A Review of Updated Recommendations for Breast Cancer Screening from the Canadian Task Force on Preventive Health Care

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About the Task Force Report Update, 2018

Based on:

- **Review of latest evidence of mammography screening effectiveness**
  - Included 8 original trials, systematic reviews, and primary studies
    - Recognized "**serious concerns regarding risk of bias in the original studies**" and only 3 reported on harms
    - Looked at all cause mortality, breast cancer mortality, overdiagnosis, false positives, and ensuing biopsies
- **A new systematic review of women's values and preferences regarding screening**
  - Appeared to sway recommendations despite an acknowledgement that benefits and harms in the studies "**tended to provide high benefit to harm ratios**"

Other Comments:

- ❖ The report is silent on DCIS
- ❖ Did not look at cost-effectiveness
- ❖ No declared conflicts of interest

Recommendations

	Mammography	Clinical Breast Exam	Breast Self Exam
CTFPHC (2018)	Age 50-74 q. 2-3 years **Conditional** recommendation **Very Low certainty** evidence	**Not** recommended **Conditional** recommendation **No** evidence	**Not** recommended **Conditional** recommendation **Low certainty** evidence
USPSTF	Age 50-74 q. 2 years **B** recommendation (2016)	**Insufficient** evidence **I** recommendation (2009)	**Not** recommended **D** recommendation (2009)

Other Quotables from the Report

"Not all women aged 50-74 years should be screened"

"Recommendations on screening mammography are conditional … underlining the need for shared decision-making"

"Strategies that promote increasing the proportion of women screened ... instead of the shared decision-making process are not aligned with these recommendations"

"Some stakeholders specializing in cancer care have differing recommendations for screening"

Task Force Recommendations for Future Work

- ❖ Need more data re risks of overdiagnosis which requires a common definition
- ❖ Need more studies on values and preferences of Canadian women re screening – **conducted using accurate estimates regarding both benefits and harms**
- ❖ Need better estimates of screening costs

Task Force: There is **Good Evidence of Harm** with Mammography Screening

- **Overdiagnosis**
- **Unnecessary treatment – for all overdiagnosis**
- **Significant psychological distress**
- **False positives**
- **Radiation-induced breast cancer and death**

Inconsistent Application of Evidence to Policy

Mammography is the only recommended breast screening method despite good quality evidence in literature of no benefit

No Evidence of Breast Cancer Mortality Reduction

Cochrane Collaboration (2013)	*RR .90 (.79-1.02)*
CNBSS (2014)	*RR .99 (.88-1.12)*
U.K. New Age Trial results (2015)	*RR .88 (.74-1.04)*
U.S. SEER data 2000-2010 (2015)	*RR 1.01 (.96-1.06)*

No Evidence of All Cause Mortality Reduction

Cochrane Collaboration (2013)	*RR .99 (.95-1.03)*
CNBSS (2014)	*RR 1.02 (.98-1.06)*

Clinical breast examination is not recommended despite very poor quality evidence

- ❖ CTFPHC (2018): **No available evidence**
- ❖ USPSTF (2009): **Insufficient evidence**
- ❖ Cochrane Collaboration (2003): **Data is incomplete**
- ❖ National Cancer Institute (2019): **Insufficient evidence**

USPSTF last report on CBE (2009) stated indirect evidence suggests CBE **may detect a substantial proportion of cancer** if it is the only screening test available

CBE is understudied. There is no standardized approach for this skill. It is unknown how many primary care providers are taught how to do CBE or are currently doing it.

Breast self examination is not recommended despite very poor quality evidence

2 randomized trials (WHO/Russia and Shanghai):

- **Significant methodological weaknesses**
- Did not evaluate the practice of BSE on breast cancer mortality

The authors of the Shanghai trial cautioned readers to **not infer** from their trial……there "would be **no reduction in risk of dying from breast cancer** if women practiced BSE competently and frequently"

There are inconsistent messages:

- ❖ BSE not recommended but 'breast health awareness' is
- ❖ Educational materials repeatedly tell women to report any change in their breast to their primary care provider

The Task Force was successful in qualifying the recommendations for mammography screening but continued change is needed

It is hoped their next recommendations will:

- ❖ Unequivocally recommend against routine mammography screening for average risk women of any age
- ❖ Recommend BSE and CBE

In the meantime…

Until provinces / territories discontinue organized breast screening programs:

- ❖ Women must be engaged in informed decision-making
- ❖ Do not send out letters of invitation
- ❖ Put radiologists on salary
- ❖ Primary care providers should do CBE
- ❖ Women should examine their breasts

Do more research:

- ❖ Natural history of breast cancer
- ❖ How to define high risk and recommended surveillance
- ❖ Effectiveness of BSE and CBE, and other breast screening methods

Carefully assess for potential conflicts of interest

This poster is concerned with population-based mammography screening for women at average risk for breast cancer.

It is not concerned with diagnostic mammography of symptomatic women or surveillance of higher risk women.

References: Please take a handout