

# The Mammography Technologist's Guide to the Diagnostic Workup

**Sarah Jacobs, B.S., R.T.(R)(M)(CT)**

With contributions from:  
Louise Miller, R.T.(R)(M)(ARRT), CRT(M), FSBI, FNCBC



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## Communication Between the Technologist, Patient and Radiologist



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### “Hi Dr. Jones”



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## Consistency is Key

It is common for mammographers to vary in the way they “present” a case to their interpreting physician:

- A consistent and concise presentation can assist the radiologist in making a more accurate diagnosis
- This is often overlooked in training and should be an integral part of a technologist's initial training



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## “Presenting” is Learned on the Job

- A mammographer’s education is often focused on mammographic views, protocols, policies, and procedures
- Eventually, they become familiar with each radiologist’s preference
- Each radiologist’s protocols may vary



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## “Presenting” Shouldn’t be Stressful



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## “Presenting” Shouldn’t be Stressful

- Diagnostic mammography tends to offer a significant amount of anxiety for patients
- Technologists should be prepared to provide details that make presenting the case a more efficient and stress-free experience for everyone



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## Common Errors in Presenting

- TMI - too much information
- Irrelevant information
- Incorrect descriptors
- Incomplete information
- Incorrect documentation



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## Common Errors in Presenting

- **TMI - too much information**
- Irrelevant information
- Incorrect descriptors
- Incomplete information
- Incorrect documentation



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## TMI

- Personal information not related to the study
- Making judgements



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## Common Errors in Presenting

- TMI - too much information
- **Irrelevant information**
- Incorrect descriptors
- Incomplete information
- Incorrect documentation



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## Irrelevant Information



Only present relevant information



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## Common Errors in Presenting

- TMI - too much information
- Irrelevant information
- **Incorrect descriptors**
- Incomplete information
- Incorrect documentation



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## Incorrect Descriptors

- Using the incorrect clock position when identifying location
- Mastitis versus mastalgia
- Focal versus generalized
- Acute versus chronic



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## Use *Appropriate* Descriptors

**Mastitis:** Inflammation of breast tissue



**Mastalgia:** Breast pain

**Focal:** In one spot of the breast



**Generalized:** all over, or multiple areas

**Acute:** Sudden, or new onset



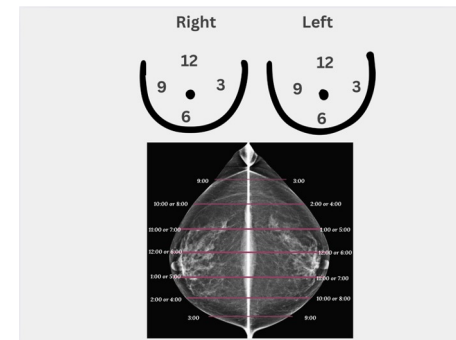
**Chronic:** Continuous or most of the time



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## Location Using O'clock Position



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What does *Asymmetry* actually mean?

-  **Asymmetry:** Visible on only one projection
-  **Focal Asymmetry:** Visible on two projections, involves less than one quadrant, lacks convex-outwards borders or is interspersed with fat
-  **Developing Asymmetry:** Focal asymmetry that is new, larger, or more conspicuous than on prior examinations
-  **Global Asymmetry:** Visible on two projections, involves more than one quadrant



## Common Errors in Presenting

- TMI - too much information
- Irrelevant information
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- **Incomplete information**
- Incorrect documentation



## Incomplete Information



## Common Errors in Presenting

- TMI - too much information
- Irrelevant information
- Incorrect descriptors
- Incomplete information
- **Incorrect documentation**



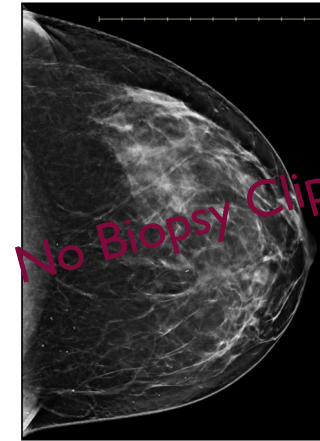
## Incorrect Documentation

- Documenting information after the exam is complete
- Laterality is incorrect
- Lumpectomy versus excisional biopsy



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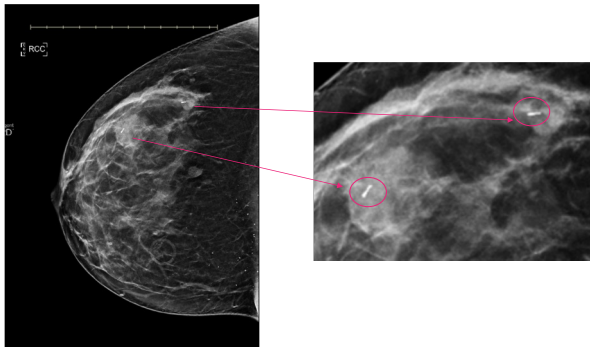
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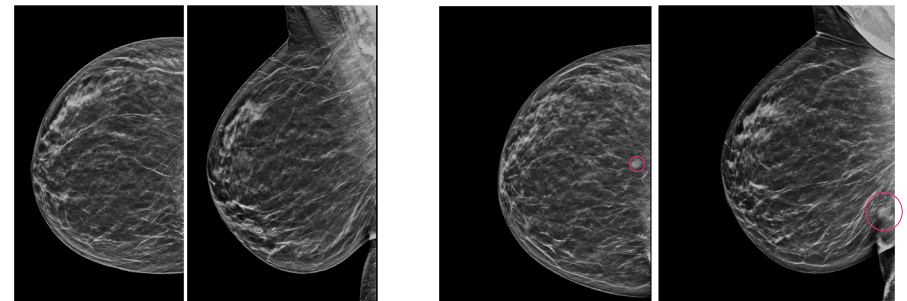
## Incorrect Documentation



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## Importance of Documentation



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## Documentation

DOB: Jan 1, 1955 Age: 69  
 Physician: ZOOK, ROBERT  
 Exam Demographic History Diagram Comments Risk Follow-up Documents  
 + Scar Reduction Scar Mark Lump Pain Mastectomy Biopsy Clear

Right Left

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## Importance of Documentation

Compared to: 07/12/2022, 04/01/2021, 11/02/2018, and 04/03/2017

Technique: This study was evaluated with the assistance of Computer-Aided Detection. Breast Tomosynthesis was used in interpretation.

Findings: The breasts have scattered areas of fibroglandular density.

There is a possible mass in the right breast at the 6 o'clock position, posterior depth.

The remainder of the breast tissue is unremarkable. There is no suspicious finding of the left breast.

**IMPRESSION: BI-RADS CATEGORY: 0 - Incomplete Need Additional Imaging**

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## Patient Returns for Imaging

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## Documentation

WELLS, DANA DOB: Jan 1, 1955 Age: 69 ONLINE TECH USER  
 Patient ID: 250538 Referring Physician: AKERS, MICHAEL J.  
 Accession: 627940 Open Clipboard Save

Exam Demographic History Diagram **Comments** Risk Follow-up Documents Refresh Comments

Comment ✓

Tech Comments ✓

Start Exam 00:00:00 Mark As Completed

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## How Mammographers Present is Critical to Patient Care

- A thorough understanding of questions:
  - What to ask
  - How to ask
  - When to ask
- A patient's breast health history is crucial to the presentation
- Use a checklist for organization



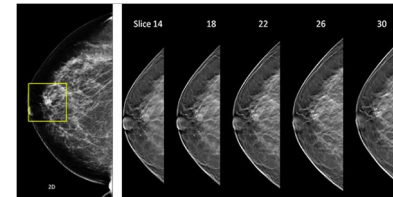
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## Step I: Determine Reason for Exam

The technologist should determine the reason for the exam:

- Additional views / short-term follow-up
- New concern



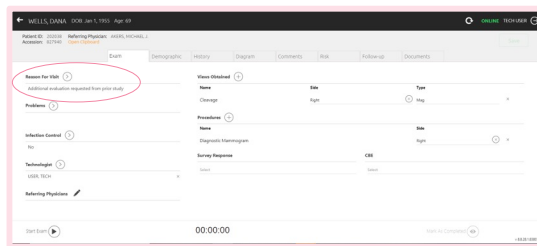
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## Step I: Determine Reason for Exam

The technologist should determine the reason for the exam:

- **Additional views / short term follow-up**
- New concern



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## Additional Views

If the patient is called back for additional views after a screening mammogram, the technologist should re-confirm the patient's history.



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## Additional Views

1. "Do you have a personal history of breast cancer?"
2. "Have you noticed any changes in your breast: Lumps, skin changes, pain, etc.?"



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## Additional Views

3. "Have you had any previous breast biopsies?" - If so, include the previous pathology report
4. "Are you taking any hormonal medications?"
5. Ask any other diagnostic protocol related questions per facility guidelines



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← MAGVIEW, MAGGIE DOB: Jan 1, 1955 Age: 69 ONLINE TECH USER

Patient ID: 202860 Referring Physician: SMITH, JOHN C.  
Accession: 01989 SPEAKS SPANISH - NEEDS ASSISTANCE Save

Exam Demographic History Diagram Comments Risk Follow-up Documents

Refresh Documents

Date	Type	Description
07/26/2017	Document	Pathology report
06/29/2017	Document	Diagnostic Mammogram report
06/09/2017	Document	History Tablet Summary
05/23/2017	Document	History Tablet Summary
05/23/2017	Document	History Tablet Summary
05/03/2017	Document	History Tablet Summary
05/03/2017	Document	History Tablet Summary
05/03/2017	Document	History Tablet Summary

Begin: 15:31:12 End: 15:31:15 Mark As Completed

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## Additional Views

The technologist should then use the information from the images, screening report, and/or the patient's chart to determine the following:

- Breast of interest
- Location (include o'clock position)
- Requested views



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## Tips for Call Backs

Ensure the staff member calling the patient is well-equipped with:

- Scripting information
- Scheduling information
- Weekends/Fridays
- Avoid having referring physician's office call patient



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## Step 1: Determine Reason for Exam

The technologist should determine the reason for the exam:

- Additional views / short term follow-up
- **New concern**



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## New Concern

If the patient is presenting with a new concern:

1. Is there is a palpable lump/mass?
  - Where is the location?
  - Is the palpable area generalized or focal?
  - Palpable all the time? Mark the area.



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## New Concern

2. Is there mastalgia (breast pain)?

- Is the pain consistent or intermittent?
- Is the pain focal or generalized?
- Describe the pain.\*



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## \*Notes on Breast Pain

Breast pain is a common reason for a diagnostic work-up:

- According to the National Library of Medicine, 50% of women studied experienced some sort of breast pain
- Another study from the AJR found that up to 69% of women report premenstrual pain, and 36% of those women consulted with their provider about the pain



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## New Concern

Ask the following questions:

- Does the patient have skin or nipple changes?
- Is there a history of breast trauma?
- Does the patient have a personal history of breast cancer? (*Include treatment and pathological findings*)



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## New Concern: Update Risk Assessment

Patient ID: 322260 DOB: Jan 1, 1955 Age: 69  
Accession: 81989 Referring Physician: SMITH, JOHN C.  
SPEAKS SPANISH - NEEDS ASSISTANCE

Exam Demographic History Diagram Comments Risk Follow-up Documents

### Risk Assessment

Tyren-Guzik Risk:

Personal life time probability:	19.9 %
BRCA1 probability:	49.5 %
BRCA2 probability:	2.8 %

BRCAPRO Risk:

Carrier probability:	69.9 %
BRCA1 probability:	49.9 %
BRCA2 probability:	29.9 %
BRCA1 and BRCA2 probability:	0.1 %

Breast cancer Ovarian cancer

within 10 years:	11.0 %	15.9 %
within 20 years:	17.4 %	24.3 %

### NCCN Guidelines

Genetic Counseling

Send to MyList

Patient Qualifies

Date Offered: [ ] [ ]

Date Responded: [ ] [ ]

Patient agreed to proceed with testing

Patient not interested

Patient interested in learning more

Comments:

Test Results: Incomplete

Not tested: BRCA1, BRCA2

Begin: 15:31:12 End: 15:31:15

Mark As Completed

v.14.26.1.030

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## New Concern

Ask the following questions:

- Family history: breast, ovarian, or colon cancer (*include age of family member at diagnosis*)
- Has the patient had previous genetic testing?
- Has the patient used/is currently using hormonal medications?
- Has the patient had any previous breast biopsies? (*Needle or surgical; include pathology*)



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## Review of Step 1: Determine Reason for Exam

The technologist should determine the reason for the exam:

- Additional views / short term follow-up
- New concern



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## Step 2: Presenting the Case



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## Step 2: Presenting the Case

DIAGNOSTIC CASE PRESENTATION	
PATIENT NAME:	AGE:
REASON FOR EXAM / CALL BACK:	DATE OF LAST SCREENING:
PATIENT HISTORY:	
PERS / FAMILY HX:	CURRENT SYMPTOMS:
PAIN / LOCATION:	GENETIC TESTING:
OTHER NOTES:	



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Confidently present the information to the radiologist.



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## Step 2: Presenting the Case

- Give information about the patient's history, symptoms, and current clinical situation
- Promote efficient and accurate communication that leads to high-quality patient care and safety



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## Tips for Effective Presenting

- Concise and informative: last no more than 10 seconds
- Do not present “from memory” until you are comfortable and competent in this process
- Do not assume that the radiologist already knows everything they need to know about the case you’re bringing to them



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## Tips for Effective Presenting

- Allow the radiologist to assess and ask questions; if the radiologist has a question that you are unable to answer, volunteer to find the answer
- Offer information about the patient’s demeanor or mindset
- Think critically, and offer solutions



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### DETERMINING REASON FOR EXAM

## CHECKLIST

#### A ADDITIONAL VIEWS:

- ✓ Re-confirm the patient’s history:
  - “Do you have a personal or family history of breast cancer?”
  - “Have you noticed any changes in your breast (lumps, skin changes or pain)?”
  - “Have you had any previous breast biopsies?” (Be sure to include pathology for your radiologist.)
  - “Are you taking any hormonal medications?”
- ✓ Use the information from the images, screening report and/or the patient’s chart, to determine the following:
  - The breast of interest
  - Which location (o’clock position and distance from nipple)
  - Which views are requested and are to be acquired during the diagnostic exam

#### B NEW CONCERN:

- ✓ If there is a palpable lump/mass:
  - Where is the location?
  - Is the palpable area generalized or focal area?
  - Is it palpable all of the time?
- ✓ If there is mastalgia (breast pain):
  - Is the pain constant or intermittent?
  - Is the pain focal or generalized?
  - Describe the pain.
- ✓ Additional questions:
  - Does the patient have skin or nipple changes?
  - Is there a history of breast trauma?
  - Does the patient have a personal history of breast cancer? (Include treatment and pathological findings.)
  - Is there a family history of breast, ovarian or colon cancer? (Include age of family member at diagnosis.)
  - Has the patient had previous genetic testing?
  - Has the patient used/is currently using hormonal medications?
  - Has the patient had any previous breast biopsies? (Needle or surgical; include pathology.)



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## Effective Communication


Extends beyond diagnostic case presentations:

- Includes phone calls letting the radiologist know you are ready for them to come in during a biopsy or other breast procedure
- Ask for feedback after the case has been presented; use suggestions for improvement as a learning experience




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*“Having a consistent approach to your presentation will convey the key information, increase the efficiency and accuracy of the work-up and lead to better patient care”*

Nathan Groebner, MD Allina Health



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# Thank you

**Sarah Jacobs, B.S., R.T.(R)(M)(CT)**  
sarahmeconsultant@gmail.com




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