

# Effect of Digital Breast Tomosynthesis Screening on Diagnostic Work-up Patterns

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For the complete abstract, please visit: [http://rsna2012.rsna.org/search/event\\_display.cfm?em\\_id=12026179](http://rsna2012.rsna.org/search/event_display.cfm?em_id=12026179)

## OBJECTIVE

To compare the diagnostic work-up, including the number of additional mammographic views and the likelihood of ultrasound being performed as the only additional test, in patients recalled from digital breast tomosynthesis (DBT) with 2D screening mammography vs. 2D mammography alone.

## MATERIALS AND METHODS

A retrospective review of 482 consecutive screening recalls performed between 9/1/2011 and 12/31/2011 was done. 2D mammography alone was performed on 405 of these patients and 66 of them were lost to follow-up. 2D mammography with DBT was performed on 77 of these patients and 4 of them were lost to follow-up. Breast density and type of screening abnormality were recorded for all patients.

## FINDINGS

- Fewer additional views were performed (average of 2.0 views) on patients screened with DBT with 2D mammography compared to 2.9 views on patients screened with 2D mammography alone.
- 22% of DBT with 2D screened patients had a diagnostic work-up consisting of ultrasound only compared to only 2% of 2D screened patients. This difference was greatest among patients:
  - With heterogeneously dense breasts (26% vs. 4% in DBT with 2D vs. 2D only)
  - Recalled for further evaluation of a mass (38% vs. 11% in DBT with 2D vs. 2D only).

## CONCLUSION

The study concludes that the addition of DBT to conventional 2D screening mammography may reduce the number of additional mammographic views required for a diagnostic assessment. A significantly higher number of patients, especially those with heterogeneously dense breasts and those recalled for a mass, may be able to be evaluated only with ultrasound.

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