

New FGI Design Standards, New MRI Equipment, and Clinical Flexibility

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In the US, design and construction standards for healthcare facilities are largely regulated at the state level. This could have resulted in a radical patchwork of standards as one moved from state to state, but today nearly all US states (and even The Joint Commission) use versions of the Facility Guidelines Institute (FGI) "Guidelines" standard. The latest version of "Guidelines" (2022) has added a couple of new criteria – really exceptions to older criteria – specifically to accommodate changes in MRI technology and clinical application.

Since the beginning of clinical MRI in the 1980s, MRI scanners were often sited at the far-end of radiology departments, enormous pieces of fixed equipment with demanding site preparations, presenting invisible and persistent hazards. For decades an MRI that could go to patients was as fanciful a joke as flying cars. But while we're still waiting on our Jetsons-inspired cars, MRI scanners that actually *do* go to the patient are upon us, upsetting some long-held paradigms of where MRI should be placed in a hospital and their role in patient care.

The 2022 FGI recognizes that the future of MRI is here, now, in the form of both portable MRI and purpose-build fixed units that serve specific clinical needs of narrow patient populations. The newest version of the standard now specifically exempts coverage for MRI units that can have the magnetic field switched off, be unplugged, and rolled away. And for specialty fixed scanners where the magnetic field hazard area is fully contained by an enclosed MRI scanner, the architectural provisions that specifically serve to keep people and equipment outside of magnetic hazards are waived (though the requirements are unchanged for conventional MRI scanners).

The diversification of MRI scanner formats and clinical applications has meant that MRI service availability is growing to serve expanded varieties of patients, including many who desperately need MRI's diagnostic information but who may have been judged to be too fragile to undergo the rigors of round-trip transport through the entire hospital to the back-end of the radiology department. The most contemporary design standards from the 2022 FGI are helping hospitals accommodate the newest MRI technology and its expanded clinical purposes.

Refer to the Facilities Guidelines Institute at <https://fgiguideines.org/> for the latest updates.