

JOINING FORCES: PROVIDING THE BEST IN PATIENT CARE

Louise C. Miller, RTRM, CRT, FSBI, FNCBC
Director of Educator: Mammography Educators LLC

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OBJECTIVES

- Identify methods for improving patient care
- Explain the importance of communication
- Discuss how standardization affects patient care
- List actual changes that one can implement within their departments

The Team Approach to Breast Imaging

Daniel Kopans, MD



Dorothy McGrath



“The Times....they are a changing”

Bob Dylan



Pat Troyer demonstrating xeromammography, Kaiser Health Magazine Winter 1976.



It's all about patient care.....

CONSISTENCY AND QUALITY

- Imaging protocols – Screening
- Imaging protocols – Diagnostic
- Imaging Quality
- Technical Call Backs (TCB)
- Communication
- Teamwork

Imaging Protocols - Screening

- 4 views plus?
- Use of additional views in screening
- Nipples centered and in profile
- Realistic expectations

Standardized Protocols - Screening

- As deemed by the technologist at the time of the examination, repeat views and/or additional views such as the Exaggerated Craniocaudal (XCCL,) Cleavage (CV,) and anterior compression views may be necessary due to technical reasons, positioning issues or artifacts and also may be done to accommodate individual patient body habitus and/or other factors or conditions. Any additional views should be obtained using standard 2D conventional mode.
- XCCLs should not be performed as a standard part of screening mammogram unless
 - a. It is the patient's baseline examination and lateral posterior breast tissue is excluded on the CC view
 - b. On subsequent screening mammograms if posterior grandular breast tissue is visualized back to the retromammary fat space on the MLO an XCCL is not necessary

EQUIP

- Radiologist evaluation of images
- Feedback and recommendations for improvement
- Corrective action
- Resources

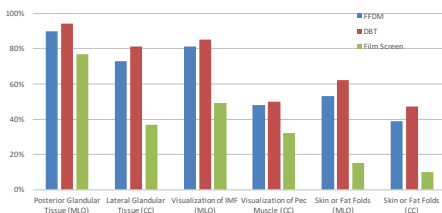
Mammography Positioning Standards in the Digital Era: Is the Status Quo Acceptable?

OBJECTIVE: The objective of this study was to evaluate positioning of standard digital mammography (DM) views using the American College of Radiology (ACR) Breast Imaging Reporting and Data System (BI-RADS) criteria. A retrospective study was conducted of consecutive patients who underwent screening DM from 1/1/2014 to 12/31/2014. The study was performed in a large, tertiary care, academic medical center. Data were collected on the following: patient age, body habitus, and technical factors. Results were analyzed using descriptive statistics. The study was approved by the Institutional Review Board (IRB) of the study site.

RESULTS: A total of 1,000 patients were included in the study. The mean age was 50.5 years. The majority of patients were screened with standard DM views. The study found that positioning standards were generally met, but there were some areas for improvement. The study also found that patient body habitus and technical factors were associated with positioning errors.

CONCLUSION: The study found that positioning standards were generally met, but there were some areas for improvement. The study also found that patient body habitus and technical factors were associated with positioning errors.

Criteria met after Standardized Training*



*AJR:209, December 2017

Reasonable Expectations – CC View

CC View	Positioning Criteria	FFDM	DBT	Bassett
	No Motion	100%	98%	-
	Lateral Glandular Tissue Included	73%	81%	37%
	Nipple in Profile	83%	85%	89%
	Skin on fat folds	39%	47%	10%
	Medial Location	16%	23%	-
	Lateral Location	29%	32%	-
	Visualization of Cleavage	41%	34%	-
	Requires More Than One View	5%	7%	-

AJR: 209, December 2017

Reasonable Expectations – MLO View

MLO View	Positioning Criteria	FFDM	DBT	Bassett
	Visualization of Pec Muscle to PNL	86%	87%	81%
	Concave Pec	36%	28%	-
	Straight Pec	41%	46%	-
	Convex Pec	23%	26%	-
	Wide Margin at Top of Pec	95%	93%	-
	No Motion	98%	97%	99%
	Posterior Glandular Tissue Included	90%	94%	77%
	Nipple in Profile	89%	92%	88%
	Skin or fat folds	53%	62%	15%
	Upper Location	25%	27%	-
	Lower Location	35%	45%	-
	Visualization of Inframammary Fold	81%	85%	49%
	Requires More Than One View	13%	17%	-

Do standardized positioning techniques work?

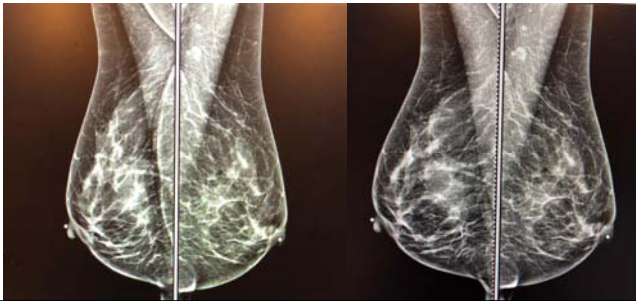
- Used consistently for 50+ years in Sweden
- Was taught by ACR in the 1990s and featured in the ACR 1994 and 1999 Quality Control Manual
- Results published by Bassett et al in 1993 showed an improvement of 68% in image quality after ACR standardized positioning training
- Most recent study on UPDATED standardized positioning techniques published in AJR, Dec. 2017
- Reduce repeats/rejects and TCBs by up to 50%

Technical Call Backs – TCBs

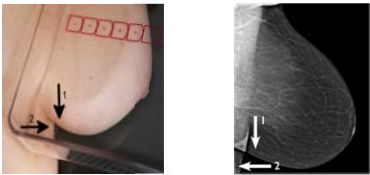
What is a “repeatable offense”?

- Skin/fat folds
- Centering
- Nipple centered and in profile
- Short CCs
- No IMF

Folds

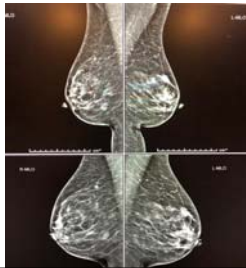


Folds in the IMF



1. Horizontal fold is in the medial breast
2. Vertical fold is in the lateral breast

Centering



Not every mammogram can be ACR perfect!

*“What Every Technologist Would Like Their Radiologist to Know” – Part 1-3**

About Our Patients
About Our Images
The Role of the Technologist

*Published in the SBI Newsletters 2015
www.SBI-online.org



Imaging Protocols - Diagnostic

- Develop standardized protocols for diagnostic workups
- Notation on images
- Disagreement with other radiologists

Standardized Protocols - Diagnostic

- FOLLOW-UP AFTER:**
- Abnormal screening mammogram (call back)
 - Short term/first year post lumpectomy request to assess residual calcifications
- A. Calcifications (without masses or asymmetry)**
1. 2D LM/ML of affected side
 2. Spot Magnification of area of concern CC and LM/ML projections
- B. Masses (with calcifications)**
1. saa
 2. Ultrasound
- C. Masses (without calcifications)**
1. Tomosynthesis CC and MLO, or Tomosynthesis XCCL if only seen on MLO
 2. 2D Spot compression on all views visualized CC and M
 3. 2D LM/ML
 4. Ultrasound

Communication

- Tech to radiologists
- Radiologist to tech
- History sheets
- Appropriate descriptions

Communication

- Patient to technologists/radiologist
- Technologist/radiologist to patient
- Develop scripts to help address difficult situations
- Maintain sincerity
- Be present

Tips for scripts

- Acknowledge concerns/feelings
- Use terminology patients will understand
- Speak in generalizations
- Exclude personal biases
- LISTEN

Example of script addressing screening guidelines:

Patient: *"My doctor told me that I only need mammograms every two years and I get confused because I get so many conflicting stories"*

Technolgist: *"I am so glad that you asked about this as many patients are confused. I can assure you that having a mammogram is the very best way to find breast cancer at it's earliest stages. It is also recommended by the American College of Radiologists who are doctors who are the experts in this area."*

ANXIETY CLOUDS INTAKE

Teamwork

- Celebrate success
- Positive feedback

EFFECTIVE COLLABORATION

Requires mutual respect and appreciation for each other's role in this life saving process



It is OUR responsibility to make sure that ALL women receive the highest level of care achievable.

TO CONTACT ME

Louise@MammographyEducators.com
www.mammographyeducators.com
FB: Mammography Educators
619-663-8269

