

Digital Mammography: A Review of the Technology and Applications

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All diagnostic imaging procedures have been converted from film to digital applications; one of the last to undergo this transformation is mammography. The requirements for very high spatial resolution have added to the complexity in this area, although the great advantages of the contrast resolution of all digital systems make them particularly useful in mammography.

There are a number of competing technologies and the equipments costs are considerable; all technologists should make an effort to keep abreast advancements in the area of medical diagnostic imaging. This lecture provides technologists the opportunity to review fundamental concepts in digital mammography including direct and indirect digital image capture; direct and indirect x-ray capture with concentration on charged coupled device (CCD) technology, amorphous silicon detectors, photon counting and amorphous selenium detectors. Other topics presented include methods of quantifying detector performance and areas of developing a modality including imaging trends and future directions.

This lecture is presented in high quality video with diagrams, charts and graphs. This learning activity includes a series of questions providing learners the opportunity to assess their knowledge prior to completing a short, online quiz. Upon finishing the quiz, learners will receive an OAMRT Certificate of Completion.

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