


Mammography Tips and Tricks 2.0

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Mammography Tips and Tricks 2.0

- Additional Views During Screening Exams
- Image Evaluation
- Positioning
- Tech Tips
- Clear Communication




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Additional Views During Screening Exams

- Screening Versus Diagnostic Views
 - CC & MLO
 - XCCL
 - AC
 - IMF
 - NIP
 - LM / ML

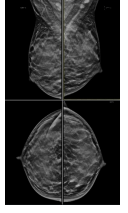



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Additional Views During Screening Exams

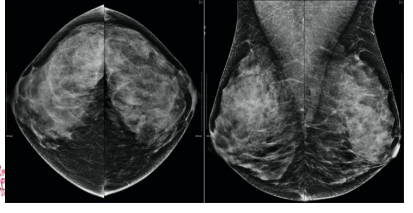

- When should you be adding these views?

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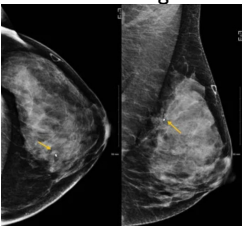

Additional Views During Screening Exams

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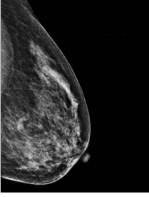

Additional Views During Screening Exams

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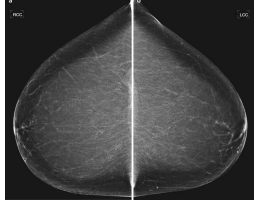

Muscle or NO muscle? NO MUSCLE!

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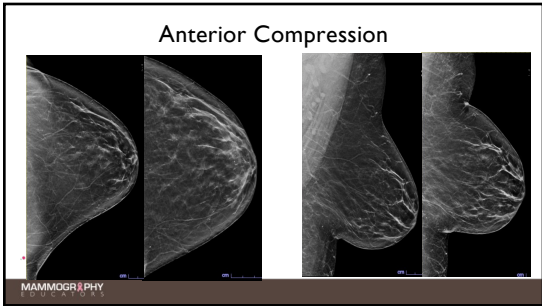
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Additional Views During Screening Exams

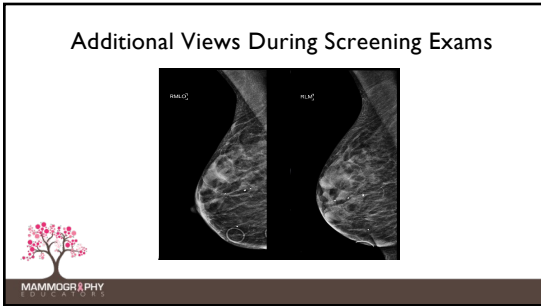



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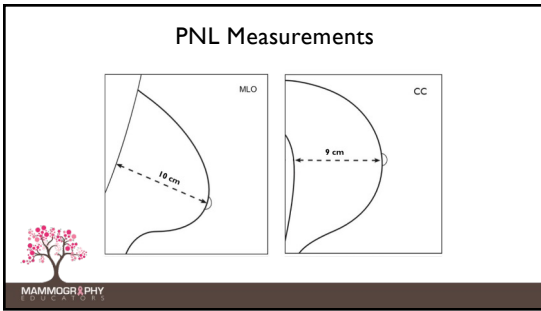
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How to Correctly Measure the PNL

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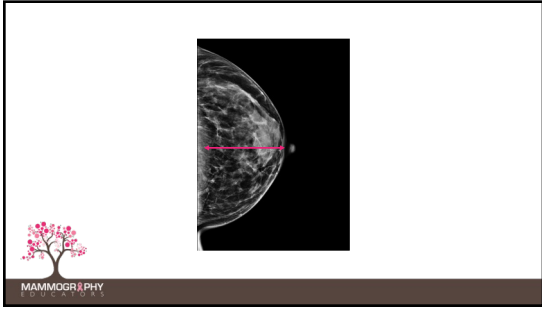
PNL Measurements

Measurement of the CC View:

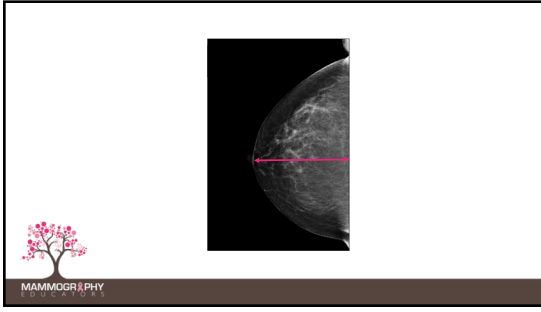
- Measurement is made from the base of the nipple to the anterior margin of the pectoralis muscle (if visualized) OR the edge of the image
- Select the measurement that is the greatest

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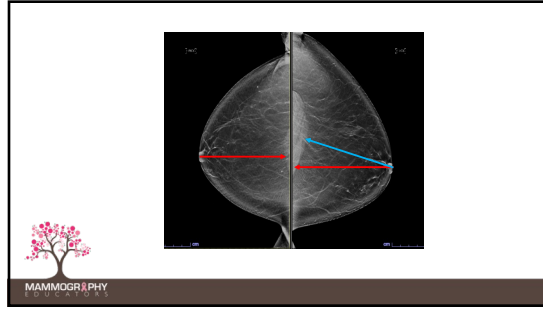
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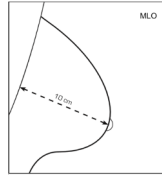


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PNL Measurements

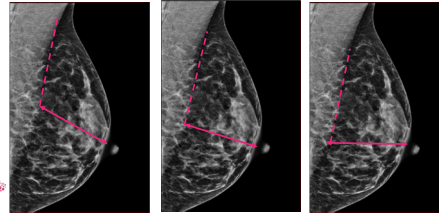
Measurement of the MLO View:

- Measure from the base of the nipple to the anterior margin of the pectoralis muscle where the intersection can be measured at a 90-degree angle

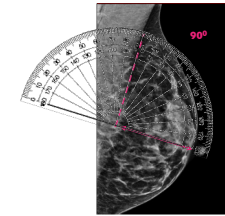


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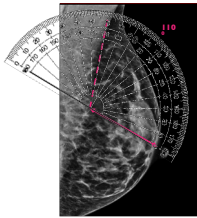
Which is correct?



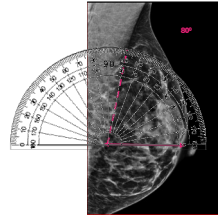
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Image Evaluation - Positioning Tips

Goals:

- Increase PNL on the CC
- IMF



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Image Evaluation

- **Increase PNL on the CC**
- IMF



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Short PNL

- PNL is "short" compared to measurement on the MLO
- *PNL measure on the CC should be within 1.0 cm of the PNL measured on the MLO*



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Possible Adverse Effects

- Possible exclusion of posterior breast tissue.
- Improper elevation will potentially exclude superior breast tissue.
- Decreases the possibility of visualizing pectoralis muscle on the CC when it could otherwise be included.



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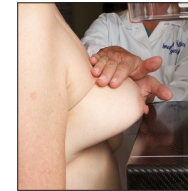
Corrective Action

- Make sure that the IMF is elevated properly and that the PNL is perpendicular to the thorax.
- The breast should be pulled onto the IR with *both hands*.
- Anchor the breast.



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Pull Breast onto the IR with Both Hands



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Anchor the Breast



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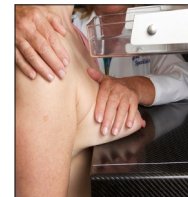
Corrective Action

- The technologist's hand should be on the patient's shoulder (on the side you are imaging), making sure it is relaxed and down.
- Check that the compression paddle is directly adjacent to the rib cage.



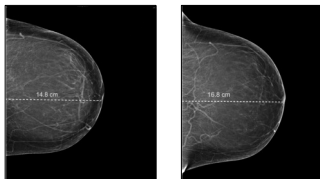
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Relax Patient's Shoulder with Your Hand



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PNL Measurements on the CC



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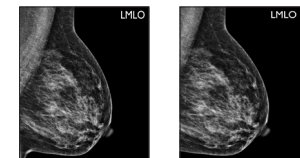
Image Evaluation

- Increase PNL on the CC
- **IMF**



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Inadequate Visualization of the IMF



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Possible Adverse Effect

Without visualization of the IMF, we cannot be certain that all of the posterior, inferior breast tissue (particularly the medial area) has been included.



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Corrective Actions

- Check the patient's position. She must be facing the machine with both feet, hips and shoulders forward.
- Make sure the bottom of the IR is later/behind the IMF.



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Corrective Actions

- Have the patient step sideways (medially), so that the bottom of the IR is directly below the plane of the nipple - approximately halfway between the umbilicus and the lateral edge of the thorax.
- The corner of the IR should NOT be directly above the umbilicus.

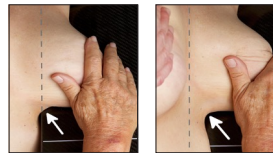


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Proper Placement of the Patient/IR



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Corrective Actions

- Check the degree of angulation – it may be too steep and therefore not supporting the breast medially.
- Ensure the compression paddle is adjacent to the sternum and over the IMF. The medial and inferior borders of the breast should be in the lower inner quadrant (LIQ).



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Corrective Actions

- Elevate the breast in the “up and out” maneuver.
- Have patient flatten her other breast and hold it up.
- Do not let go until compression is complete.



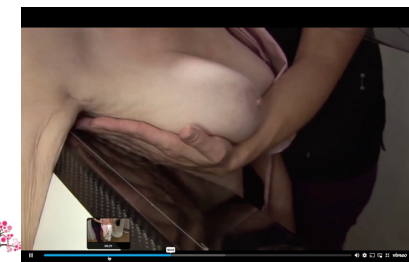
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Corrective Actions

- **Elevate the breast in the “up and out” maneuver.**
- Have patient flatten her other breast and hold it up.
- Do not let go until compression is complete.



44



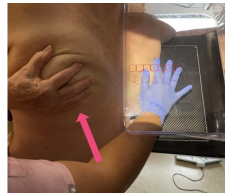
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Corrective Actions

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46



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Corrective Actions

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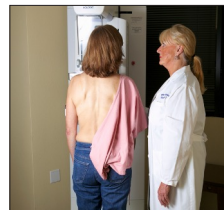
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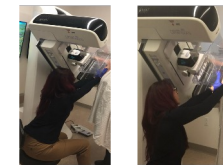
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Stand Up Straight!



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Sitting is NOT Recommended for MLO



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Technologist Sitting for the MLO is NOT Recommended Unless:

- The patient is extremely short or the technologist has previous injuries or pain that prohibits standing.
- Sitting is usually the cause of shoulder pain and injury and will actually exacerbate the problem.



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No “Lunging”!!




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Control the Patient With Your Body





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Hand Position is Important for the CC and MLO



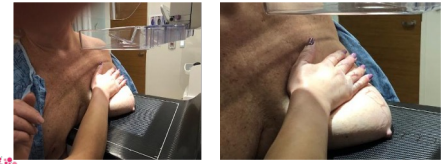


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Thumbs Up!







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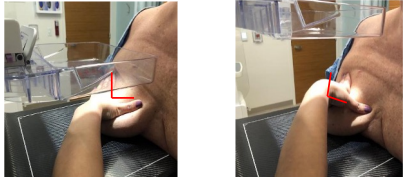

Thumbs Up...Wrist Straight!



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Technologist Tips


- Relaxing the patient
- "Things" in the way



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Relaxing the Patient


- Breathing
- No hanging on
- Have her bend her knee on the side you are imaging



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"Things in the Way"

- Remove it
- Move it





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Gown Trick



When imaging RMLO:

- Untie gown
- Wrap gown around left breast
- Secure under IMF
- Tuck gown into waistband

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Hair Tie Trick

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Hair Tie Trick






66

Hair Tie Trick




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Hair Tie Trick






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Biopsy Clips

Do your patients ask questions about the "clip" used during biopsy?


Show them an actual clip, laminated on cardstock with your facility's logo. This offers a professional way to show the patient exactly what will be inserted. This can help ease their mind when they see how tiny it is!

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Communication Tips - Patients

FEAR and ANXIETY cause most people to do the following in an effort to gain some 'control' over the situation.


- Be crabby/complain
- Be angry
- Do crazy things
- Say crazy things



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"I hate mammograms."

- "Thank you for coming in anyway."



72

“Are you the nurse?”

- “No, I’m an x-ray tech. It’s very different training.”



73

“What a disgusting job.”

- “I’m proud to work in Women’s Health.”



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Tips for Scripts

- Don’t get defensive
- Remember, it’s not personal
- Anxiety creates some “interesting” actions/reactions
- Do NOT make fun of your patients or their behavior
- How would you act in this same situation?



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Act Don’t React

- Offer the patients correct information and reassurance.
- Get her in...and out quickly.
- Tell her what you are going to do *before* you do it.
- Invite her into a partnership.



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Communication Tips - Colleagues

- Complaining about images
- Complaining about patients
- Complaining about co-workers



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Some of the things patients do
can really be annoying!



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Letting Off Steam

- Appropriate
- Inappropriate



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Letting Off Steam

- Appropriate:**
- Take a walk
 - Exercise
 - Listen to music
 - Treat yourself to some retail therapy
 - Treat yourself to some self care



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Letting Off Steam

Inappropriate:

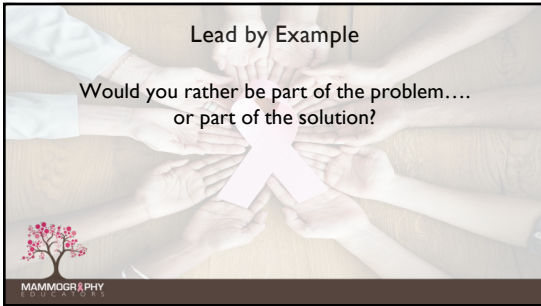

- Complaining
- Using social media as an outlet
- Over-doing
- Negative talk
- Self neglect or punitive behavior



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Lead by Example


Would you rather be part of the problem....
or part of the solution?

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References

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- Miller, Louise C. (2015) *Mammography Positioning Guidebook*. San Diego, CA.
- Miller, Louise C., Lehmann, T.L.(2020) *Image Quality & Positioning Problem Solving for Breast Imagers: Meeting EQUIP Standards*. San Diego, CA\
- Video Credit: Volpara Health Solutions




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For questions or more information:

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