Breast Imaging Policies and Procedures: A Key to Excellence in Care

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Policies, Procedures and Protocols

Establishing and maintaining all of these is essential for fostering consistency within an imaging team and elevating the quality of patient care.

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Objectives

- Understand the added value of establishing policies, procedures, and protocols within breast imaging teams.
- Establish methods of creating protocols and policies that are easy to maintain and are understood by all team members.
- Determine potential protocols and guidelines based on patient factors, current imaging trends, and imaging technologies.

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Breast Cancer Screening: Canada

- All provinces and territories in Canada provide breast cancer screening services.
- Variation in how each jurisdiction provides these services.
- Screening programs are characterized by eligibility criteria, referral strategies, screening intervals, promotional strategies, Dx follow-up, QA mechanisms, IT systems, etc.

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Breast Cancer Screening: Canada

Recommendations conflict with other reputable organizations leading to confusion among providers and patients.

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Canadian Task Force **Pause** on Preventative Health Care


Canadian Society of Breast Imaging Société canadienne de l'imagerie mammaire

Promoting Excellence in Breast Imaging for All Canadians

From our President

The Honourable Mark Holland, Minister of Health, Orders a Pause on the Work of the Canadian Task Force on Preventive Health Care.

On behalf of the Canadian Society of Breast Imaging, I would like to take a moment to express my sincere appreciation and support for the Honourable Mark Holland, Minister of Health's recent decision to pause the Canadian Task Force's recommendations.

Minister Holland's leadership in advocating for a pause in these recommendations demonstrates a recognition of the evolving science surrounding breast cancer detection.

It acknowledges the importance of making health decisions based on the best available evidence, and it provides an opportunity to reassess guidelines that directly impact the lives of so many women across our nation.

Yours sincerely,
Supriya Kulkarni
President, Canadian Society of Breast Imaging

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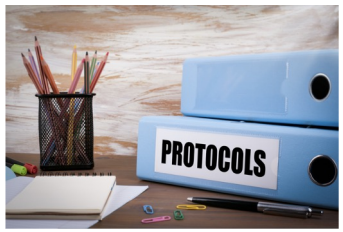
Policies, Procedures and Protocols

One method to help minimize the confusion that these new changes may bring is to implement robust protocols.



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Policies

- Policies are typically guidelines or standards that are set by the facility to comply with the rules and regulations of the accrediting body and define the required quality level for mammography services.
- Examples include hygiene, infection control, record retention, consumer complaints, result reporting, quality control, etc.

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Procedures

- Outline the specific steps or actions the facility must take to meet the standards set by the accrediting body.
- Examples include equipment quality control and maintenance, personnel qualifications, and record-keeping practices to ensure compliance.

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Protocols

- Outline the steps a staff member should take when providing quality patient care in various specific situations.
- Can be developed for scheduling guidelines, use of skin markings, technical call-back guidelines, supplemental imaging, image quality acquisition parameters, and special imaging considerations, such as skin tears during the exam.

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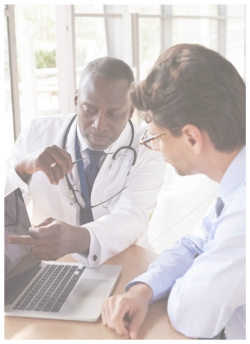
Policies, Procedures and Protocols

- **Benefits**
- Requirements
- Where to Begin



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Benefits of Protocols

- Universal policies and procedures contribute to a higher level of patient care and quality interactions
- Higher departmental efficiency
- Contribute to a higher level of patient and employee satisfaction
- Provide an outline for technologist training and competency

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Benefits of Protocols

- Help minimize patient anxiety
- Reduce technical callback rates and unnecessary callbacks
- Decrease departmental interruptions
- Reduce the possibility of litigation

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Litigation in Breast Imaging

How often does litigation happen in breast imaging?

- 50% by age 60
- Patients may bring charges for many reasons, including failure to diagnose breast cancer or negligence leading to a fall resulting in injury

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Policies, Procedures and Protocols

- Benefits
- **Requirements**
- Where to Begin

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Requirements

It's important to understand which policies are *required* by an accrediting body, versus which policies, procedures and/or protocols *may* be a good idea to have in place to ensure patient safety and quality care.

Guidelines

- Canadian Association of Radiologists (CAR)
- American College of Radiology (ACR) practice parameters:
  - Screening and diagnostic mammography
  - Performance of DBT
  - Determinants of quality in digital mammography
- Society of Breast Imaging (SBI) and CSBI
- Mammography Quality Standards Act (MQSA)/ Food and Drug Administration (FDA)

Guidelines

- Professional organizations
- Facility admin and legal team
- Radiologist and/or reading group requirements and preferences

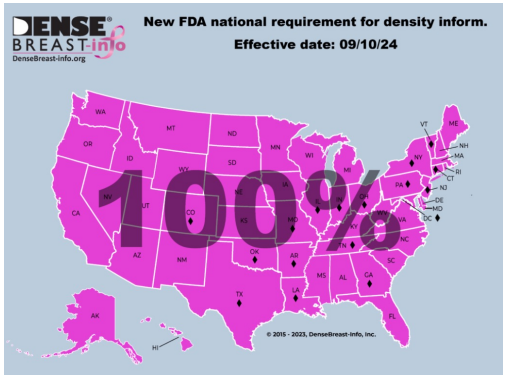
Policies, Procedures and Protocols

- Benefits
- Requirements
- **Where to Begin**

Where to Begin

- FDA, ACR, ASRT, SBI, NCBC, or State (United States)
- CAR
- Quality Assurance (QA)/Quality Control (QC)
- Lead/Chief physician
- Professional organizations
- Providence guidance
- Dense breast laws

Dense Breast Resources



Where to Begin

Who to involve:

- Medical Director or LIP
- Interpreting radiologists
- Radiation safety officer
- Lead or staff technologists
- Departmental nurses
- Auxiliary personnel (clerical staff)

Where to Begin

Protocols should be constructed from:

- Evidence-based material
- Well-recognized references
- Peer-reviewed literature and published guidelines

Standardization and Maintenance

- Protocols should be standardized in the same location, format, and language at each site
- Maintenance is critical to success

Standardization

RADIOLOGIST PREFERENCES	TECHNOLOGIST ROLES AND WORKFLOW	SUPPORT FROM BREAST SURGEON, ONCOLOGY AND OTHER TEAMS
Radiologist preferences are the most important factor in setting the standard of care and are often the most difficult to standardize.	Protocols should include positioning directives, order of views, and competencies.	Surgical teams, oncology, and even medical-legal teams should be advised when determining some protocols.

Maintenance

REVIEW YEARLY	COMMUNICATION IS KEY	CLEAR LANGUAGE
Protocols, policies and procedures should be reviewed yearly, and not just by key players.	All pertinent staff, including technologists, radiologists, support staff, and offsite personnel, should be included in policy reviews.	Language should be clear, concise and consistent.

Protocol Creation

- Scheduling guidelines (to include technical call-backs)
- Screening and diagnostic imaging guidelines
- Patient preparation and history intake
- Diagnostic callback imaging guidelines
- Breast imaging procedure guidelines
- Use of skin markers for scars, skin lesions, and abnormalities

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Protocol Creation

- Pregnant and lactating women
- Transgender patients
- Pacemaker/implanted device
- Breast pain
- Vaccines (Covid-19)

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Image Acquisition

Protocols can help technologists determine which specific mammographic views to acquire:

- Short-term follow-up
- Call back for diagnostic work-up
- Technical repeat views required
- Imaging the augmented breast
- Repeat or rejected imaging (skin folds)

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Supplemental vs Additional Views

- Extra image(s) required to complete a screening exam
- Not to be confused with "Additional Views" (Dx)

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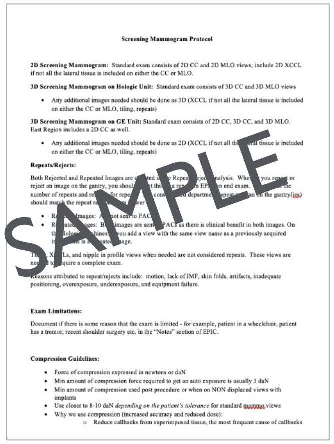
SAMPLE

Screening Mammogram Protocol

2D Screening Mammogram: Standard exam consists of 2D CC and 2D MLO views; include 2D XCCL if not all the lateral tissue is included on either the CC or MLO.

3D Screening Mammogram on Hologic Unit: Standard exam consists of 3D CC and 3D MLO views

- Any additional images needed should be done as 3D (XCCL if not all the lateral tissue is included on either the CC or MLO, tiling, repeats)

3D Screening Mammogram on GE Unit: Standard exam consists of 2D CC, 3D CC, and 3D MLO. East Region includes a 2D CC as well.

- Any additional images needed should be done as 2D (XCCL if not all th[illegible]al tissue is included on either the CC or MLO, tiling, repeats)

Repeats/Rejects:

Both Rejected and Repeated Images are [illegible]ted i[illegible]e Repea[illegible]ejec[illegible]nalysis. Whe[illegible] you rep[illegible] or reject an image on the gantry, you shoul[illegible]t this[illegible] a rep[illegible]n EP[illegible]n end exam. [illegible] the number of repeats and re[illegible] for repe[illegible] cons[illegible] departme[illegible]epeat [illegible]an on the gantry(ies) should mat[illegible] the repeat ra[illegible] [illegible]wer

- R[illegible] Images: [illegible] not sent to PAC[illegible]
- R[illegible]ate[illegible]ges: B[illegible] images are sent[illegible] PACs as there is clinical benefit in both images. On th[illegible]olo[illegible]chines[illegible] you add a view with the same view name as a previously acquired i[illegible]is is a[illegible]eated[illegible]age.

Ti[illegible], X[illegible]Ls, and nipple in profile views when needed are not considered repeats. These views are nee[illegible] to[illegible]quire a complete exam.

[illegible]easons attributed to repeat/rejects include: motion, lack of IMF, skin folds, artifacts, inadequate positioning, overexposure, underexposure, and equipment failure.

Exam Limitations:

Document if there is some reason that the exam is limited - for example, patient in a wheelchair, patient has a tremor, recent shoulder surgery etc. in the "Notes" section of EPIC.

Compression Guidelines:

- Force of compression expressed in newtons or daN
- Min amount of compression force required to get an auto exposure is usually 3 daN
- Min amount of compression used post procedure or when on NON displaced views with implants
- Use closer to 8-10 daN *depending on the patient's tolerance* for standard mammo views
- Why we use compression (increased accuracy and reduced dose):
  - Reduce callbacks from superimposed tissue, the most frequent cause of callbacks

Follow Your Facility Protocols

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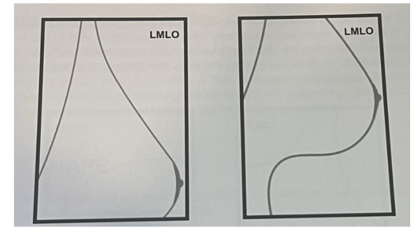
Tiled Exam (Large Breast Size)

CC, MLO:
- Inner/outer
- Upper/lower



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XCCL

XCCL (Exaggerated Cranio-Caudal Lateral View):
- Particularly helpful in visualizing the posterior-lateral aspect of the breast
- Used less than 10% of the time

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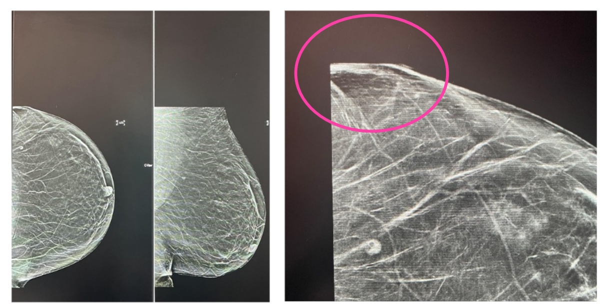
Is an XCCL Needed?



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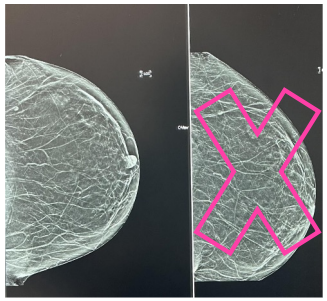
NO!



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XCCL

May be required when:

- Lateral glandular tissue and retromammary fat are not visualized on **one** of the two screening views on a patient with prior imaging
- **Baseline** exams when glandular tissue and retromammary fat aren't fully visualized on either view
- Patient had prior surgery (lumpectomy) or other concerns in that area

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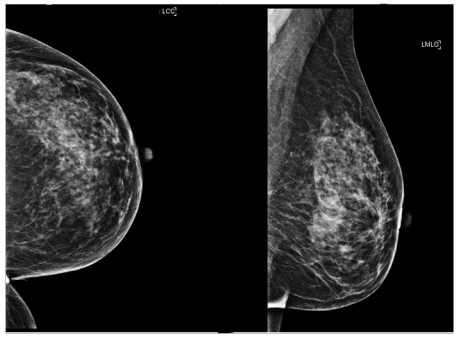
Baseline Exam



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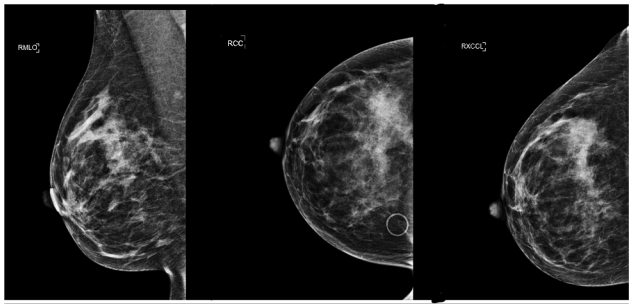
Baseline Exam



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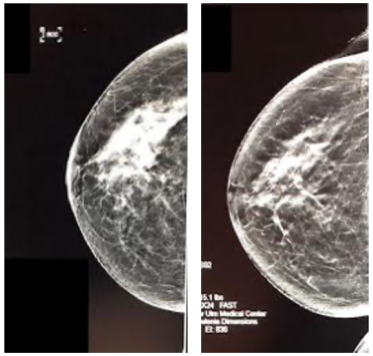
XCCL or CC?



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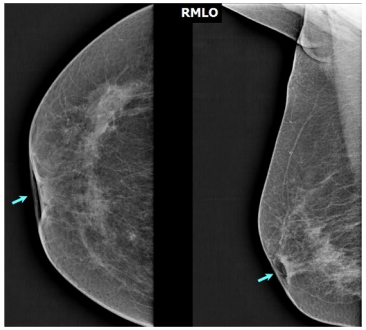
Nipple in Profile



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Nipple in Profile (NIP/NP Views)

- Required when nipple is not in profile on one of the two screening views
- Required approximately 10-15% of the time

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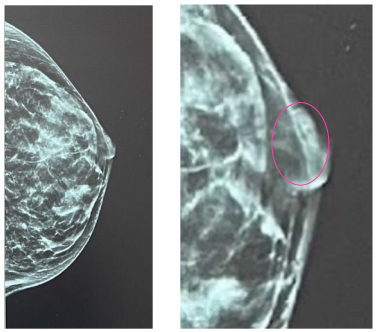
Nipple in Profile



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Anterior Compression (AC)

- Breast shape/size
- Axillary fullness
- Use "Flex/Fast" on machine

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Subareolar Complex

- Approximately 10% of all breast cancers occur in this region.
- Has an extensive network of vascular tissues.
- Adequate compression is imperative.
- Supplemental AC views may be required.

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Performing AC Views

- Only the anterior aspect of the breast is needed.
- Over-compressing the anterior aspect of the breast causes nipple retraction and discomfort.

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Supplemental Views

Supplemental images that are required to complete an exam should not be counted as repeats:

- Tiled breasts
- Nipple in profile view
- XCCLs due to dense tissue

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Protocols for Special Imaging Considerations

- Emergency protocols for patient adverse events
- Protocol for skin tears to include patient education and post-exam care
- Special patient circumstances and patients with physical limitations
- Scripts for documentation history and information for radiologists

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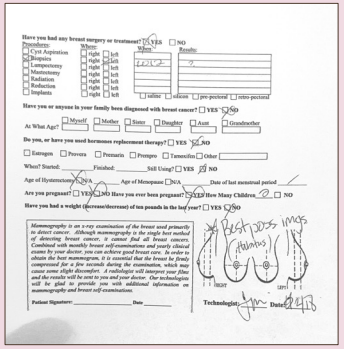
Documentation



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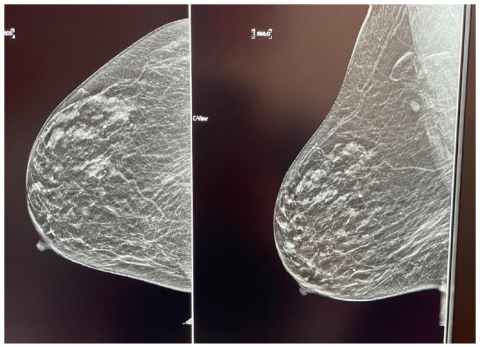
Documentation: Nipples Not Centered



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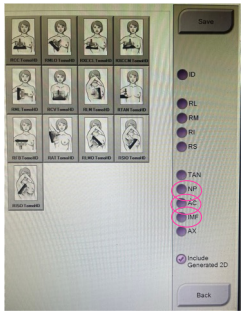
Documentation and Labeling of Views

Label appropriately if adding supplemental views.



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Expectations for Documentation

- Have reasonable expectations for image quality.
- Use Script Library for documentation when the exam is suboptimal.
- Know breast anatomy and clock positions.

Patient Education of Protocols

- Role of a mammographer often consists of patient education.
- Protocols can be viewed as another method of patient education.

Patient Care and Managing Expectations

The patient's perception of the care they receive will determine their likelihood of returning for care if/when care is needed.

Patient Care and Managing Expectations

- Clear expectations set forth by substantiated imaging protocols limit confusion among team members
- Defines workflow
- Creates uniformity
- Reduces misunderstandings among team members
- Provides every patient with the same level of high-quality care

High Volume Leads to Speed Over Quality

- Busy imaging departments can lead staff to make "small adjustments" in an attempt to stay on schedule.
- Risks when deviating from standard processes:
  - Increase in errors
  - Neglect of specific aspects of patient care
  - Decrease in image quality

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Communication is Key

All personnel should understand, adhere to and annually review policies, procedures and protocols.

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Communicating Updates

- Off-site facilities
- Off-site radiologists
- Yearly review
- Patient education

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