Today’s agenda
- MIPPA overview and CMS requirements
- Breast MRI accreditation
- How to prepare for accreditation
- Program requirements
- Getting ready to submit your materials
- Accreditation FAQs
- Q & A discussion

New CMS requirements by deadline — even if you are currently accredited
- Verification of personnel qualifications for supervising physician and non-physician staff
  - With primary source verification
- Written policy on patient access to information
  - Including patient record retention and retrieval process
- A policy for consumer complaints
  - Including posted notice about where/how to file a complaint with the provider’s accrediting organization
- Policies for staff and patient safety
Breast MRI overview

- Breast MRI is the newest ACR accreditation program:
  - Launched May 2010
  - More than 350 applicants
- It involves acquisition of clinical images and submission of quality control
- All personnel involved with the examination must meet ACR requirements
- Every unit that performs diagnostic breast MRI must go through testing for the facility to be accredited

How to prepare for accreditation

- Go to acr.org and read the Breast MRI Accreditation Program Requirements
- Download the application forms
- Where to find them...
Application

• Download forms:
  – New - Word documents
  – Type, save and print

• Application includes:
  – Facility information
  – Personnel information
  – Modality information
  – CMS information
  – Medicare ID number
  – National provider identifier
  – Payment options

Program requirements

• Certified in Radiology or Diagnostic Radiology by one of the following:
  – American Board of Radiology
  – American Osteopathic Board of Radiology
  – Royal College of Physicians and Surgeons of Canada
  – Le College des Medecins du Quebec

• And either:
  – Supervision, interpretation and reporting of 150 breast MRI examinations in the last 36 months
  – Interpretation and reporting of 100 breast MRI examinations in the last 36 months in a supervised situation

Interpreting physician – initial qualifications

• Not board certified:
  – Completion of an Accreditation Council for Graduate Medical Education (ACGME) or American Osteopathic Association (AOA) approved diagnostic radiology residency program
  – Interpretation and reporting of 100 breast MRI examinations in the last 36 months in a supervised situation
Interpreting physician – initial qualifications

- 15 hours of Category 1 in MRI, including:
  - Clinical applications of MRI in breast imaging
  - MRI artifacts
  - Safety
  - Instrumentation

Interpreting physician – continuing

- Continuing experience
  - Upon renewal, 75 breast MRI examinations in the prior 36 months
- Continuing education
  - Upon renewal, five hours Category 1 CME in breast MRI in the prior 36 months

Technologist – initial qualifications

- Registered in MRI by one of the following:
  - American Registry of Radiologic Technologists (ARRT)
  - American Registry of MRI Technologists (ARMRIT)
  - Canadian Association of Medical Radiation Technologists (CAMRT)

  OR

- Registered in radiography by the ARRT and/or unlimited state license and six months supervised clinical MRI scanning experience

  OR

- All three of the following:
  - Associate’s or bachelor’s degree in allied health field
  - Certification in another clinical imaging field
  - Six months supervised clinical MRI scanning experience

Technologist – continuing experience and education

- Continuing experience
  - Upon renewal, 50 breast MRI examinations in the prior 24 months
- Continuing education
  - Continuing Education (CE) for all staff includes credits pertinent to the accredited clinical practice
    - Registered technologist:
      - In compliance with the CE requirements of certifying organization
    - State-licensed technologists:
      - 24 hours of CE every two years (relevant to imaging and the radiologic sciences, patient care)
    - All others:
      - 24 hours of CE every two years (relevant to imaging and the radiologic sciences, patient care)

Medical physicist/MR scientist – qualifications

- Initial qualifications – may qualify through one of the following pathways:
  - Board certified
  - Not board certified in required subspecialty
  - Grandfathered
- Continuing experience
- Continuing education
Equipment requirements

- No requirement for minimum field strength
- MR equipment must:
  - Have a dedicated, bilateral breast coil
  - Be capable of simultaneous, bilateral imaging
  - Meet all state and federal performance requirements, including:
    - Maximum static magnetic field strength
    - Maximum rate of change of magnetic field strength (dB/dt)
    - Maximum RF power deposition (specific absorption rate)
    - Maximum auditory noise levels

OR

- Capacity to perform mammographic correlation, directed breast ultrasound and MRI-guided intervention
- Create a referral arrangement with a cooperating facility that provides these services
  - Cooperating facility must be accredited by the ACR in breast MRI
  - Cooperating facility must have had an application for breast MRI accreditation accepted by the ACR (option expires May 10, 2011)

Quality control

- Documentation of QC is required:
  - By technologist (weekly)
  - By medical physicist/MR scientist (required annually)
  - Use 2004 ACR Magnetic Resonance Imaging (MRI) QC Manual
- Facilities must submit:
  - Most recent medical physicist's annual MRI System Performance Evaluation report (including checks of bilateral breast coils)
  - Documentation of corrective action, if performance problems
- Use of current MRI phantom may not be possible
  - QC phantom choice and action criteria must be made by medical physicist/MR scientist in cooperation with the system vendor

Quality assurance

- Must establish/maintain medical outcomes audit program to follow up positive assessments and correlate pathology results with findings
- Must use BI-RADS®
  - Category 1 – Negative
  - Category 2 – Benign Finding(s)
  - Category 3 – Probably Benign Findings; short-interval follow-up suggested
  - Category 4 – Suspicious Abnormality; biopsy should be considered
  - Category 5 – Highly Suggestive of Malignancy; appropriate action should be taken
  - Category 6 – Known Biopsy-Proven Malignancy; appropriate action should be taken

Getting ready to submit your materials
Timeline

- Facilities have 45 days to complete and submit testing materials after applying.
- Extensions are considered on a case-by-case basis.
- Let us know if you need more time.

Accreditation testing

- Submit clinical images and corresponding data for each magnet performing breast MRI.
- No phantom required at this time.
- Does not evaluate MR-guided biopsy.

Accreditation testing

- Two bilateral breast MRI cases:
  - One known, enhancing, biopsy-proven carcinoma.
  - One benign finding (BI-RADS 1 or 2).
- Must include four sequences:
  - T2-weighted/bright fluid series.
  - Multi-phase T1-weighted series:
    - Early phase post-contrast T1.
    - Delayed phase post-contrast T1.

Complete Test Image Data form

- Leave no blanks.
- Check accuracy.

Burn cases on CD or DVD

- Images must be in a DICOM format.
- Cases must be on separate discs.
- Each disc must have:
  - Scout or localizer images.
  - The four requested sequences (if possible, only submit the required sequences).
  - An embedded viewer.
- If possible, burn the discs from the acquisition station.
  - Burn a total of four discs:
    - Two copies of the carcinoma case.
    - Two copies of the negative benign case.
Exam identification and labeling
- Patient’s first and last name
- Patient age or date of birth
- Patient identification number
- Facility name
- Examination date
- Laterality, left or right of midline section

Label cases and discs
- Put ACR-provided labels on each of the four disc cases
  - CA-CD 1 and CA-CD 2
  - Neg-CD 1 and Neg-CD 2
- Write corresponding info on discs along with the BMRAP and unit #

Important – open and check each disc on a separate computer before sending in
- Be sure
  - Disc opens within two minutes
  - All required information (exam ID) is visible or available from the DICOM header
- If ACR cannot open the disc, we will return it
- If required information is missing, the unit may fail

Accreditation testing
- Will be reviewed by three ACR reviewers:
  - One technical reviewer (medical physicist)
  - Two clinical reviewers (radiologists)
- Five categories will be reviewed:
  1. Pulse sequences and image contrast
  2. Positioning and anatomic coverage
  3. Artifacts
  4. Spatial and temporal resolution
  5. Exam ID

Image quality criteria
- Pulse sequences and image contrast
  - T2 Weighted/Bright Fluid Series
    - Adequate SNR/not too grainy
    - Sufficient bright fluid contrast
  - Multi-Phase T1-Weighted Series:
    - Pre-Contrast T1
      - Adequate SNR/not too grainy
    - Early Phase (first) Post-Contrast T1
      - Adequate SNR/not too grainy
      - Completed within four minutes of completion of injection
      - Technical factors match pre-contrast T1
    - Delayed Phase (last) Post-Contrast T1
      - Adequate SNR/not too grainy
      - Technical factors match pre-contrast T1
  - Positioning and anatomic coverage
    - Adequate breast tissue inside the coil
    - Proper positioning of the breast within the coil
    - Properly positioned nipple
    - Coverage of the entire breast
    - Absence or minimization of skin folds
Image quality criteria

- Artifacts
  - Must not be excessive or interfere with diagnosis
- Exam ID

Image quality criteria

- Spatial and temporal resolution
  - Spatial resolution: pre-contrast and post-contrast T1-weighted series
  - Temporal resolution:

Spatial and Temporal Resolution Table

<table>
<thead>
<tr>
<th>Slice Thickness</th>
<th>Gap</th>
<th>Maximum in Plane Pixel Dimension for Phase and Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;3 mm</td>
<td>0 mm</td>
<td>&lt;1 mm</td>
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</tbody>
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Accreditation results

- Final reports are generated after complete reviews by the ACR radiologist and medical physicist reviewers
- Final reports with your accreditation results are mailed to the modality supervising physician
- All images are mailed back to the facility
- When accreditation is achieved, facilities will receive an accreditation certificate, decal and marketing packet

Breast MRI accreditation fees

- Initial cycle and renewal:
  - $2,400 for first unit
  - $2,300 each additional unit at one site location

Accreditation FAQs

Q. May we apply for breast MRI accreditation as a module under the general MRI Accreditation Program?
A. No, the Breast MRI Accreditation Program is a stand-alone program and not a module under the general MRI Accreditation Program. You must apply for accreditation in breast MRI separately.
Accreditation FAQs

Q. Why is there a requirement that facilities accredited in breast MRI have MRI biopsy capabilities or an on-site arrangement for such?
A. The ACR wants to ensure that women who have a suspicious finding under breast MRI are able to get a biopsy based on the results of the examination that discovers the finding. Here’s why:

• Cost – there have been frequent reports of patients who needed a biopsy as a result of a diagnostic breast MRI at one center and could not have the biopsy performed at that center. They were then forced to pay out-of-pocket for a repeat breast MRI at another center that could perform their biopsy. This is because these centers are uncomfortable with the quality of exams performed at some facilities and do not feel that they can perform a biopsy safely without repeating the scan.

• Patient safety – a facility that does not have arrangements to schedule a biopsy could lead to patients foregoing needed biopsy because of inconvenience or cost, or because that facility might fail to recommend a biopsy based on their lack of equipment.

Accreditation FAQs

Q. Is a fellowship in breast MRI required in order to meet the initial requirements?
A. No.

Q. May our physicians double read in order to meet the continuing experience requirements?
A. Yes, double reading (two or more physicians interpreting the same examination) is acceptable to meet the continuing experience requirements. Interpreting physicians may also re-interpret a previously interpreted examination and count it towards meeting the continuing experience requirement, as long as he/she did not do the initial interpretation.

Q. May our physicians document a bilateral breast exam as two exams for their initial and continuing experience?
A. No. As in mammography, a bilateral breast MRI exam is considered one examination.

Why choose ACR for accreditation?

• Developed by radiologists
• Accreditation generally within 90 days of image submission
• No pre-accreditation on-site survey
• Save 10% on three or more modalities (excluding mammography)
• Multi-site, multi-modality pricing
• Renewal is faster and easier
  - Average renewal pass rate — 85%
• Custom marketing toolkit
• Based on ACR Practice Guidelines and Technical Standards
• Focus on quality and safe imaging
• Peer-reviewed assessment of clinical and phantom images
• Continuous practice improvement process with key performance metrics
• Dedicated account team of technologists guide you every step of the process