Standard Operating Procedure: MRI Safety Training

Background: There are occasions when research personnel, for example Biomedical Engineering students developing cardiac MRI techniques, have a need to perform MRI exams without the assistance of an MRI Technologist. In order to ensure that MRI safety guidelines are followed on these occasions, MRI safety training will be provided to these personnel prior to the performance of any MRI exams on either phantoms or human subjects.

Purpose: Establish a process, to include documentation, for MRI safety training for research personnel who will be scanning without the presence of an MRI Technologist.

Training Requirements for Independent Scanning (to be completed in the order below):

- MRI Training:
  - Lecture with PowerPoint presentation that will review general MRI safety and safe practices while working in the MRI environment
  - Completion of an MRI screening sheet
  - Walk-through of the MRI space (to include a review of imaging coils, cleaning and scanner-use etiquette)
  - Completion of MRI training checklist
  - Completion of MRI Technologist shadowing
    - When personnel are ready to observe/shadow an MRI Technologist, it will be the trainee's responsibility to review the Imaging Core Calendar (www.imagingcore.sites.virginia.edu) and work with the MRI Technologist to determine and arrange the best date/time/location to observe/shadow a cardiac exam or any other relevant exam
      - Personnel will be responsible for documenting five observed exams with the MRI Technologist on established observation form
  - A post-test will be given following the completion of five observations with an MRI Technologist
    - Post-test will include questions related to MRI safety and relevant Cardiac imaging exams (e.g., cardiac)
  - If all of the above is completed and personnel pass the post-test, ID Badge access can be granted for access to the MRI scanner area
    - A formal email request to include full name, and 9-digit employee ID # is required to request official access. Email requests for badge access should be sent to Jessica Lilly (JLW8FK@virginia.edu) and Jamie Weathersbee (jg6w@virginia.edu)

All documentation of MRI Training will be kept with the MRI Technologist (scanned into database)

- Other training in order to be added to a study protocol:
  - Complete CITI Training online and email documentation to Brigitte Kelly
    - CITI website: https://about.citiprogram.org/en/homepage/
    - For assistance or questions regarding completion of this training reach out to Brigitte Kelly

Completion of Training:

- When all of the above requirements have been completed, an email can be sent to Brigitte Kelly to request to be added to the study protocol in order to be able to perform independent scans.
- The Primary Investigator for the IRB will be responsible for the personnel performing independent scanning.

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