

Hospital gives first tomosynthesis mammograms in region this week

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There is still a one in eight lifetime risk that a woman will develop breast cancer, and the best tool against the disease remains early detection. Now, Women & infants Hospital of Rhode Island has taken the breast cancer battle to the next level with the installation of the most advanced imaging technology available, called digital breast tomosynthesis.

Women & Infants is the first and only facility in southeastern New England to offer this new technology, which was approved in February 2011 by the federal Food and Drug Administration (FDA). The first woman to receive a digital tomosynthesis test in the region was processed at the hospital yesterday.

Digital breast tomosynthesis captures three-dimensional images of the breast versus the two-dimensional ones available through standard full-field [digital mammography](#). This gives a more comprehensive and clear image for the radiologist to interpret, increases the early detection rate for [breast cancer](#) by up to 15%, and decreases the number of false positive findings by about 25%.

"Tomosynthesis gives doctors a clearer view of a woman's breast tissue and significantly helps us screen for and find potential breast cancers," explained Patricia Spencer, MD, chief of the Department of Diagnostic Imaging at [Women](#) & Infants.

The new technology is used at the same time the technologist conducts a routine digital mammography, which is still considered the "gold

standard" in breast imaging. However, the two-dimensional digital mammography takes an image of the entire breast in one exposure, which means features of the breast can be hidden by overlapping tissue.

Tomosynthesis takes images from multiple angles and uses computer processing to compile them into a three-dimensional picture a radiologist can examine and manipulate. The added detail helps the radiologist pinpoint the size, location and shape of any breast abnormality, and can help distinguish real tumors from harmless abnormalities. Because digital breast tomosynthesis removes the layers of breast structure and tissue, it is particularly beneficial for women with dense breasts.

"The result is fewer calls to patients for further testing and less overall anxiety for women," Dr. Spencer said. Even though in 2010, the U.S. Preventive Services Task Force recommended screening every two years for women ages 50 to 74, the American Cancer Society still recommends annual screening for all women age 40 and older. Women & Infants adheres to the American Cancer Society recommendations, believing the best chance for survival and cure is [early detection](#). This is the hospital's motivation for bringing the advanced technology of digital [breast tomosynthesis](#) to the women of Rhode Island and southeastern New England.

Provided by Women & Infants Hospital

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