



Mammography

Candidates applying for certification and registration are required to meet the Professional Requirements specified in the [ARRT Rules and Regulations](#). ARRT's [Mammography Clinical Experience Requirements](#) describe the specific eligibility requirements that candidates must document as part of the application for certification and registration process.

The purpose of the clinical experience requirements is to document that candidates have performed a subset of the clinical procedures within a discipline. Successful performance of these fundamental procedures, in combination with mastery of the knowledge and cognitive skills covered by the examination requirement, provides the basis for the acquisition of the full range of clinical skills required in a variety of settings.

ARRT periodically updates the requirements based on a practice analysis, which is a systematic process to delineate the job responsibilities typically required of mammographers. The result of this process is a task inventory. An advisory committee then determines the number of clinical procedures required to demonstrate adequate candidate experience in performing the tasks on the inventory.

Candidates for Mammography certification and registration must document independent completion of mammography clinical procedures according to the criteria noted below in the mandatory and elective procedures sections. Procedures are documented, verified, and submitted when complete via an online worksheet accessible through the candidate's ARRT account on www.arrt.org. ARRT encourages individuals to obtain education and experience beyond these minimum requirements.

The candidate can document up to 16 mammographic procedures (mammograms, QC procedures, mammographic image evaluation, elective procedures) per day in the online worksheet.

Remote scanning is not acceptable for completion of ARRT Clinical Requirements. The candidate must complete the examination or procedure at the facility where the patient and equipment are located. The candidate must be physically present during the examination or procedure.

For postprimary clinical experience requirement procedures, clinical verifiers are responsible for verifying the candidate's completion of procedures in accordance with ARRT requirements. Clinical verifiers are not required to directly observe the candidate performing the procedure and may perform their verification responsibilities remotely.



Mammography Quality Standards Act (MQSA) Requirements

Candidates must be [MQSA](#) compliant **prior** to performing required clinical procedures. ARRT will request confirmation that the candidate is MQSA compliant through the online worksheet.

MQSA regulations are subject to change, please refer to [21 CFR 900.12 \(a\)\(2\)](#) for current requirements.

A certified and registered supervising mammographer, an MQSA-qualified supervising mammographer, or an MQSA-qualified interpreting physician must verify completion of each procedure. The online worksheet describes the verification process.

Specific Procedural Requirements

Mandatory Procedures

*Any mammographic procedures/imaging the candidate performs **prior to** their MQSA compliance date may not be submitted toward their clinical experience requirements.*

A. Mammographic Imaging

The candidate must independently complete the mammographic imaging requirement (screening and/or diagnostic) on 75 patients. The candidate must perform all mammograms on patients (not phantoms or simulations) demonstrating the following tasks for each mammogram performed.

Patient Preparation/Education Tasks:

- Provide for patient comfort and cooperation by familiarizing patient with the equipment and process, stressing the need for compression, and providing general psychological support.
- Solicit and record patient clinical, surgical, and family history relevant to the performance and interpretation of the mammographic procedure.
- Document areas of interest including location of lumps, scars, moles, etc., by means of radiopaque markers on the breast and/or diagram on clinical information sheet, per department protocol.
- Respond to patient questions regarding breast self-examination, clinical breast examination, patient dose, possible need for additional views, and process for receiving results.
- Respond to patient questions regarding American Cancer Society (ACS) and American College of Radiology (ACR) guidelines for screening mammography, and other breast imaging procedures.

Mammographic Imaging Tasks:

- Select equipment (e.g., compression paddles, magnification stand) appropriate to the patient and the views to be performed.
- Adjust exposure factors, as needed (e.g., implanted devices, augmentation, postradiation changes).
- Position patient and equipment to acquire views per department protocol specifications.
- Evaluate the images to ensure that they contain proper identification and labeling, and are of diagnostic quality.



B. Quality Control (QC)

The candidate must participate¹ in the performance, evaluation, and recording of all the QC tests as indicated in the 2018 ACR Digital Mammography Quality Control Manual or according to equipment manufacturer's recommendations.

If the manufacturer's QC recommendations do not require a test listed below, candidates should follow the 2018 ACR Digital Mammography Quality Control Manual information to perform the test.

QC Documentation (limited to one submission per day per test)

- Phantom Image Quality (10)
- Compression Thickness Indicator (5)
- Visual Checklist (5)
- Acquisition Workstation Monitor QC (5)
- Radiologist's Workstation Monitor QC * (2)
- Compression Force (2)
- Facility QC Review (1)
- Repeat Analysis (1)
- Review of Medical Physicist's Annual Survey Report (1)
 - Including Signal-to-Noise Ratio (SNR), Contrast-to-Noise Ratio (CNR), Modulation Transfer Function (MTF), Manufacturer Detector Calibration, Artifact Evaluation, Flat Field, as applicable.

*If the radiologist's workstation monitor is remote, the candidate is responsible for reviewing the documentation of the monitor QC, according to facility protocol.

C. Mammographic Image Evaluation

Candidate must consult with an MQSA-qualified interpreting physician at least once, to review 10 (or more) mammographic cases for breast anatomy, pathology, and image quality, and establish corrective action per EQUIP (Enhancing Quality Using the Inspection Program) regulations. ARRT highly recommends that the candidate makes their best effort to participate in this evaluation in person. However, if the interpreting physician is remote, the candidate may review the same images on a local monitor through a HIPAA-compliant virtual meeting with the physician.

¹ "Participate" means being actively involved in the performance of the procedure even though the candidate may not have primary responsibility for performing the procedure.



Elective Procedures

The candidate must observe, assist with, or participate¹ in at least five of the procedures listed below. For each individual patient per day, the candidate may count up to two procedures. The candidate may document all five elective procedures in one day.

- Needle Localization
- Localization Imaging (postplacement)
- Surgical Specimen Imaging
- Breast MRI
- Breast Ultrasound (e.g., diagnostic ultrasound, biopsy)
- Stereotactic Biopsy with Clip Placement
- Stereotactic Specimen Imaging
- Tissue Marker Clip Placement Imaging
- Screening Breast Implant Imaging
- Diagnostic Mammogram
- Recall from a Screening Mammogram

¹"Participate" means being actively involved in the performance of the procedure even though the candidate may not have primary responsibility for performing the procedure.

Examples

1. A patient is having a stereotactic biopsy for calcifications. The following procedures are performed on the patient:

- 1 stereotactic biopsy with clip placement
- 1 stereotactic specimen imaging
- 1 tissue marker clip placement imaging

The candidate may document two of the three above procedures for this patient in the online worksheet.

2. A candidate has performed 14 screening mammograms and 4 diagnostic mammograms. The candidate may document up to 16 procedures in the online worksheet for that day. See [Daily Reporting Limits](#) for the Mammography Clinical Experience Requirements.

3. A candidate completes the following QC tests in one day:

- 2 phantom images (two different machines)
- 1 compression thickness indicator
- 2 radiologist workstation monitor QC
- 1 visual checklist

The candidate may document 4 QC tests in the online worksheet (1 phantom image submission per day and 1 radiologist workstation monitor QC).