Breast Density, Breast Cancer Risk, and California Breast Density Notification Law SB 1538: Scenarios for Clinicians

California Breast Density Information Group (CBDIG)

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- A working group of breast radiologists and breast cancer risk specialists, representing academic and community-based practices across California
- Formed to assist patients, referring doctors, and radiologists in responding to new legislation in California (SB-1538) that will mandate radiologists report breast density to patients

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Stanford University School of Medicine

Debra M. Ikeda, MD
Jafi A. Lipson, MD
Bruce L.Daniel, MD
Allison Kurian, MD MSc

University of California, Davis

Karen K. Lindfors, MD
Jonathan Hargreaves, MD
Donna D. Walgenbach, MS CGC
Elyse Love, MS CGC

<u>University of California, Irvine</u> Stephen Feig, MD

<u>University of California, San Diego</u> Haydee Ojeda-Fournier, MD University of California, San Francisco

Bonnie N. Joe, MD PhD
Edward A Sickles, MD
Elissa R. Price, MD
Lauren Ryan, MS LCGC

University of California, Los Angeles

Lawrence Bassett, MD

Alta-Bates Summit Medical Center

R. James Brenner, MD JD

California Pacific Medical Center

Jessica W. T. Leung, MD

My patient received the letter stating she has dense breasts.

Now she is wondering whether she should continue to get mammograms at all.



She *should* continue to get screening mammograms. The breast density law does not reflect any change in the current mammography screening recommendations by professional medical societies.

Mammograms have been shown to be effective in lowering breast cancer mortality for all breast densities.

My patient received the new breast density letter. She is concerned because she now thinks she is at high risk for breast cancer.



Reassure the patient that breast density alone has only a small impact on breast cancer risk.



She wants to know specifically how it changes her risk.



Look up her mammogram report (different from the patient letter).

- 1. If the report states her density is *heterogeneously dense*, this is associated with minimal risk above average (RR=1.2 compared to average breast density).
- 2. If her density is *extremely dense*, this factor doubles her risk of breast cancer compared to average density, similar to the risk associated with a family history of unilateral, post-menopausal breast cancer in a mother, sister, or daughter. For example, having *extremely dense* tissue on its own raises the 10-year risk of breast cancer in the average 50 year old woman from 1 in 42 to 1 in 21.

My patient received the new breast density letter. She wants to be screened with another modality instead of mammograms.



Explain that at this point in time, there is **no** other method that is recommended to replace the mammogram. There are certain manifestations of cancer (for example, calcifications) that are only seen on mammography. The other "screening options" referred to in the letter are in addition to, and not instead of, a routine screening mammogram.

My patient received the new breast density letter. She wants to get additional tests to be screened for breast cancer.



Does she have a first degree relative (mother, sister, daughter) who had premenopausal breast or ovarian cancer, or a male relative with breast cancer?

or

Does she have a history of atypia (ADH, ALH) or LCIS on a previous breast biopsy?



She would likely benefit from a breast cancer risk assessment.

This could be performed by a physician with experience in breast cancer risk model selection and interpretation, or by a cancer risk assessment program.



Educate the patient about the risks and benefits of screening MRI and ultrasound (higher cancer detection, but also higher false positive biopsy rates and short term follow-up recommendations). Many health centers have chosen not to offer screening breast ultrasound, in part because ultrasound depicts many fewer mammographically invisible cancers than does screening MRI. Tomosynthesis is an additional screening test with current results suggesting some increase in cancer detection and decreased false positives.

Explain that at most medical centers, additional screening tests are an out-of-pocket cost for the patient, unless they have been assessed to have high risk. Assist the patient in making the best personal choice to meet her needs based on these factors, using a shared decision making process.

My patient has "heterogeneously dense" or "extremely dense" breasts and she also has other risk factors. She has completed a risk assessment showing her overall risk to be high (e.g. calculated >20% lifetime risk or >5% 10-year risk), or has a BRCA mutation or history of mantle radiation.



Recommend annual breast MRI and annual mammogram for screening.

Screening breast MRI is typically covered by insurance for high-risk women.

If a woman is being screened annually with MRI and mammogram, no additional screening tests (such as ultrasound) are needed.

My patient has "heterogeneously dense" or "extremely dense" breasts and she also has other risk factors. She has completed a risk assessment showing her overall risk to be high (e.g. calculated >20% lifetime risk or >5% 10-year risk).



I recommended an annual MRI, but the patient has either claustrophobia, pacemaker, contrast allergy, limited insurance coverage plan, or other reasons why she does not want to have an MRI.



Recommend screening ultrasound as the second-best supplementary screening test for high risk women. Studies have shown some utility for ultrasound in high risk women *if screening MRI is not performed*.

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