



MAMMOGRAPHY STANDARDS MANUAL

For Diagnostic Imaging Clinics

1. Governance & Scope

1.1 Purpose

To ensure safe, consistent, high-quality mammography services that meet national and international standards (CAR, ACR, MQSA principles).

1.2 Scope

Applies to:

- Mammography technologists
- Radiologists
- Medical physicists
- Clinic managers
- All supporting staff

Includes:

- Screening mammography
 - Diagnostic mammography
 - Special views
 - Implant imaging
 - Tomosynthesis (if applicable)
-

2. Personnel Standards

2.1 Qualifications – Technologists

- Current license/registration (e.g., ACMDTT or appropriate provincial/state body)
- Mammography-specific certification or documented competency (CAMRT, CAR-MAP)
- Annual continuing education:

- Minimum **15 CE credits every 3 years** in breast imaging. A minimum of 7.5 of those credits must be from accredited activities (category “A” or “1” or approved by the CAMRT) and substantiated with certificates of completion.
 - Annual competency assessment

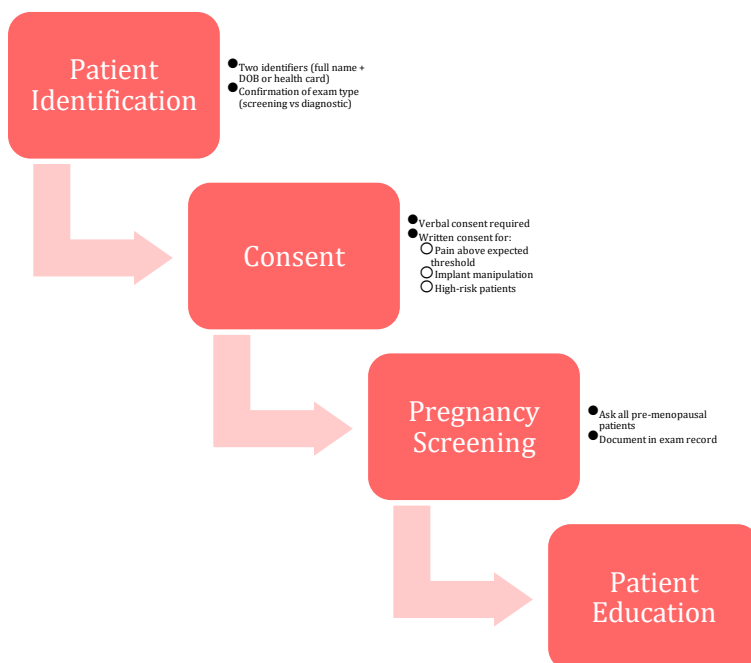
2.2 Radiologists

- Specialist certification
- Minimum **1000 mammograms/year** to maintain competency
- Annual audit of cancer detection performance
- Participation in peer review programs

2.3 Medical Physicist

- Authorized to perform mammography physics evaluations
- Annual equipment survey and dose assessment required

3. Patient Care Standards



4. Workflow & Positioning Standards

4.1 Standard Views

- **Craniocaudal (CC)**
- **Mediolateral Oblique (MLO)**
- Both breasts for screening
- Additional views only when clinically indicated

4.2 CC Position Requirements

- Medial tissue included
- Pectoral extension if possible
- Nipple in profile (if possible)
- Posterior nipple line (PNL) within 1 cm of MLO view

4.4 Implant Imaging Standards

- Eklund technique (ID views) mandatory
- 8-view protocol (CC, MLO each with and without displacement)

4.3 MLO Position Requirements

- Pectoralis muscle visualized to nipple level
- Proper arm positioning to open axilla
- Clear inframammary angle
- No skin folds
- Document implant type when known

4.5 Tomosynthesis (DBT)

- Detector sweep validated daily
- Reconstructed slices free of motion or artifact

5. Equipment & Technical Standards

5.1 Exposure & Imaging Parameters

- Automatic Exposure Control (AEC) as default
- Manual only with documented reason
- Target/filter combinations appropriate for breast thickness

- Density range: adequate visualization without saturation

5.2 Compression Standards

- Minimum force: **11 kg (25 lb)**
- Maximum force: **18 kg (40 lb)** unless patient requests relief
- Document any reduced compression

6. Image Quality Standards

6.1 ACR Criteria

Every image must be evaluated for:

- Sharpness
- Adequate tissue inclusion
- Correct positioning
- No motion
- Exposure appropriate
- No artifacts
- Nipple in profile (one view minimum)

6.2 PGMI Scoring (UK/EUREF)

Each image must be classified:

- P** – Perfect
- G** – Good
- M** – Moderate
- I** – Inadequate (requires repeat)

Repeat rate target: < 5%

7. Radiation Safety Standards

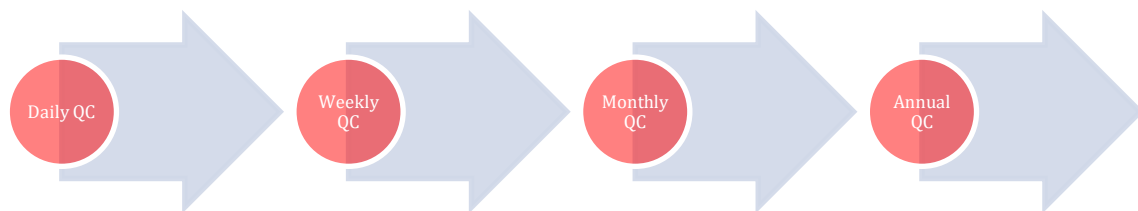
7.1 ALARA Compliance

- Exposure minimized for all patients
- Enhanced caution for:
 - Pregnant patients
 - High-risk genetic groups

7.2 Protective Equipment

- Lead aprons for accompanying parties
- Thyroid shield not used unless essential

8. Quality Control Program



9. Documentation & Recordkeeping

9.1 Technologist Notes

Must include:

- Positioning comments
- Compression force
- Exposure factors (AEC/Manual)
- Patient tolerance
- Special techniques (Eklund)
- Repeats and reasons

9.2 Equipment Logs

- QC logs
- Service reports
- Calibration documents

9.3 Report Turnaround

- Screening: ≤ 7 days
 - Diagnostic: ≤ 48 hours
 - Urgent findings: same day
-

10. Clinic Policies & Safety

10.1 Infection Control

- Clean paddle and detector between patients
- Routine disinfection log required

10.2 Emergency Protocols

- Technologist trained in CPR
 - Emergency phone numbers posted
 - Incident reporting within 24 hours
-

11. Audit & Accreditation

11.1 Required Annual Audits

- Image quality audit (random 50 exams)
- Cancer detection outcome analysis
- Repeat/reject analysis
- Technologist performance review

11.2 Accreditation Standards

Clinic must maintain compliance with:

- CAR Mammography Accreditation Program
- ACR Mammography Accreditation (if applicable)
- Provincial regulatory inspections