Medical Xpress

Interpretation time for screening digital mammograms: Is it efficient?

January 6 2009

Digital mammograms take longer to interpret than film-screen mammograms, according to a study performed at The University of Texas M.D. Anderson Cancer Center in Houston, Texas.

The study included four radiologists who interpreted 268 digital screening mammograms and 189 film-screening mammograms. "The average interpretation time for all of our readers was 240 seconds (4 minutes) for digital screening mammograms and 127 seconds (2 minutes, 7 seconds) for film-screen screening mammograms," said Tamara Miner Haygood, MD, lead author of the study. "The digital screening mammograms took nearly twice as long to interpret as the film-screen screening mammograms," said Dr. Haygood.

The study identified factors that might have contributed to the difference in time. "Those factors were the identity of the interpreting radiologist, whether there were older studies available for comparison, whether the radiologist looked for and hung up additional films, how many images were obtained and whether the study was normal or not. In each of these situations, the digital images took longer to interpret than the film-screen images," said Dr. Haygood.

"As a result of this study, radiologists should be able to make a more informed choice about whether digital of film-screen mammograms are right for their practice, and if they choose digital screening mammograms, they will have a better idea of how much time to allow for reading them," said Dr. Haygood.

"Digital screening mammograms offer an improvement in diagnostic accuracy compared with film-screen screening mammograms and they have other advantages such as improved ease of storage and retrieval," said Dr. Haygood. It will be very beneficial if manufacturers of digital equipment, in cooperation with radiologists, can improve equipment and reading techniques to bring interpretation speed for digital mammograms closer to interpretation speed for film-screen mammograms," she added.

This study appears in the January issue of the *American Journal of Roentgenology*.

Source: American Roentgen Ray Society