### Physician Protocol for Screening Mammograms

#### Average risk

**Ages 40-49**

- Health care providers are encouraged to discuss the benefits and limitations of screening mammography with asymptomatic women in this age group.
- If screening mammography is chosen, it is available every **two years**. Patients will be recalled every two years.
- A health care provider's referral is not required but is recommended.

- Women ages 40-49 have a lesser chance of developing breast cancer and a greater chance of false positive\(^1\) or false positive biopsy\(^2\) results:

<table>
<thead>
<tr>
<th>Screened Population</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70-79</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancers Detected</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>False Positive(^1)</td>
<td>88</td>
<td>67</td>
<td>55</td>
<td>50</td>
</tr>
<tr>
<td>False Positive Biopsy(^2)</td>
<td>8.5</td>
<td>6.7</td>
<td>5.6</td>
<td>5.7</td>
</tr>
</tbody>
</table>

\(^1\)False Positive: A test result that turns out to be normal after further testing.
\(^2\)False Positive Biopsy: A biopsy result that shows no cancer is present.

#### Average risk

**Ages 50-74**

- Routine screening mammograms are recommended every **two years** for asymptomatic women at average risk of developing breast cancer. Patients will be recalled every two years.
- A health care provider’s referral is not required.

- Age is the biggest risk factor for breast cancer. Over 80 per cent of cases occur in women ages 50 and older who have no risk factors other than being an aging female.

#### Average risk

**Ages 75+**

- Health care providers are encouraged to discuss the benefits and limitations of screening mammography with asymptomatic women in this age group.
- Health care providers should discuss stopping screening when there are comorbidities associated with a limited life expectancy or physical limitations for mammography that prevent proper positioning.
- If screening mammography is chosen, it is available every **two to three years**. Patients will not be recalled by the Screening Mammography Program of BC.
- A health care provider’s referral is not required but is recommended.

- Screening decisions in older women should be individualized based on a woman’s overall health, life expectancy and her personal preferences.

#### Higher than average risk

**Ages 40-74 with a first degree relative with breast cancer**

- Routine screening mammograms are recommended **every year**. Patients will be recalled every year.
- A health care provider’s referral is not required.

- Having a first degree relative with breast cancer is an internationally accepted and proven risk factor.
- BC data confirms that these women have almost twice the risk of developing breast cancer than women at average risk.

#### High risk

**With a known BRCA1 or BRCA2 mutation or prior chest wall radiation or strong family history of breast cancer**

- Ages 40-74: please refer to recommendation for "Higher than average risk" women.
- Under age 40: The Screening Mammography Program accepts women at high risk of developing breast cancer with a health care provider’s referral, provided they do not have breast implants or an indication for a diagnostic mammogram. Please discuss patient with a screening program radiologist before referral.

---

**Policy References:** Please visit www.screeningbc.ca/breast
Communicating the benefits and limitations

Ensure that your patient is well informed about the benefits and limitations of screening mammography:

<table>
<thead>
<tr>
<th>BENEFITS</th>
<th>LIMITATIONS</th>
</tr>
</thead>
</table>
| **Mammograms save lives.** | **Mammograms are not perfect.**  
Research has shown a 25 per cent reduction in deaths from breast cancer among women who are screened regularly.  
Not all breasts look the same on a mammogram – a woman's age or breast density can make cancers more or less difficult to see. In general, screening mammograms are less effective in younger women because they tend to have denser breast tissue. |
| **Mammograms are safe and effective.**  
Mammograms can usually find lumps two or three years before a woman or her health care provider can feel them. | **Mammograms may lead to additional testing.**  
On average, seven per cent of women screened will require additional testing to look more closely at a specific area of the breast. This does not mean that a cancer was found – over 95 per cent of the women recalled for additional testing do not have cancer. |
| **Breast cancer risk increases with age.**  
Over 80 per cent of new breast cancers diagnosed each year in BC are in women ages 50 or older.  
Only one out of 10 women diagnosed with breast cancer have a family history of the disease. While women with a family history of breast cancer have a higher than average risk, the biggest risk factor for breast cancer is being a woman over 50 years of age. | **Mammography does not detect all cancers.**  
Some cancers cannot be detected on a mammogram due to the location of the cancer or the density of the breast tissue. About 25 per cent of cancers in women ages 40-49 are not picked up by a screening mammogram, compared with about 10 per cent in women older than 50. |

Other breast health recommendations

<table>
<thead>
<tr>
<th>PROCEDURE</th>
<th>RECOMMENDATION</th>
</tr>
</thead>
</table>
| Breast Self Exam (BSE) | Routine breast self examinations (when used as the only method to screen for breast cancer) are not recommended for asymptomatic women at average risk of developing breast cancer.  
Women should be familiar with their breast texture and appearance and bring any concerns to their health care provider. |
| Clinical Breast Exam (CBE) | There is insufficient evidence to either support or refute routine clinical breast exams (in the absence of symptoms) alone or in conjunction with mammography. The patient and her health care provider should discuss the benefits and limitations of this procedure to determine what is best for the patient.  
This excludes women with prior breast cancer history. |
| Magnetic Resonance Imaging (MRI) | Routine screening with breast MRI of women at average risk of developing breast cancer is not recommended.  
Exceptions are made for higher than average risk groups including: BRCA1 and/or BRCA2 carriers, first degree family relatives of BRCA1 and/or BRCA2 who choose not to be tested, and those with prior Hodgkin's disease (or other lymphoproliferative diseases) at a young age (between the ages of 10-30 years old) treated with chest radiation. |