

Cardiac MRI - FAQ and Thoughts

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Is cardiac MRI reimbursed?: Yes. There are CPT codes specific for a variety of cardiac MRI studies including functional assessment, viability, and stress studies with either perfusion or dobutamine stress agents. Medicare and private payers reimburse for these studies. The one study type that is not consistently reimbursed for is flow velocity imaging

Cardiac MRI studies take too long and are not clinically practical: A functional study should not take longer than 30 minutes, well in more complex studies such as viability or perfusion will take approximately 45 minutes. The key to efficient imaging is clearly defined protocols, and a clear understanding of the anatomy and basic sequences.

Cardiac MRI is too complex and difficult to perform in a community setting: 90+% of cardiac MRI can be done with the use of a 4 key sequences. The sequences are cine (SSFP), delayed enhancement, perfusion, and phase contrast imaging. These sequences can be combined in a variety of formats to answer most simple and complex cardiac imaging problems.

The learning curve is too steep to acquire this knowledge while maintaining an active clinical practice: The key to learning cardiac MRI is rapid feedback. Often there are simple problems with patient position, sequence selection, or gating, which can quickly be remedied leading to successful studies. We have developed a remote curriculum which as a companion to the on-site course will allow for rapid feedback and assistance in developing your and your technologist's skills. Cardiac MRI is an active science. Textbook and 'hands off' learning only goes so far.

Physicians in my community currently use other technologies for cardiac imaging: It is true that many successful programs have a clinician champion. The champion, however, can be the imager. The key is to start with simple straightforward cases which highlight the technologies strength. Cine imaging for cardiac function or valves can be a good start. Basic viability or delayed enhancement can be an eye opener.

Cardiac MRI will compete against my nuclear or echocardiography business: Cardiac MRI is an adjunct to these imaging technologies, not a replacement. Echocardiography still remains the mainstay of cardiac imaging. CMR study requests are often generated because of questions which echocardiography raises, such as mitral or aortic valve assessment, or the need to more clearly define ejection fraction. Nuclear stress perfusion will continue to be a mainstay of ischemia evaluation. Cardiac MRI can be a beneficial adjunct to nuclear imaging when needing to rule in or rule out infarcts based on perfusion defects, or solidify viability assessment.

Introduction: Cardiac MRI is gaining an important role in the imaging armamentarium for cardiac patients. A review of major cardiology journals reveals new studies weekly which are further highlight the role of cardiac MRI in clinical practice. Cardiac MRI has already shown itself to be the gold standard for assessment of cardiac function and viability. Because MRI is not a static imaging platform it also allows for dynamic imaging of valves and vascular flow as well as perfusion imaging. State-of-the-art clinical practice in the 21st century is defined by new technology. Cardiac MRI will quickly become an essential and indispensable technology for the cardiac practitioner.