2. 3D volume reformation 3. multiplanar reformation 4. diffusion 5. echo planar imaging 6. CINE 7. vascular (iliac, runoff) 8. spectroscopy 9. other (e.g. functional MRI)
G. Quality Control	<ol> <li>signal to noise</li> <li>center frequency</li> <li>film quality control (processor sensitometry, SMPTE pattern)</li> <li>transmitter gain or attenuation</li> <li>geometric accuracy</li> <li>equipment inspection (e.g. coils, cables, door seals)</li> </ol>

<sup>\*</sup>Note: A study on any one of these structures (liver or spleen or pancreas) counts as one repetition of the procedure)