

# MRI FAQs

**1. What does the MRI Accreditation Program evaluate?**

The program is designed to be educational in nature, and it evaluates qualifications of personnel, equipment performance, effectiveness of quality control measures, and quality of clinical images. It is believed that these are the primary factors that impact the quality of clinical images and the quality of patient care.

**2. Does a physician have to be present during injection of intravascular contrast media?**

A properly certified and/or licensed healthcare professional may perform the injection so long as a radiologist or his or her physician designee is present and immediately available to furnish assistance and direction throughout the performance of the procedure. The physician need not be in the same room.

**3. What is the cost of MRI accreditation?**

<b>MRI Accreditation Fees</b>	
<b>Cycle</b>	<b>Fees</b>
<b>Accreditation</b> (Initial cycle and renewal)	\$2400 for the first unit up to four modules, \$2600 for five modules, \$2800 for six modules  \$2300 each additional unit at one site location applying for four modules, \$2500 for five modules, \$2700 for six modules
<b>Repeat</b>	\$800 per unit for clinical or phantom images.  \$1600 per unit if repeating both.
<b>Reinstate/Corrective Action Plan</b>	\$2400 for the first unit up to four modules, \$2600 for five modules, \$2800 for six modules  \$2300 each additional unit at one site location applying for four modules, \$2500 for five modules, \$2700 for six modules
<b>Add units (mid cycle)</b>	\$1600 per unit
<b>Add module (mid cycle)</b>	\$1600 per unit
<b>Replacement Certificate</b>	\$65 per certificate.
<b>Large Phantom</b>	\$1050 (includes shipping and handling).
<b>Small Phantom</b>	\$780 (includes shipping and handling).

**4. Does the ACR require that a physicist or MR scientist perform testing services for a facility to apply for accreditation?**

Starting July 1, 2005, sites applying for MRI accreditation must submit an annual MRI system performance evaluation performed by a medical physicist or MR scientist. The medical physicist/MR Scientist will follow the ACR MRI Quality Control Manual in order to perform a complete annual system performance evaluation. This evaluation includes an evaluation of the weekly QC performed by a technologist. A technologist may still perform the ACR phantom portion of the accreditation submission, although the ACR strongly recommends the services of a medical physicist or MR scientist for this also.

**5. Who can purchase an ACR MRI phantom?**

At this time, the phantom can be purchased by MRI facilities that apply for accreditation, MRI equipment manufacturers, and consulting physicists or MR scientists only. The order form for the phantom comes with the testing materials packet

when a facility applies for, or renews accreditation. For your convenience, you can download the MR phantom order form. This form allows you to order either the large or small phantom. The fees are listed on the form. MRI manufacturers interested in purchasing a phantom should contact the MRI Accreditation Program at (800) 770-0145 or e-mail to [MRI@acr.org](mailto:MRI@acr.org).

**6. Can any MRI facility apply for MRI accreditation?**

Yes, any MRI facility may apply for MRI accreditation. For small, extremity-only scanners, there is a smaller phantom that your scanner can accommodate. Simply indicate on your application that your scanner is only capable of extremity scans.

**7. Can mobile MRI practices apply for accreditation?**

Yes. If a unit serves multiple sites and the imaging protocols and interpreting physician group are the same at each site, then one application and fee should be submitted. If a unit serves multiple locations and the protocols and interpreting physician groups vary from site to site, then each site is required to submit separate applications and fees.

**8. What is the most common cause for failure?**

Clinical image deficiencies or a combination of clinical and phantom image deficiencies.

**9. What options does a site have if it fails the initial testing cycle?**

Sites have the option of appealing the results if they disagree with the findings based on the information submitted, or they may reapply for the deficient areas indicated on the final report. For clinical examinations: repeat those examinations on a different patient. For phantom images, repeat the phantom scans (we recommend with the assistance and supervision of a qualified medical physicist/MR scientist).

**10. Do sites have to submit images within a certain time frame?**

Sites are given a 45-day time frame to complete the testing portion of the accreditation process (30 days for repeating).

**11. Do sites undergo a site survey as part of the accreditation process?**

The accreditation process is conducted primarily through the US mail. The ACR will perform random site visits with prior notification to validate maintenance of accreditation criteria.

**12. Will MRI accreditation become mandatory?**

The ACR MRI Accreditation Program is a voluntary process. However, several third-party payers have recognized the ACR MRI Accreditation Program as a method of demonstrating quality and consequently require ACR accreditation for their providers of MRI services.

**13. Does the ACR accredit 3.0-T magnets?**

Yes. Starting July 1, 2005, the ACR began accepting MRI accreditation applications for 3.0-T magnets. In order to accurately measure the performance of these units, 2 of the physics tests performed for ACR accreditation will have different pass/fail criteria for 3.0-T units. For the low-contrast object detectability (LCOD), the required number of total spokes for a 3.0-T magnet is equal to or greater than 37. For the image intensity uniformity, the required percent integral uniformity (PIU) for a 3.0-T magnet is equal to or greater than 82%.

**14. Do sites have to perform weekly laser film quality control if the radiologists read soft copy instead of film?**

If there is a laser film printer at the address listed on your application, the weekly laser film printer quality control must be performed.

**15. My facility did not pass accreditation. May we appeal the decision? If so, what's involved?**

Yes. Facilities that receive a deficiency or a failure may **appeal** the determination in writing within 15 days of the date of the final report. You must send the **original images for all of the submitted examinations that did not pass** along with a letter describing your reason for appealing. Only those images reviewed for the original determination (and having the original labels) will be considered during the appeal evaluation. These will be forwarded to a senior reviewer (a reviewer who did not participate in the initial review) with a copy of the previous reviews and the appeal letter written by the facility. **No other images will be sent to the reviewer for consideration in the evaluation.** The arbitrator's determination will be final.

**16. We recently appealed an adverse accreditation decision. When should we receive the results of the appeal?**

You should receive the appeal results within **30 to 45 days** of the date all required appeal materials were received by the ACR.

**17. We did not pass accreditation because our technologists selected and submitted the wrong images. May we appeal the decision and submit new cases?**

Although you may appeal the decision, you may **not** submit new cases. During accreditation review, the ACR reviewers assume that the submitted cases were reviewed by the modality's supervising physician (as specified in the Testing Instructions) and are examples of your best work. Consequently, during an appeal, you may only **submit the original images** with the original ACR labels.

**18. We did not pass accreditation because our technologist did not submit all required images and provided insufficient information with the images that were submitted. May we appeal the decision and submit the rest of the required information?**

You may appeal the decision; however, you may only submit the original images with the original ACR labels. Please call the Diagnostic Modality Accreditation Information Line at (800) 770-0145 for further guidance on your specific situation.

**19. We are currently accredited under the "whole body" MRI Accreditation. Do we have to go through the new "modular" program to remain in good standing?**

You will go through the "modular" approach to MRI Accreditation when your facility comes up for renewal. You are not required to go through the process until your normal renewal.

**20. Why did the ACR change the MRI Accreditation Program from whole body to modular?**

Due to tremendous growth in Magnetic Resonance Imaging and the need for quality assurance in this ever-changing area of imaging care, the American College of Radiology (ACR) is developing a modular MRI accreditation program. In 2006, the ACR Council approved a resolution requiring that the current ACR MRI accreditation program be redesigned into a modular program to best meet the needs of current MR practice.

This new approach offers facilities a more flexible accreditation program that recognizes that facility practice patterns vary, depending on the patient population served and the number of magnets utilized. Facilities will have six modules to choose from, so they can match their accreditation to their practice on each magnet. Breast MR, which is currently also under development, was specifically excluded from this modular concept because it fits better within the framework of the other breast imaging accreditation programs.

**21. My facility plans to apply for ACR MRI Accreditation, where do I start?**

Start by reading the Diagnostic Modality Accreditation Program overview. This will give you an overview of the ACR Accreditation Process. Then read the ACR MRI Accreditation Program Requirements. This document will give you information on the MRI Accreditation Program specifically. After you have read and understand these two documents, you will be ready to apply at <https://acredit.acr.org>.

**22. How many people at my facility are involved in the accreditation process?**

Everyone at your facility is involved with accreditation. Your "core team" should be made up of the following personnel:

1. Your lead MRI technologist – your lead technologist will be the main person we contact if necessary, and should be the primary person who completes accreditation forms and documents, and is the technologist contact listed on your application.
2. Your MRI supervising physician – your MRI supervising physician is the interpreting physician responsible for your MRI protocols, and approves all aspects of the testing materials submission before you send them to the ACR for review.
3. Your medical physicist/MR scientist – should be responsible for supervising your facility's weekly QC and the annual system performance evaluation. We also recommend that they are closely involved with the phantom portion of your testing materials submission, and assist the supervising physician and lead technologist with your routine clinical protocols.
4. Administrative contact – Your administrative contact, such as the manager, director, etc., will help organize the members of your "core team", and ensure that everyone on the team has the resources necessary to successfully complete your accreditation process.

**23. We are an accredited facility. Can we add a module (such as MRA or Body) before we renew our accreditation through the modular approach?**

Yes. Through our online application at <https://acredit.acr.org>, you may add a module to a unit's accreditation before you renew.

**24. We are an accredited facility. Will our expiration date change?**

If you remain in good standing, your accreditation expiration date will not change.

**25. Is the Dixon Method an acceptable method of fat suppression?**

Yes, any method that reduces fat signal uniformly is acceptable for fat suppression, such as the Dixon Method or Inversion Recovery.

**26. Is it acceptable to cool the MRI Accreditation Phantom before scanning to improve SNR?**

No. It is not acceptable to cool the phantom before scanning.

**27. Is it required to perform the homogeneity test for the annual system performance evaluation?**

Yes, a homogeneity test of some kind is required as part of the annual system performance evaluation for **all** accredited magnets, and those applying for accreditation. The ACR QC Manual describes this in the Medical Physicist's/MR Scientist's section. This is sometimes a difficult test to perform independently. If the techniques described in the QC Manual cannot be performed, please ask the service engineer to provide a field map or equivalent field homogeneity assessment that has been performed within the last 12 months. If the qualified medical physicist/MRI scientist has an alternate method of accurately assessing this measurement, it is acceptable, providing they include a description of their methodology. A potential alternate method that may be used with systems that do not provide access to either phase-angle images or spectroscopy is the "Bandwidth-difference" method (Chen, et al **Med. Phys.** 33 (11), 2006).