

Streamlining Cancer Screening: Executive Insights on Breast Density Reporting in Aotearoa New Zealand

Key conclusions

Density is both an independent risk factor and a source of diagnostic masking; its systematic capture within BSA is warranted¹.

Women at elevated risk may benefit from supplemental imaging, yet optimal modality, frequency and age thresholds are still being defined¹.

Robust New Zealand-specific prevalence studies, cost-effectiveness modelling, and pilot implementation research are prerequisites to policy change¹.



Understanding the 2025 Technical Review of Breast Density reporting in Aotearoa

Around the world, breast density is gaining long-overdue attention as a critical factor in breast cancer risk and detection. Dense breast tissue not only increases a woman's likelihood of developing breast cancer – it also makes the cancer harder to see on a mammogram.

In May 2025, Health New Zealand (Te Whatu Ora) released a **Technical Review of Breast Density Reporting in Cancer Screening**. This document represents the first formal step toward breast density notification in BreastScreen Aotearoa (BSA) and outlines the risks, benefits, ethical complexities, and system-wide implications of integrating breast density reporting in the New Zealand context.

This technical review follows on from the 2023 RANZCR recommendation for breast density reporting and reflects a growing international consensus that breast density is not only a significant independent risk factor for breast cancer but also impairs mammographic sensitivity – potentially leading to missed or delayed diagnoses.

Reference list

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Prevalence of breast tissue density



1 in 10 women
have extreme
density



4 in 10 women have
heterogeneous density



4 in 10 women
have scattered
fibroglandular tissue



1 in 10 women
have fatty
breast tissue

Current state in Aotearoa New Zealand

BreastScreen Aotearoa (BSA) offers biennial mammography to women aged 45 – 69 but does not presently measure or report breast density; the true national distribution therefore remains unknown¹. Access to density assessment is largely restricted to private providers, adding cost barriers. Māori women already experience lower screening coverage and may carry a higher burden of dense tissue, compounding inequities in detection and outcomes¹.

In December 2023 the Royal Australian and New Zealand College of Radiologists (RANZCR) publicly called for nationwide breast density reporting⁷. With mandatory breast density notification now law in the United States, recommended by the European Society of Breast Imaging, and implemented in several Australian jurisdictions, New Zealand is considering the same.

2009 – U.S.: World-first breast density notification law

Connecticut becomes the first jurisdiction globally to mandate patient notification of dense breast tissue following mammography.

2013 – U.S.: California & Texas pass density notification laws

Other U.S. states start to pass their own density notification laws, pressuring federal regulators and setting global precedent.

2018 – Canada: British Columbia introduces notification

British Columbia leads Canada in offering voluntary breast density notification, a model later adopted by Alberta and Nova Scotia.

2018 – Europe: EUSOBI recommends routine disclosure

The European Society of Breast Imaging (EUSOBI) recommends all women be informed of breast density and offered advice on supplemental screening when appropriate.

2019 – U.S.: FDA federal mandate announced

The FDA introduces a federal requirement for breast density notification, with compliance to begin in 2024.

2020 – EU: Beating Cancer Plan commits to risk-stratified screening

The EU highlights breast density as a consideration in future risk-adapted breast screening programmes, encouraging pilot studies across member nations.

2020 – BreastScreen Australia advises against notification

BreastScreen Australia issues a position statement against mandatory breast density disclosure, citing insufficient evidence of benefit and the potential for harm through unnecessary anxiety or imaging.

2023 – RANZCR calls for mandatory reporting

In December 2023, RANZCR releases a new position statement recommending mandatory reporting of breast density in both screening and diagnostic mammography.

2025 – BreastScreen Australia commits to national density disclosure

BreastScreen Australia formally adopts a position to notify all women of their breast density in writing with encouragement to consult a health professional for follow-up.



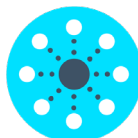
Measuring Density – From Eyeballing to Algorithms

- Visual BI-RADS grading is subjective with known intra- and inter-reader variability.⁶
- Volumetric tools such as Volpara TRUDensity provide objective, continuous density scores.
- Scores are mapped to BI-RADS and integrated into PACS.⁹



Density-Informed Supplemental Imaging

- Supplemental screening raises cancer-detection rates in dense breasts.
- MRI offers the highest sensitivity but drives more false-positive callbacks.^{2,5}
- Contrast-enhanced mammography (CEM) delivers near-MRI performance at lower cost.^{2,5}
- Ultrasound and DBT are more accessible, with lower sensitivity.^{2,5}
- All improve early detection in dense breasts, with impact on mortality under study.



Risk-Stratified Screening

- Classical calculators Tyrer-Cusick (IBIS) and BOADICEA (CanRisk) already embed breast density; Volpara TRUDensity is a validated input to both.⁵
- Emerging AI image-based models, like Mirai or Colditz/Jiang (Prognosia), show improved 5-year risk prediction.⁴
- International trials are testing personalised intervals and modality mixes with breast density a core factor.¹



Benefits, Harms & System Readiness

- Density reporting enables tailored screening and risk discussions.
- Personalised screening may reduce interval cancers and late-stage diagnoses.¹
- Workforce training and capacity planning is required (e.g., availability of MRI slots).
- Must balance concerns about false positives, overdiagnosis, and access equity.



Equity, Ethics & Data Governance

- Māori and Pacific women must benefit, not be left behind.
- AI models need diverse training data.
- Clear data ownership and communication frameworks are critical.

