MRI and Cardiovascular Implantable Electronic Devices (CIEDs)

MRI ordered on patient with CIED.

Radiologist reviews a chest radiograph performed after most recent CIED intervention and not older than 30 days.

Fractured, abandoned, or malpositioned leads? Stop.

If the CIED is clear by imaging, the MRI technologist will refer to the manufacturer's documentation.

If MRI Conditional, proceed with scanning according to conditions.

If not MRI Conditional and has an epicardial lead, stop.

If not MRI Conditional and does not have an epicardial lead, continue below.

MRI technologists passes request to radiologist. Radiologist and ordering physician discuss necessity of and alternatives to MRI.

If radiologist and ordering physician come to agreement for MRI, ordering physician will consult patient's cardiologist unless not credentialed here in which case the on-call cardiologist will be consulted.

The cardiologist interrogates the CIED and if not pacer dependent and no malfunction, completes CIED consent with patient and approves scan.

MRI coordinates with the cardiologist to do immediate pre- and post-MRI reprogramming of CIED.

1.5T Scanner Only.

An ACLS-trained nurse monitors the patient during the scan including ECG and pulse oximetry.

Defibrillator/monitor with external pacing function is immediately available.

The cardiologist must be immediately available during scan but not necessarily present in room (direct supervision).

The cardiologist coordinates patient follow-up within 1 week for re-interrogation.