

Mammographic Breast Density Interpretation Varies Widely

The percentage of mammograms believed to show dense breasts was 36.9% overall, but ranged from 6.3% to 84.5%, a new study found. This difference persisted after adjusting for patient factors such as age, race, and body mass index. These findings were [published online](#) July 18 in the *Annals of Internal Medicine*. The analysis by Brian L. Sprague, PhD, from the Office of Health Promotion Research, University of Vermont in Burlington, and colleagues consisted of 216,783 screening mammograms from 145,123 women, which were interpreted by 83 radiologists (16 from the University of Pennsylvania, 39 from the University of Vermont, and 28 from Dartmouth/Brigham and Women's Hospital). The three sites were part of the Population-Based Research Optimizing Screening Through Personalized Regimens (PROSPR) consortium.

Also, when different radiologists interpreted mammograms from women who had several mammograms in a short period, more than one (17.2%) in six mammograms were reclassified from nondense to dense categories. "Twenty-five percent of radiologists rated fewer than 28.9% of their patients' mammograms as showing dense breasts, whereas the highest 25% of radiologists rated at least 50.9% of their patients' mammograms as showing dense breasts," the authors note. They add that this variation has important implications for the national debate about mandatory notification laws and about clinical management of women told they have dense breasts. They also note that variation in machines and software can add to the confusion.

Half of States Have Notification Laws

About half of US states mandate disclosing breast density information directly to women. National legislation is currently being considered, and the US Food and Drug Administration is also considering amending the Mammography Quality Standards Act to require reporting of density information to patients.

"[P]hysicians should consider density information as only one subjective factor among many relevant risk factors that should be incorporated into decision making about screening. Policymakers should be aware that density assessment as currently practiced is subjective and highly variable across radiologists," the authors write. Priscilla Slanetz, MD, MPH, director of breast imaging research at Beth Israel Deaconess Medical Center in Boston, Massachusetts, agreed. "Breast density is a risk factor for breast cancer, but it's really a minor risk factor. It does make it harder for a mammogram to see things, but in terms of a true risk factor we should not be using that as the sole determinant as to whether someone should be getting supplemental screening," Dr Slanetz told *Medscape Medical News*.

She said that if someone has dense breasts, it starts a conversation with the provider as to what other risk factors they may have. So she does not see notification laws in general as a bad thing. However, she does take issue with the states that demand that an ultrasound follow as the second modality. That simply may not be the best screening tool for all women, she notes. For example, "If a woman has dense tissue and is found to be of elevated risk above a 20% to 25% lifetime risk, then those women should be getting breast [magnetic resonance imaging] as a supplemental screening," she said.

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