Frank G. Shellock, Ph.D., FACR, FISMRM Member, Joint Commission's Ionizing Radiation & Magnetic Resonance Imaging Expert Panel

Excerpts Pertaining to the Joint Commission's Requirements Related to MRI Safety

Joint Commission Requirements

Revised Requirements for Diagnostic Imaging Services, Effective July 2015

Standard EC.02.01.01

The organization manages safety and security risks.

Elements of Performance for EC.02.01.01

Applicable to Ambulatory Care Centers

A 14. The organization manages magnetic resonance imaging (MRI) safety risks associated with the following:

or

Applicable to Hospitals and Critical Access Hospitals

A 14. The [critical access] hospital manages magnetic resonance imaging (MRI) safety risks associated with the following:

- Patients who may experience claustrophobia, anxiety, or emotional distress
- Patients who may require urgent or emergent medical care
- Patients with medical implants, devices, or imbedded metallic foreign objects (such as shrapnel)
- Ferromagnetic objects entering the MRI environment
- Acoustic noise

Applicable to Ambulatory Care Centers

A 16. The organization manages magnetic resonance imaging (MRI) safety risks by doing the following:

or

Applicable to Hospitals and Critical Access Hospitals

A 16. The [critical access] hospital manages magnetic resonance imaging (MRI) safety risks by doing the following:

- -Restricting access of everyone not trained in MRI safety or screened by staff trained in MRI safety from the scanner room
- and the area that immediately precedes the entrance to the MRI scanner room.
- -Making sure that these restricted areas are controlled by and under the direct supervision of staff trained in MRI safety.
- -Posting signage at the entrance to the MRI scanner room that conveys that potentially dangerous magnetic fields are present in the room. Signage should also indicate that the magnet is always on except in cases where the MRI system, by its design, can have its magnetic field routinely turned on and off by the operator.

Standard HR.01.05.03
Staff participate in ongoing education and training.
Elements of Performance for HR.01.05.03

Applicable to Ambulatory Care Centers

C 25. The organization verifies and documents that technologists who perform magnetic resonance imaging (MRI) examinations <u>participate in ongoing education</u> that includes annual training on safe MRI practices in the MRI environment, including the following:

Or

Applicable to Hospitals and Critical Access Hospitals

C 25. The [critical access] hospital verifies and documents that technologists who perform magnetic resonance imaging (MRI) examinations <u>participate in ongoing education that includes annual training on safe MRI practices</u> in the MRI environment, including the following:

- -Patient screening criteria that address ferromagnetic items, electrically conductive items, medical implants and devices, and risk for Nephrogenic Systemic Fibrosis (NSF).
- -Proper patient and equipment positioning activities to avoid thermal injuries.
- -Equipment and supplies that have been determined to be acceptable for use in the MRI environment (MR Safe or MR Conditional).*
- -MRI safety response procedures for patients who require urgent or emergent medical care.
- -MRI system emergency shutdown procedures, such as MRI system quench and cryogen safety procedures.
- -Patient hearing protection.
- -Management of patients with claustrophobia, anxiety, or emotional distress.

[*Terminology for defining the safety of items in the magnetic resonance environment is provided in ASTM International F2503 Standard Practice for Marking Medical Devices and Other Items for Safety in the Magnetic Resonance Environment.]