



# Position Statement

## *Yearly breast screening mammograms for women 40-49 years of age*

July 2009

### Position

The New Zealand Breast Cancer Foundation recommends yearly breast screening mammograms for women 40-49 years of age.

### Breast Screening Mammogram

A breast screening mammogram checks women for early, unsuspected breast cancer; women who have no signs or symptoms of breast cancer – ‘well’ women.

### Benefit

Benefit of a breast screening mammogram:

- Best method to detect an early, unsuspected breast cancer
- Early detection and diagnosis of a breast cancer increases the likelihood of successful treatment and survival

### Justification

Reasons for the Foundation’s position statement:

- The time during which a breast cancer is potentially detectable by breast screening mammography is shorter in women aged 40 to 49 years compared to women in their 50s, 60s and 70s<sup>1</sup>
- Breast cancer in women in their 40s can be:
  - More aggressive (grows more rapidly) as opposed to women who have gone through the menopause<sup>2,3</sup>
  - More difficult to detect on mammogram x-ray images due to the increased density of their breasts. In NZ, up to 25% of breast cancers are not detected in women in their 40s, compared with 10% not detected in their 50s<sup>4</sup>. Therefore, there is a need for detection and diagnosis at the earliest possible stage.
- Between 40-49 years of age, the evidence for regular breast screening mammography is perhaps less compelling than for women in their 50s, 60s and 70s. Nevertheless, there is a powerful and consistent trend, based on well conducted clinical trials of annual breast screening mammography which shows a reduction in the death rate between 15-17% in the 40-49 age group<sup>5</sup>.
- In 2005, close to 22% of all diagnoses of female breast cancers in NZ were between 40-49 years of age<sup>6</sup>.

Age in years (females)		
40-44	5-49	40-49
203 (8.19%)	340 (13.7%)	543 (21.9%)

Australian breast cancer statistical data for women aged 40-49 years is similar to New Zealand’s data<sup>7</sup>.

### Benefit versus Risk

It is the Foundation’s view, after careful consideration of the literature, the benefit of breast screening mammography in this younger age group outweighs any potential risk.

Potential risk of breast screening mammography may include:

- A false positive

A false positive is when a screening mammogram suggests there is a breast cancer when, in fact, there is no breast cancer<sup>8</sup>. A false positive means a woman will be recalled for further investigations ranging from repeat mammography and/or ultrasound, biopsies, etc. These investigations and the resultant fear and anxiety would not have occurred in the absence of screening.

- A false negative

A false negative is when a screening mammogram misses a breast cancer even though a breast cancer is present<sup>8</sup>. False negatives occur partly because most young women (under 50 years of age) have denser breasts, and dense breast tissue makes it more difficult to read mammogram images by a radiologist, i.e. spot problems<sup>9</sup>.

Screened women need to be aware that mammography has limitations. In women under 50 years of age, screening mammograms detect about 75% of unsuspected cancers, and in women 50 years of age onwards, about 85-90% of unsuspected cancers are detected<sup>4</sup>. Therefore, women under 50 years of age have approximately a 25% chance of having a breast cancer missed with routine screening mammography. These statistics highlight the need for all women, particularly those under 50 years of age, to report any breast changes to their family doctor without delay, even if a recent screening mammogram was normal.

*continued overleaf*

Breast changes that require attention are:

- A new lump or thickening
- A change in breast shape or size
- Puckering, dimpling, or a change in colour of the skin
- Any change in a nipple such as a discharge or a nipple that starts to turn inwards
- A radiation induced breast cancer

The benefit of breast screening mammography (early detection of breast cancer) outweighs the risk from radiation exposure in women of this age<sup>10</sup>.

### Family Doctor

It is important for women to gain an understanding of breast screening mammography.

The Foundation recommends women 40-49 years of age discuss with their family doctor the following:

- Benefit and risk of having a breast screening mammogram
- Their personal risk of developing breast cancer

Personal risk factors to consider are:

- Age
- Family history of breast or ovarian cancer
- Previous breast biopsies
- Long term hormone replacement therapy
- Obesity
- Alcohol

Personal risk will determine the appropriate age that breast screening mammograms should commence.

### BreastScreen Aotearoa (BSA)

The New Zealand (NZ) Government's breast screening programme – Breastscreen Aotearoa – checks women with no breast cancer symptoms for unsuspected breast cancers between 45 and 69 years of age with a free screening mammogram every two years. The programme's aim is to reduce the number of New Zealand women who die from breast cancer<sup>4</sup>. For women 40-49 years of age, yearly screening mammograms would not all be free, as BreastScreen Aotearoa covers women from 45-69 for a free screening mammogram every two years. Therefore, women from 40-44 years of age would need to pay for each of their yearly screening mammograms (5 screening mammograms), as well as, the alternate years between 45-49 years of age (2 screening mammograms).

The cost of a screening mammogram at a private NZ breast clinic/radiology group service varies from approximately \$100 to \$175.

### BreastScreen Australia

The BreastScreen Australia programme provides free breast screening mammograms every two years for women 50-69 years of age. On request, women 40-49 years of age and women 70 years of age and older are able to attend for free screening mammograms every two years<sup>7</sup>.

### Digital Mammography versus Conventional Film Mammography

Some research by Skaane et al. (2007) shows digital mammography has a significantly higher cancer detection rate than conventional film mammography in a population-based

screening programme (Oslo, Norway) for women aged 45 – 69 years of age<sup>11</sup>. In a Canadian/USA 33 site screening programme, a key finding is the accuracy of digital mammography is significantly higher than that of conventional film mammography in women:

- Under the age of 50 years
- With radiographically dense breasts
- Who are premenopausal or perimenopausal (Pisano et al., 2005)<sup>12</sup>

In New Zealand, digital mammography is an emerging technology with nationwide screening implementation expected within the next five years<sup>13</sup>. Currently, BreastScreen Aotearoa has introduced digital mammography at BreastScreen Waitemata Northland (Takapuna and Whangarei) and BreastScreen Healthcare (Dunedin).

### Conclusion

As there is sufficient evidence in the literature worldwide, the Foundation recommends women - from the age of 40 to 49 years - have a yearly breast screening mammogram (either a conventional film mammogram or a digital mammogram).

[www.nzbcf.org.nz](http://www.nzbcf.org.nz)

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