



Two issues impacting the health of the women in New Brunswick

1. Self-referral for women in the 40s

Issue

New Brunswick does not allow women aged 40-49 to self-refer for a mammogram. Breast cancer is the leading cause of death for women aged 40-49. Women of that age account for 17.5% of breast cancer deaths. Women in their 40s represent **27 percent of the life-years lost to breast cancer** and have the **most years of life to gain when screening is performed**. **Seventeen percent of breast cancers are found in women in their 40s, and no decade of life accounts for more than 25% of cancers**. Although breast cancer is less common in younger premenopausal women, it is more aggressive because of the presence of ovarian hormones. **Survival depends on the size of the tumor at diagnosis**. Early detection is critical.

Screening mammograms reduce deaths from breast cancer starting at age 40, and by allowing early detection of breast cancer, **they allow less aggressive treatment**, which increases quality of life. When found early, cancer can be treated with lumpectomy instead of mastectomy, node staging can be done with sentinel node biopsy rather than axillary dissection, and many women can avoid chemotherapy and return sooner to productive lives in the community.

New analysis of provinces that screen vs provinces that do not screen in 40s and stage of cancer diagnosis: Dr. Anna Wilkinson and Dr. Jean Seely from the Ottawa Hospital published a study in 2022 in partnership with Statistics Canada using the Canadian Cancer Registry. Provinces that don't screen women 40-49 have significantly more advanced and metastatic breast cancer in women 40-49 at time of diagnosis. There are downstream impacts on women 50-59, who have later stage diagnoses if they are not screened in their 40s. There is increased mortality in women 40-60 when women in their 40's are not screened.

Family physician shortage: Given the shortage of family doctors in New Brunswick, some women who want a mammogram in their 40s will have difficulty getting the necessary requisition from a family doctor. Self-referral beginning at age 40 is the obvious solution.

Racial disparities: **Black and Asian women have a peak incidence of breast cancer in their 40s**, whereas the peak for white women is in the late 50s and early 60s. These overlooked data are contributing to avoidable inequities.

New Brunswick lags behind other jurisdictions: Currently 4 jurisdictions begin screening at 40: Nova Scotia, PEI, Yukon and BC. Alberta begins screening at 45. In Alberta and NWT, women can also self-refer after a requisition for their first screen at 40. Saskatchewan has committed to screening at 40 in 2024/5.

Guidelines for Breast Cancer Screening were recently issued in July 2022 by the [National Comprehensive Cancer Network](#) (NCCN) and stress the importance of annual mammograms for all average-risk women aged 40 and older. The Canadian Society of Breast Imaging is the equivalent in Canada and they recommend screening starting at 40. Screening starts at 40 in countries such as Japan, Sweden, and USA.

Recommendation: All women in New Brunswick should be allowed to self-refer at age 40.

2. The need for supplemental screening for women with dense breasts

Issue

Dense breast tissue makes it harder to see cancer on a mammogram and increases the risk of getting breast cancer. Women with dense breasts are more likely to be diagnosed with larger and more aggressive cancers, and have a poorer prognosis. Cancer in women with dense breasts is often discovered when a woman feels a lump after a 'normal' mammogram. These are called interval cancers, and they are frequently later stage. Women with dense breasts are more likely to need mastectomy and chemotherapy and their prognosis is impacted. Screening ultrasound can find many cancers in dense breasts that were missed by mammography. Many more cancers could be detected early, and lives saved, if women with dense breasts were offered supplemental screening.

Evidence since 1995 showing the benefits of ultrasound

It has been known since 1995 when the Journal *Cancer* published the first paper that ultrasound detects small, invasive, node negative cancers in women with dense breasts that were missed on mammograms. It is those characteristics that lead to reduced mortality. Multiple single institution and multicenter trials of screening ultrasound have since shown detection rates of 3-4 cancers missed on mammography per 1000 women screened. In 2022, a study published by Vancouver authors found [7 additional cancers per thousand](#) women using supplemental screening ultrasound exams. All cancers have been small and node negative. Significantly, 40% were in women with no family history and 60% were in women with Category C density.

Randomized Control Trial in Japan showing the benefits of ultrasound

With all that is now known about using ultrasound for supplementary screening, it would be unethical to do a randomized controlled trial in North America. Luckily, there is an RCT of supplementary ultrasound screening (J-START) underway in Japan, and preliminary findings are showing greater cancer detection of node negative cancers, and a reduction of interval cancers by half. This is the precursor to reduced mortality. It would be unethical to let women die while we wait for decades for J-START to mature.

This comprehensive article on [dense breasts and supplemental screening](#) outlines the risks of dense breast tissue, and the current and future modalities that can detect cancers missed on mammograms.

Annual screening with mammography leads to fewer interval cancer cases: A Canadian study showed that [annual screening with mammography for women with Category D density leads to fewer interval](#) cancer cases.

Jurisdictional Scan: Although no screening program offers supplemental screening, screening ultrasound is accessible in BC and Alberta, and covered by provincial health insurance. PEI has committed to ultrasound for women with Category D. In other provinces, access can vary depending on the physician. As well, six provinces offer annual screening with mammography to women in Category D. New Brunswick does not invite women with Category D density to return annually. Based on new RCT data from the Netherlands, the European Society of Breast Imaging now recommends [MRI every 2 to 4 years for all women in category D](#). Yet, in New Brunswick, screening ultrasound is not even easily accessible for women with dense breasts.

Recommendation: To prioritize the health of New Brunswick women, the government should offer supplemental screening for women with dense breasts. This would allow the opportunity for early detection, less aggressive therapy and mortality reduction.