



Aiming for Quality: Tips for Achieving Optimal Imaging in a Suboptimal World, Part 1

By Dawn Derenburger, RT(R)(M)

Technologists and radiologists aspire to produce images of the highest possible quality every day for every patient. Since the implementation of the Enhancing Quality Using the Inspection Program initiative of the Mammography Quality Standards Act, our awareness of the quality of the mammograms we produce has heightened. We are working collaboratively to ensure that standard imaging criteria established by accrediting bodies are being met and monitored on a regular basis. Technologists are given feedback on whether the quality of their images measures up to standards. Radiologists may identify improvements needed to optimize imaging. Meeting all of the required criteria on every image and for every patient may be challenging because of many intersecting variables such as body habitus, health conditions, sensitivity, language barriers, type of machine, and the patient's level of anxiety. Technologists must use their creative positioning skills and knowledge of patient and breast anatomy to obtain the best images possible for each individual. Technologists encounter many types of challenges daily. Some of these challenges, along with tips and suggestions for optimizing images, are discussed in this article.

Imaging Patients With Chest Wall Devices

Pacemakers, implanted venous access ports, and shunts are generally easy to work around when obtaining standard craniocaudal views. However, obtaining mediolateral oblique (MLO) views may be more challenging. Technologists can generally position these medical appliances underneath the compression paddle, being mindful to use enough compression to stabilize the breast (similar to performing implant views). Depending on facility protocol, a conventional 2-dimensional mammogram or digital breast tomosynthesis image can be acquired with the device in place. An additional MLO view showing anterior tissue without the device in place can be acquired with higher levels of compression. Alternatively, a 90° lateral view may be obtained to visualize tissue anterior to the device. The images should always be appropriately labeled. The need for additional images should be communicated and documented in the medical record or the mammography reporting module, and the less optimal images should be included.

Imaging Patients Who Have Difficulty Standing

Mammography of patients who have difficulty standing—for example, those who are kyphotic or use a wheelchair—may be difficult for both the technologist and the patient. Examination of a patient with kyphosis can be performed with the patient sitting on a stable stool without wheels or on a chair without armrests. This positioning allows the patient to attain a more upright position and keep her face and chin out of the imaging field. Patients in wheelchairs can be transferred to a stool or chair or may remain seated in the wheelchair with the armrests removed.



Dawn Derenburger,
RT(R)(M)

Imaging Patients Who Have Difficulty Maintaining Balance

Whether a patient is standing or seated, selecting manual compression release instead of automatic compression release allows the technologist to take a position next to the patient while having complete control over the release of the paddle. Mammography requires stability and balance. Let the patient rest between images and proceed when the patient is ready. This can be challenging with facility scheduling and time limitations. However, allowing patients to pause between views may prevent repeated images, technical callbacks, and (more importantly) injuries to patients from unexpected falls or the technologists who catch them. If possible, a second technologist should always help position patients who are unable to stand unassisted or are extremely challenging to position.

In the next issue of this newsletter, other challenging situations will be presented. Together we must use our experience, positioning skills, knowledge, and understanding of patient limitations when encountering challenging situations. We must also use all available resources, such as educational materials, mentors, colleagues, vendors, positioning specialists, and continuing education courses, to obtain the best images possible in these patients.