ASSESSMENT OF THE CANADIAN TASK FORCE ON PREVENTIVE HEALTH CARE BREAST IMAGING GUIDELINES

By the Canadian Association of Radiologists and the Canadian Society of Breast Imaging

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The Canadian Task Force on Preventive Health Care (CTF) has positioned itself as Canada's leading source for medical guidelines. In the case of breast screening recommendations, there is a conflict between CTF guidelines and those co-developed by the Canadian Association of Radiologists (CAR) and Canadian Society of Breast Imaging (CSBI). As a result, women's health is at risk. The following summary details how the CTF's breast cancer screening guidelines are negatively impacting Canadian women.

The CAR and CSBI have reached out to the CTF on several occasions through letters and meeting requests to remedy the situation with little response.

In 2019, the CAR published a position statement expressing its concern regarding the 2018 CTF updated guidelines for breast cancer screening.[1]

NO SUBJECT-MATTER EXPERT REPRESENTATION

The panel making the recommendations has no breast cancer screening expert representation. Instead, the panel members include of family doctors, nurses, a psychologist, a chiropractor, an occupational therapist, and kidney specialist. The lack of representation for radiology, and for breast cancer screening experts in particular, means that the recommendations lack the full breadth of expert opinion.

THE BENEFITS OF SCREENING ARE UNDERESTIMATED AND EVIDENCE IS LIMITED TO THE SOLE USE OF DECADES OLD RANDOMIZED CONTROL TRIALS

The CTF opted to ignore observational studies done with modern mammography equipment, in favour of Randomized Control Trials (RCTs) from the 1960s to 1990s, which show only a 15-20% reduction in mortality. A 2014 study of screening in Canada of almost 3 million women showed 40% fewer deaths among women who had screening mammograms than women who did not.[2]

The CTF claims to use the GRADE tool to develop guidelines (Grading of Recommendations Assessment, Development and Evaluation), but in the case of the breast screening recommendations, the CTF misapplied this tool: GRADE recommends upgrading the evidence-value rating of observational studies with large magnitude benefit such as the Pan-Canadian Study. While the CTF insisted that only RCTs be used to assess the benefits of screening and rejected observational studies, they used observational studies (even very small or some that they acknowledged as being of poor quality) to infer evidence of the harms of screening.

CTF OVERLOOKS OTHER BENEFITS

Since the only measurable outcome of an RCT is the number of women who die of breast cancer, the CTF did not take into account three *other significant benefits of early detection of cancer*:[3] the ability to avoid chemotherapy, mastectomy, and lymphedema.

OVEREMPHASIS ON HARMS

Annual mammographic screening starting at age 40 saves the *most lives*, but the CTF did not recommend it because they focus on "harms" of screening: the anxiety created for women who are recalled for additional tests after screening, and "overdiagnosis."[4,5] About 10% of women need additional tests after screening; *this causes anxiety for many women, but it's transient, and studies show that it doesn't harm women long-term*.[6] The CTF unduly emphasizes the risks associated with overdiagnosis, i.e., the theoretical possibility that a woman will be diagnosed with breast cancer and treated for it but will die of something else before she would have died of cancer.

The CTF estimates 41% of breast cancers are over-diagnosed. No credible expert in screening correctly estimates overdiagnosis to be more than 10%.[7,8]

The CTF says that most women aged 40-49 would choose not to be screened. Published research shows that when told that mammograms can prevent breast cancer death and allow them to have a lumpectomy and avoid chemotherapy if cancer is detected early, most women choose to be screened.[9]

LIVES AT RISK

The CTF made serious numerical errors in its assessment of the number of women needed to be screened to save a life by a factor of 3 because it did not consider input from subject-matter experts. Dr. Martin Yaffe calculated, *using a model based on CISNET*, that in Canada approximately 1,000 more women can be expected to die of breast cancer yearly, if the CTF guidelines are followed.[10]

DENSE BREASTS AND SUPPLEMENTAL SCREENING

Women with dense breast tissue have a much *higher* chance of having breast cancer detected late because the cancer may be masked by their dense breast tissue.[11] The CTF says there's insufficient evidence to recommend supplementary screening for women with dense breasts because of their insistence on RCTs. A Dutch RCT found that supplemental Breast MRI detected 16.5 additional cancers per thousand women. An RCT of screening ultrasound is *underway in Japan* but it will take at least 7-10 years before it can prove mortality reduction.[12] There is *observational data* from multiple studies showing that *ultrasound finds* an *2-3 cancers* per *thousand women*. Finding these cancers earlier will allow less aggressive treatment and reduce mortality.[13–16]

All women and their health providers deserve to have all the facts, and the option of shared decision-making, to decide whether the harms outweigh the real benefits. This is not possible when both groups are being given recommendations lacking subject-matter expertise.

BACKGROUND

The CTF is an arms-length body funded by the Public Health Agency of Canada (PHAC). Its 15-member volunteer panel is selected by PHAC and the College of Family Physicians of Canada and members usually serve about four years. When developing guidelines, the CAR goes through a rigorous process ensuring that guidelines are based on the most recent credible research and has an extensive consultation process before they are published.

- The CTF was initiated in the 1970s and disbanded in 2005 and then resurrected under the Conservative government in 2010. The CTF was designed at University of Calgary.
- It failed to include an internal accountability structure that would allow for oversight of recommendations.
- CTF panel produces guidelines in multiple areas of medical specialty for 43,500 family doctors. The breast guidelines apply to 8 million Canadian women.
- No experts related to breast screening or breast cancer were included on the panel and when asked for input, the experts' input was dismissed.
- The panel is composed of members who are experts in areas unrelated to the focus of the guidelines. This is deliberate due to a "presumed" conflict of interest. However, bias can be easily mitigated according to established mechanisms.
- There is a significant gap between what specialists recommend and what the CTF recommends (below). The gap is being compounded by COVID-19 because more women are delaying screening. A 2021 report from Statistics Canada predicts that disruptions to cancer screening may lead to increases in cancer rates and deaths, including advanced breast cancers and breast cancer deaths.[17]
- CTF does not comply with international guideline-making bodies which recommend inclusion of experts and patients and genuine consultation, resulting in misleading and erroneous recommendations, biased knowledge tools, and inaccurate "shared" decision-making tools.
- Guidelines do not take racial disparities into account.
- Experts accused of bias as a reason for keeping them excluded; COI can be mitigated.
- Recommendations are "perceived" to be government sanctioned and have been adopted by most provinces and territories.
- 82,000 signatures on petition to Health Minister; 130 experts have signed a letter in response to the 2018 CTF guidelines.
- 27,000 Canadian women diagnosed annually with breast cancer and 5,100 die each year.
- If the guidelines are not changed to reflect current research and content expertise, the guidelines will lead to needless suffering and loss of Canadian lives.

HOW TO ADDRESS THE ISSUE

SHORT-TERM

The Federal Health Minister should place a moratorium on the breast guidelines. In the USA such a moratorium was achieved on their harmful similar guidelines from 2009 and 2016; instead, the ones from 2002 are in use. It should be noted that the US is updating their breast screening guidelines with a focus on racial disparities. Canadian guidelines based on 30–50-year-old studies did not take racial differences into account. Black, Asian and Hispanic women have earlier incidence and younger peak of breast cancer than white women.

LONG-TERM

1. A new task force should be convened that includes:
    a. an appropriate accountability structure; and
    b. experts of breast cancer screening mammography.
2. The CTF should update the breast cancer screening guidelines to include evidence from recent observational trials and actual Canadian data on screening mammography.

There are more collaborative models that can be used to rebuild the CTF, such as guidelines from the National Institute for Health and Care Excellence (NICE UK).

A COMPARISON OF THE CTF RECOMMENDATIONS VS. CAR AND CSBI GUIDELINES

Canadian Task Force Recommendations	Canadian Association of Radiologists/Canadian Society of Breast Imaging
Screening for women aged 40-49 is not recommended.	Women aged 40-49 should screen annually with mammography.
Women aged 50-74 should screen every 2-3 years with mammography.	Women aged 50-74 should screen every 1-2 years with mammography.
There are no recommendations for screening women over age 74.	Women over aged 74 should screen every 1-2 years with mammography, provided they are in good health with life expectancy of ~7+ years.
Supplemental screening in not recommended for women with dense breasts.	Women with dense breasts can benefit from supplemental screening.
Risk assessment not recommended.	Risk should be assessed by age 25-30 to determine if early screening is appropriate.
Clinical breast exam is not recommended.	Mammography may miss breast cancers and clinical breast exam is complementary to mammography.

POSITION STATEMENT AND FEEDBACK

While this brief has focused on breast cancer screening, the issues with the CTF pertain to multiple medical specialties. There are several published letters from leading specialists and specialist societies opposing the CTF guidelines in the following fields.

- Adult obesity
- Breast cancer screening
- Cervical cancer screening
- Hepatitis C virus screening
- Impaired vision screening
- Prostate cancer screening
- Colon cancer screening
- Developmental delay screening

Here is a link to a Dropbox folder which includes a compilation of specialists and specialty society representatives' letters:

https://www.dropbox.com/sh/fesq9axe53ttge7/AACHI-kgeyI28cqxkTT9jgQqa?dl=0

We feel that Canadians are unaware of these matters and would almost certainly prefer that their healthcare guidelines were formulated with substantial input from both content experts/specialists and patients.

We welcome the opportunity to work with Health Canada and the Public Health Agency of Canada to address the risk facing Canadian women pertaining to Breast Cancer Screening.

Thank you for your consideration.

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March 2021