From:	Vandermolen, Kayla S HLTH:EX
To:	Parte, Maura HLTH:EX
Cc:	Davidson, Heather HLTH:EX
Subject:	FW: Cancer Breast Screening Session Note - Due to ADMO Sept 25
Date:	September 20, 2023 3:45:59 PM
Attachments:	Cancer Breast Screening QP Note MM draft.docx

Hi Maura,
We don't seem to have any updated data to include in this QP note for imaging. We will need to reach out to BC Cancer in order to obtain. Please advise.
Kayla

From: Mumblo, Melissa HLTH:EX <Melissa.Mumblo@gov.bc.ca>
Sent: Wednesday, September 20, 2023 1:59 PM
To: Vandermolen, Kayla S HLTH:EX <Kayla.Vandermolen@gov.bc.ca>
Subject: Cancer Breast Screening Session Note - Due to ADMO Sept 25

Hi Kyla,

My name is Melissa and I currently am the Medical Imaging Team (Sierra is back at the end of the week).

I have drafted the attached document per Kristy's instructions, I also have consulted with Carolyn Rudden on the information included. Can you please review and update the areas that I have highlighted for you and send it back to me, by that time I hope to have updates from PHSA and BC Cancer. If you or your team have any questions or concerns, please reach out.

Thank you,

Melissa Mumblo
PA| AWT/MI
HPHS | Ministry of Health
PO Box 9601 PROV STN GOV Victoria BC V8N 3C8
Tel: (236) 478-2037 | Email: Melissa.Mumblo@gov.bc.ca

From: Vandermolen, Kayla S HLTH:EX
To: Parte, Maura HLTH:EX; Graham, Harriet HLTH:EX; Davidson, Heather HLTH:EX
Subject: Pending update to Breast cancer screening guidelines
Date: June 22, 2023 4:03:56 PM
Attachments: image001.jpg

FYI, it is anticipated that there will be changes to the breast cancer screening guideline recommendations based on recent announcements. In Canada, this recommendation could come as early as Fall 2023.

1. The government of Canada has provided funding to expedite a review of the breast cancer screening guidelines by the Canadian Task Force on Preventative Health. The updated guideline is expected to be released in late fall 2023. Currently, the Task Force guidelines recommend mammography every two years for those who are between 50 and 74 years old and not at high risk for breast cancer. For women aged 40 to 49, it is recommended that they make an informed decision with their healthcare provider about whether mammography is right for them. Based on what is being seen in other jurisdictions, we could anticipate that this review could result in recommendations to begin screening at age to 40 and may include additional recommendations around dense breast/screening in women over 75.

2. In May 2023, the US Preventative Services Task Force (USPSTF) proposed updates to recommend breast cancer screening biennially beginning at age 40. This recommendation is still in progress, in the draft phase, and public comments (the final part of the recommendation process) is currently undergoing review. It is unknown when this will be complete.

3. Recently, Ontario Health made a recommendation around breast cancer screening guidelines based on guidance from the Ontario Health Technology Advisory Committee. They have recommended publicly funding supplemental breast cancer screening following mammography to enhance early detection for people with extremely dense breasts. Types of breast imaging that could be added include contrast-enhanced mammography, ultrasound, digital breast tomosynthesis (3-dimensional breast x-ray), or magnetic resonance imaging (MRI). This recommendation has undergone public feedback and a final recommendation has not yet been published.

Below I have included links and detailed summaries of the recent announcements on guidelines mentioned above. Maura has asked me to work with medical imaging to set up a meeting with them and other areas of the Ministry that would be relevant to any impending changes. Let me know if you have any questions in the meantime.

Kayla Vandermolen (she/her)
Senior Policy Analyst
Provincial Services Branch
HPHS | Ministry of Health

Media announcement: Breast Cancer Screening Guidelines

An investment of $500,000 from the Government of Canada to expedite the review of the breast screening guidelines by the Canadian Task Force on Preventative Health Care (Task Force). The guidelines were last updated in 2018 and since then, evidence and understanding of breast cancer early detection has continued to evolve, applying pressure on the guidelines to keep pace. Currently, the Task Force guidelines recommend mammography every two years for those who are between 50 and 74 years old and not at high risk for breast cancer. For women aged 40 to 49, it is recommended that they make an informed decision with their healthcare provider about whether mammography is right for them… Last month, the US Preventive Services Task Force (USPSTF) proposed updates to their recommendations on breast screening, which included women starting biennial screening at age 40. In that review, the USPSTF recognized inequities in breast cancer mortality and length of survival for Black women. https://www.newswire.ca/news-releases/canadian-cancer-society-applauds-government-of-canada-investment-to-expedite-review-of-breast-screening-guidelines-880049155.html

The Canadian Task Force on Preventive Health Care

will expedite the scheduled review of its 2018 breast cancer screening recommendations. The updated guideline is expected to be released in late fall 2023.
https://canadiantaskforce.ca/task-force-expedites-update-to-2018-breast-cancer-guideline/

USPSTF Breast Cancer Screening Recommendation Update

Status: IN PROGRESS
On May 9, 2023, the U.S. Preventive Services Task Force (USPSTF) posted a draft recommendation on screening for breast cancer. The Task Force's draft recommendation expands their prior recommendation and encourages all women to get screened every other year starting at age 40. This draft recommendation applies to women at average risk of breast cancer.

There are key areas where more research is urgently needed that will allow the Task Force to build on its existing recommendations and help all women live longer and healthier lives:
• We need to know how best to address the health disparities across screening and treatment experienced by Black, Hispanic, Latina, Asian, Pacific Islander, Native American, and Alaska Native women.
• We also need studies showing how additional screening with breast ultrasound or MRI might help women with dense breasts to stay healthy.
• Additionally, we need more evidence on the benefits and harms of breast cancer screening in women 75 and older. More research is needed on whether or not women with dense breasts should have additional screening with breast ultrasound or MRI, and on the benefits and harms of screening in women older than 75.

The Task Force's draft recommendation statement, draft evidence review, and draft modeling report have been posted for public comment on the Task Force website at
https://www.uspreventiveservicestaskforce.org/ .
Comments can be submitted from May 9, 2023, to June 5, 2023, at

https://www.uspreventiveservicestaskforce.org/tfcomment.htm .

https://www.uspreventiveservicestaskforce.org/uspstf/sites/default/files/file/supporting_documents/breast-cancer-screening-draft-rec-bulletin.pdf

Ontario HTAC review on Supplemental Screening as an Adjunct to Mammography for Breast Cancer Screening in People With Dense Breasts

Status: IN PROGRESS

Draft Recommendation:

Ontario Health, based on guidance from the Ontario Health Technology Advisory Committee, recommends publicly funding supplemental screening as an adjunct to mammography for people with extremely dense breasts.

One way to improve cancer detection for people with dense breasts might be to use other types of imaging in addition to mammography (called supplemental screening). Types of breast imaging that could be added include contrast-enhanced mammography, ultrasound, digital breast tomosynthesis (3-dimensional breast x-ray), or magnetic resonance imaging (MRI).

- Public feedback is now closed
- A final recommendation is not published yet

https://hqontario.ca/evidence-to-improve-care/health-technology-assessment/reviews-and-recommendations/supplemental-screening-as-an-adjunct-to-mammography-for-breast-cancer-screening-in-people-with-dense-breasts

From: Vandermolen, Kayla S HLTH:EX
To: Parte, Maura HLTH:EX
Subject: RE: RUSH MAURA/LAICY IH New mammography unit open at Shuswap Lake General Hospital
Date: October 3, 2023 10:47:36 AM
Attachments: image001.jpg

I'm not sure what "too few screening locations" she is referring to? Screening mammograms can be performed at any facility in BC. Breast ultrasound, which is often the next step for patients with dense breasts, is not considered 'screening'.

Patients with dense breasts are encouraged to contact their doctor to discuss if screening ultrasound would be appropriate for them. If chosen, their doctor will provide them with a requisition so that they may make an appointment for a diagnostic breast ultrasound. This test is not provided by the BC Cancer Breast Screening Program.

Dense Breasts Canada lists this information for BC on their website:
https://densebreastscanada.ca/

"Breast density notification was implemented on Oct.15, 2018. You will be informed of your breast density category: A, B, C or D in your screening mammogram results letter. Category C and D are dense breasts. Additional screening is recommended for women with dense breasts. Screening ultrasound is covered under MSP for women with dense breasts. You can request a requisition from your healthcare provider. Screening ultrasound is available at:

Vancouver: X-ray 505

Victoria West Coast Imaging

Prince George

Vernon: Category D only

Kamloops: Royal Inland Hospital

Shuswap Lake: if mammogram is done at Vernon

East Kootenays

This list was last updated in 2022. Please let us know of any additional locations. Breast Density Notification BC Press Release"

We would need to check with medical imaging but I am sure there must be more locations that provide this service.

Kayla

From: Parte, Maura HLTH:EX <Maura.Parte@gov.bc.ca>
Sent: Tuesday, October 3, 2023 10:26 AM

To: Vandermolen, Kayla S HLTH:EX <Kayla.Vandermolen@gov.bc.ca>
Subject: FW: RUSH MAURA/LAICY IH New mammography unit open at Shuswap Lake General Hospital

Hi Kayla,
Do we have an update on the status of implementation re: all of the dense breast recommendations? I know we are sharing results but can't see where things stand on the other 2 items. This is not for this media release – MLA Bond just brought up lack of resources/testing for people with dense breasts in the House.
Thank you,
Maura

From: Vandermolen, Kayla S HLTH:EX <Kayla.Vandermolen@gov.bc.ca>
Sent: Tuesday, October 3, 2023 9:23 AM
To: Parte, Maura HLTH:EX <Maura.Parte@gov.bc.ca>
Cc: Ball, Laicy HLTH:EX <Laicy.Ball@gov.bc.ca>; HLTH Health Issues HLTH:EX <HealthIssues@gov.bc.ca>
Subject: RE: RUSH MAURA/LAICY IH New mammography unit open at Shuswap Lake General Hospital

Hi Jasmine, I hope you are well. Please see answer to your questions below:

- On July 18, 1988, BC established the Breast Screening Mammography Program – the first in Canada. http://www.bccancer.bc.ca/about/history
- BC is also the first province to share breast density results with all women (September 21, 2028). http://www.bccancer.bc.ca/about/news-stories/stories/b-c-first-province-to-share-breast-density-results-with-all-women
- See above
- In 2021, 261,905 screening mammograms were performed in BC, and 254,663 screening mammograms were performed in 2022. Participation rates in the Breast Screening Program remain stable at around 50% of those eligible.

Let me know if you have any further questions,

Kayla Vandermolen (she/her)
Senior Policy Analyst
Provincial Services Branch
HPHS | Ministry of Health

From: Parte, Maura HLTH:EX <Maura.Parte@gov.bc.ca>
Sent: Tuesday, October 3, 2023 9:09 AM
To: Vandermolen, Kayla S HLTH:EX <Kayla.Vandermolen@gov.bc.ca>

Subject: FW: RUSH MAURA/LAICY IH New mammography unit open at Shuswap Lake General Hospital

Hi Kayla, can you please assist with the questions below? Thank you, Maura

---

From: HLTH Health Issues HLTH:EX <HealthIssues@gov.bc.ca>
Sent: Tuesday, October 3, 2023 9:08 AM
To: Parte, Maura HLTH:EX <Maura.Parte@gov.bc.ca>
Cc: Ball, Laicy HLTH:EX <Laicy.Ball@gov.bc.ca>; HLTH Health Issues HLTH:EX <HealthIssues@gov.bc.ca>; HLTH Health Issues HLTH:EX <HealthIssues@gov.bc.ca>
Subject: RUSH MAURA/LAICY IH New mammography unit open at Shuswap Lake General Hospital

Hello,

GCPE has some follow up questions from the NR for the new mammography unit open at Shuswap Lake General Hospital they are hoping you can help answer:

- Was BC the first province in Canada to develop an organized, provincial breast cancer-screening program?
- How long has it been around?
- Do we know how many people the program has supported (if not in total, then annually maybe)? (Please let us know if this is best answered by HSIAR)

Looking for this back ASAP.

Many thanks,

Jasmine Lowey
Health Issues Analyst
Corporate Issues and Client Relations
Ministry of Health | Phone: 778 974-2863

From: Postulo, Marli HLTH:EX
To: Parte, Maura HLTH:EX
Cc: Rudden, Carolyn HLTH:EX; Camp, Rachel L HLTH:EX
Subject: Request for info re: dense breast screening initiatives (CLIFF 1260841)
Date: June 29, 2023 12:12:11 PM

Good afternoon!

PCR is seeking to respond to the below query on HPHSD's behalf (CLIFF 1260841). We currently don't have any messaging related to dense breast screening (specifically ultrasound) and was hoping you may have some wording we could use to respond to this individual:

> "Dear Adrian Dix,
>
> I am writing to you today about breast screening practices in our Province that are costing lives.
>
> On Oct 15, 2018, B.C. became the first province to implement breast density notification. The government recognized that women were being put at risk of a delayed cancer diagnosis because they were not given information about breast cancer risk affecting them involving dense breast tissue.
>
> We know that for women with dense breasts mammograms are less accurate as dense breast tissue is white on a mammogram, as is cancer. This creates a masking effect. The accuracy of a mammogram declines as the density increases - up to 50% of the cancers present in the densest breasts may be missed. Cancer in women with dense breasts is often discovered when a woman feels a lump after a 'normal' mammogram.
>
> s.22
>
> We know that Screening Ultrasound can find many cancers in dense breasts that were missed by mammography. However, there are very few locations in British Columbia offering it. We live s.22 in Northern B.C. s.22 s.22 I recently asked my doctor about this, and he said there is a center in Victoria where it could be done, however, it would be very hard to get an appointment.
>
> We all know with cancer, it is very important to take preventative measures - hence

the mammograms. But if it is known that mammograms aren't effective with higher breast density tissue, the government should ensure that screening ultrasound is accessible so that women in B.C. who have dense breasts who wish to access ultrasound can do so in a timely manner.

Could you please let me know if screening ultrasound is available to persons with dense tissue, and what the protocol is?

Thank you."

Any information you could provide would be appreciated!

Thanks so much,

Marli

Marli Postulo ***(she/her)***
Patient and Client Relations Officer | Patient and Client Relations | Corporate Issues and Client Relations
Ministry of Health | PO Box 9639 STN PROV GOVT Victoria, BC V8W 9P1
236-478-1444
I acknowledge my presence as a settler upon the unceded lands of the Coast Salish Territories, specifically of the Songhees First Nation, as I work towards further decolonizing this relationship.

Appendix C: Diagnostic Imaging Modalities and Procedures of the Breast

Screening mammography: an imaging examination (x-ray) of the breast performed to detect unsuspected breast cancer in asymptomatic women. Standard views consisting of a Medial–Lateral Oblique view and a Cranio-Caudal view of both breasts are obtained.[1]

Diagnostic mammography: an imaging examination (x-ray) of the breast performed to evaluate symptomatic women, image findings of concern, or to follow-up from a previous image. Includes additional views to those in screening mammography such as magnification views (for characterization of calcifications) and spot compression views.1

Breast Imaging Reporting and Database System (BI-RADS®) is a standardized classification system (scale 0-6) for radiologists to use to communicate mammogram findings to the family physician. Follow-up recommendations, including which method of sampling is required for the lesion(s) in question, will be suggested by the radiologist.

Table 1. Breast Imaging Reporting and Database System (BI-RADS®) – 4th Edition[2]

Category	Assessment	Finding	Follow-up Recommendation
0	Incomplete	Need additional imaging evaluation and/or prior mammograms for comparison.	Additional imaging and/or obtain prior images for comparison
1	Complete	Negative	Routine screening mammograms
2		Benign finding(s)	Routine screening mammograms
3		Probably benign finding	Follow-up 6-month mammogram
4		Suspicious abnormality	Biopsy should be considered
		Optional subdivisions: *4A: Finding needing intervention with a low suspicion for malignancy* *4B: Lesions with an intermediate suspicion of malignancy* *4C: Findings of moderate concern, but not classic for malignancy*	
5		Highly suggestive of malignancy	Biopsy required
6		Known biopsy-proven malignancy	Appropriate action should be taken

Diagnostic ultrasound: [3] an imaging examination of the breast performed to examine a targeted area for the evaluation of any abnormalities. It may be used as initial diagnostic investigation in women aged ≤ 30 years due to their denser breasts. It may also be performed in conjunction with a mammogram to assist in a diagnose. Ultrasound is useful for characterization of cysts (simple versus complex) and is very accurate for characterizing simple cysts which can then be aspirated if symptomatic. Ultrasound is not considered as an acceptable screening tool for breast cancer. [3, 4]

Core biopsy: a procedure that removes tissue samples from breast lesions using a hollow needle. An image-guided (ultrasound, MRI, stereotactic) core biopsy is the standard of care for the establishment of a histological diagnosis.[5]

Fine Needle Aspiration: a procedure that removes breast tissue samples using a very fine needle from an abnormal area. It is limited to sampling of lymph nodes suspected of metastatic disease or aspiration of symptomatic cysts.

Excisional biopsy: a procedure that removes the entire breast lesion by surgery. It is limited to instances where a core biopsy for diagnosis is not possible for physical reasons or patient preference.

Thermography: an imaging examination that uses infrared cameras to produce images of temperature variations within the breast. There is no scientific evidence to support the use of thermography as a screening or diagnostic tool for breast cancer. Thermography can miss an abnormality that requires further investigation, and has a high false-positive rate which may lead to unnecessary tests.[6] Thermography equipment has not been licensed for breast cancer screening in Canada.[7]

Magnetic Resonance Imaging (MRI):[4] an imaging examination of the breast performed to examine a targeted area for the evaluation of any abnormalities. However, the use of a breast MRI in any specific cancer indication lacks any strong supporting evidence. A breast MRI should only be considered after a mammogram and an ultrasound have been performed. Recommended uses of a breast MRI include screening of women with the *BRCA 1* and/or *BRCA 2* gene and for the evaluation of occult breast cancer. It is also appropriate for the assessment of rupture/integrity/complications of silicone implants. **A breast MRI is not appropriate for screening purposes in the general population**, or determining if the lesion is benign or not. For more information on who should receive a breast MRI, refer to BCCA, www.bccancer.bc.ca.

References

1 American College of Radiology Joint Committee on Breast Imaging. ACR practice guideline for the performance of screening and diagnostic mammography. 2008 (Resolution 24).

2 D'Orsi CJ, Bassett LW, Berg WA, et al. BI-RADS: Mammography, 4th edition. In: D'Orsi CJ, Mendelson EB, Ikeda DM, et al.Breast Imaging Reporting and Data System: ACR BI-RADS – Breast Imaging Atlas, Reston, VA, American College of Radiology, 2003.

3 Meisner A, Fekrazad, MH, Royce, ME. Breast disease: Benign and malignant. Med Clin N Am. 2008; 92:1115-1141.

4 BC Cancer Agency. Cancer management guidelines (Breast). Available from www.bccancer.ca.

5 Schueller G, Schueller-Weidekamm C, Helbich TH. Accuracy of ultrasound-guided, large-core needle breast biopsy. Eur Radiol. 2008; 18:1761-1773.

6 Fitzgerald A, Berentson-Shaw J. Thermography as a screening and diagnostic tool: a systematic review. NZ Med J. 2012; 125:80-91.

7 Health Canada. Mammography. Available from http://hc-sc.gc.ca.

1228081

1350 5th Ave
Prince George BC V2L 3L4

Dear Ms. Shirley Bond:

In response to your question raised in the estimates debate of May 11, 2022, the following material has been prepared.

Topic: Imaging Wait Times and Dense Breast Project Status Update

Minister's Response:

Imaging Wait Times
During the first wave of the pandemic, non-urgent medical imaging services were only postponed between March 19, 2020 to May 14, 2020. In 2020/21, it is estimated that 22,519 MRI exams were lost due to the COVID-19 restrictions that were in place in April and May and a further 16,613 exams due to elongated Infection Prevention and Controls protocols until Fall, for a total of 39,132 MRI exam lost. It is estimated that 29,844 CT exams were lost due to the COVID-19 restrictions that were in place in April and May.

There were no further official postponements, however, some facilities may have been required to postpone exams due to regional circumstances.

As soon as restrictions were lifted, our health authorities ramped up services to move through the backlog. So even with those estimated lost exams in 2020/21, 247,106 MRI exams were performed across the province, which was only 5,421 less MRI exams from 2019/20, and 812,212 CT exams were performed in 2020/21, which was 6,628 more CT exams from 2019/20.

This year (2021/22), the highest number of MRI and CT exams were performed in the province's history. In total, 296,211 MRI exams and 901,256 CT exams, which are 20% and 11% increase from the previous year.

	2019/20	2020/21			2021/22		
	Exams Performed	Estimated Exam loss	Exams Performed	Difference from 2019/20	Exams Performed	Difference from 2020/21	Difference from 2016/17
MRI	252,527	39,132	247,106	-5,421 (-2%)	296,211	+49,105 (+20%)	+120,504 (+69%)
CT	805,584	29,844	812,212	+6,628 (+1%)	901,256	+89,044 (+11%)	+206,008 (+30%)

The Ministry of Health collects wait times for completed outpatient MRI and CT exams. This

year (2021/22), the MRI wait time for the 90th percentile was 128 days. This means nine out of ten people waited 128 days or less for their MRI outpatient exam. This is a decrease of 60 days compared to last year's 188 days. Nationally, according to Canadian Institute for Health Information, B.C. is ranked 2nd out of the 7 reporting provinces at 133 days, compared to Canada's 147.

For CT, this year's 90th percentile wait time was 101 days. This means nine out of ten people waited 101 days or less for their CT outpatient exam. This is a decrease of 42 days compared last year's 143 days. Nationally, according to Canadian Institute for Health Information, B.C. is ranked 3rd out of the 7 reporting provinces at 93 days, compared to Canada's 66.

	2019/20	2020/21		2021/22		
	90th Percentile	**90th Percentile**	**Difference from 2019/20**	**90th Percentile**	**Difference from 2020/21**	**Difference from 2016/17**
MRI	148	188	+40 days	128	-60 days	-145 days
CT	106	143	+37 days	101	-42 days	+11 days

As noted, the Ministry of Health does not collect ultrasound wait times. However, wait times for non-emergency ultrasound exams have been an issue across the province for several years. Therefore, since December 2012, applications for new, expanded or relocated outpatient ultrasound facilities have been under a Medical Services Commission (MSC) moratorium. The ultrasound moratorium has been extended five times due to the significant and ongoing shortage of sonographers in the province and is currently set to expire on to June 1, 2022. The key factor impacting ultrasound wait times is the long-standing provincial shortage of diagnostic ultrasound technologists (sonographers). This is why we have worked hard at building new sonographer training programs and expanding the number of education seats of existing programs are expected to double annual number of sonography graduates in B.C., from 40 graduates in 2020, to 80 in 2023.

Dense Breast Project Status Update

Last year, I mentioned there was work underway on building access to breast ultrasounds. The working group was formed in Spring 2021 to support development of (1) evidence-based clinical guidance and (2) strategies to increase access to ultrasounds for individuals with dense breasts.

After several working group meetings, consensus was not reached by the clinical experts in phase 1 on which patients should receive supplemental breast ultrasounds based on available evidence. Further forthcoming evidence will inform the work of phase 1 and 2, including a Health Technology Assessment on different imaging modalities for supplemental testing of dense breasts from Ontario (Fall 2022) and the Japan Strategic Anti-Cancer Randomized Trial – the only randomized controlled trial examining supplemental ultrasound testing in detecting early breast cancers. The work is on hold until this evidence becomes available.

However, since December 2018, the Medical Services Plan expanded the breast ultrasound fee item's scope to include breast ultrasound for screening purposes for individuals with dense breasts, when requested by a primary care provider who feels that their patient's situation warrants further investigation. As noted above, there are known wait time issues with non-emergency ultrasound exams, which include breast screening ultrasounds. As a result, the Ministry of Health is actively looking at strategies to increase access to breast ultrasound exams until this evidence becomes available. This includes building more capacity through upscaling more technologists.

Yours truly,

Adrian Dix
Minister

MEETING MATERIAL

Cliff #: 1241402

PREPARED FOR: Honourable Adrian Dix, Minister of Health, in preparation for a meeting with the British Columbia Radiological Society (BCRS), scheduled for November 1, 2022, from 4:00 - 4:30 pm

TITLE: Minister of Health meeting with BCRS

MEETING REQUEST/ISSUE: Meeting was requested by Dr. Charlotte Yong-Hing, BCRS President and Breast Radiologist, via letters dated September 26th and October 13th. Other attendees include: Bob Raucher, BCRS Executive Director (outgoing,s.22
s.22 and Ken Ostertag, BCRS Executive Director (incoming).

Key issues BCRS intends to discuss at the meeting are:

1. Critical shortage of medical imaging technologists
2. Aging medical imaging equipment and needing net-new equipment
3. Long wait times for breast imaging
4. Community imaging clinics needing emergency overhead support

SHOULD MINISTRY STAFF ATTEND THIS MEETING: Yes – ADM, Hospital and Provincial Health Services Division, if not available ADM, Health Sector Workforce and Beneficiary Services

BACKGROUND: BCRS is a non-profit organization that represents the interests of radiologists and patients to advance the art and science of radiology within the province. The key issues that are being raised are not unique to BC[1], with significant work already underway to address some of these issues within the province. Some highlights include:

1. Health Human Resources:
    - In September 2022, the Province launched the Health Human Resources Strategy, to optimize the health system, expand training and further improve recruitment and retention.
    - Work is underway to increase training opportunities to increase the supply of imaging technologists.
    - To increase the supply of sonographers, several strategies have been established, including:
        - Increasing the number of education seats – sonography graduates in BC will double to 80 by 2023 as a result of the new programs and seat expansions.

[1] As noted in national level reports (both financially supported by the Canadian Association of Radiologists, including 1) The Conference Board of Canada. Medical Imaging Equipment in Canada, 2022, Link: Medical Imaging Equipment in Canada 2022: Trends, Challenges, and Opportunities (conferenceboard.ca) and 2) Canadian Association of Radiologists. Canadians Need Better Access to Medical Imaging: Addressing the Diagnostic Backlog, 2022, link: CAR-PreBudgetSubmission-2023-FINAL.pdf

    - Increasing the number of FTEs within Health Authorities. From 2017 to 2021, 121 FTE Sonographers were added to (21.5% growth), increasing the workforce from 386 FTEs in 2017 to 506 FTEs in 2021.
- To increase the supply of MRI technologists, several strategies have been established, including:
    - Developing a new direct-entry diploma program at B.C. Institute of Technology (BCIT). The new BCIT MRI direct-entry diploma will be a full-time 2-year program begin in January 2023;
    - Establishing an MRI Technologist Bursary Program (Interim until the First-discipline program is established). This program is to encourage more MRI technologist students currently enrolled to enter the workforce sooner by providing supports for them to graduate earlier. Since the bursary program was first offered in March 2022, 29 students have taken advantage of the opportunity to complete their MRI training in an accelerated timeframe. This includes 16 students in the Spring term, and 13 students in the Fall term.

2. Equipment:
    - Since August 2017, 17 net-new MRI units have been operationalized, bringing the provincial total to 42.
    - Since 2016/17, 5 net-new CT units have been operationalized, bringing the provincial total to 68.
3. Breast Imaging:
    - In 2020, the BC government promised British Columbians a new 10-year Provincial Cancer Action Plan.
    - The Ministry has been working closely with BC Cancer to develop the Plan which will help address ongoing care challenges now and into the future, which includes increasing access and reducing wait times for breast imaging.

Breast Biopsy

- Medical Imaging facilities are encouraged to provide same-day breast imaging and ultrasound-guided biopsy procedures, to reduce the time between an abnormal mammogram or identification of symptoms, and definitive diagnosis. Same day, one-stop services provide the best care for breast health patients and will help to reduce wait times for patients to get a clear diagnosis.
- Key factors impacting wait times for image-guided biopsies are:
    - Increased demand for all breast imaging services due to population growth and expansions of what is considered clinical standard of care,
    - Technologist shortage, especially those competent in breast imaging,
    - Low number of radiologists who have specialized in breast imaging,
    - Barriers within the Medical Service Plan (MSP) billing rules.
- To overcome some of the MSP barriers, in 2018, the Ministry changed the billing rules to allow billing MSP for a second ultrasound if used for the biopsy on the same day.

Tomosynthesis

- Digital tomosynthesis is a different modality than ultrasound to image breasts.
- It is a three-dimensional (3-D) imaging technique in which an X-ray tube moves along a limited angle arc and produces 2-D projections of the breast. From these 2-D projections, a 3-D volume of the breast is reconstructed.
- It can be used for screening and diagnostic purposes for breast cancer.
- Currently, the main screening modality for breast cancer is mammography, which produces only 2-D images and may hamper interpretation of results in cases of overlapping tissues and normal dense structures in the breast.
- The Ministry has received the new fee item application for tomosynthesis with proposed funding from the New Fee Item Fund (NFIF). Unfortunately, the NFIF under the 2014 and 2019 Physician Master Agreements has been exhausted. Following the establishment of the 2022 Physician Master Agreement and associated funding, applications for new fee items will be reviewed in order of date received, including the application for tomosynthesis. In absence of a new fee item code, physicians currently performing this service can utilize the existing fee codes for mammography and/or breast sonogram.

Supplementary Screening for Dense Breasts

- It is also anticipated that BCRS may raise supplementary screening for dense breasts.
- Screening breast ultrasounds are available to patients with dense breasts, when requested by a primary care provider who feels their patient's situation warrants further investigation. These are different than diagnostic ultrasounds as there are no symptoms.
- This change was made to MSP in December 2018, after BC became the first province in Canada to provide breast density scores to patients and their primary care provider following a screening mammogram in October 2018.
- A working group was formed in Spring 2021 to support development of
  (1) evidence-based clinical guidance, and
  (2) strategies to increase access to screening ultrasounds for individuals with dense breasts.
- After several working group meetings, consensus was not reached by the clinical experts in phase 1 on which patients should receive supplemental breast ultrasounds based on available evidence.
- This work was put on hold until further evidence becomes available, which Dr Yong-Hing does not agree with. Dr. Yong-Hing was a member of the working group.
- While the working group could not reach consensus on clinical guidance, the Ministry is actively looking at options to support strategies to increase access to breast ultrasound services within the province. This includes:
  - Supporting more facilities providing this service by creating a new MSP fee item for screening breast ultrasound. This was in response to concerns raised by radiologists that the current fee amount does not cover their costs to perform the screening exam. This is under review by MSP.
  - Building capacity by increasing the number technologists with the required specialized breast ultrasound training.

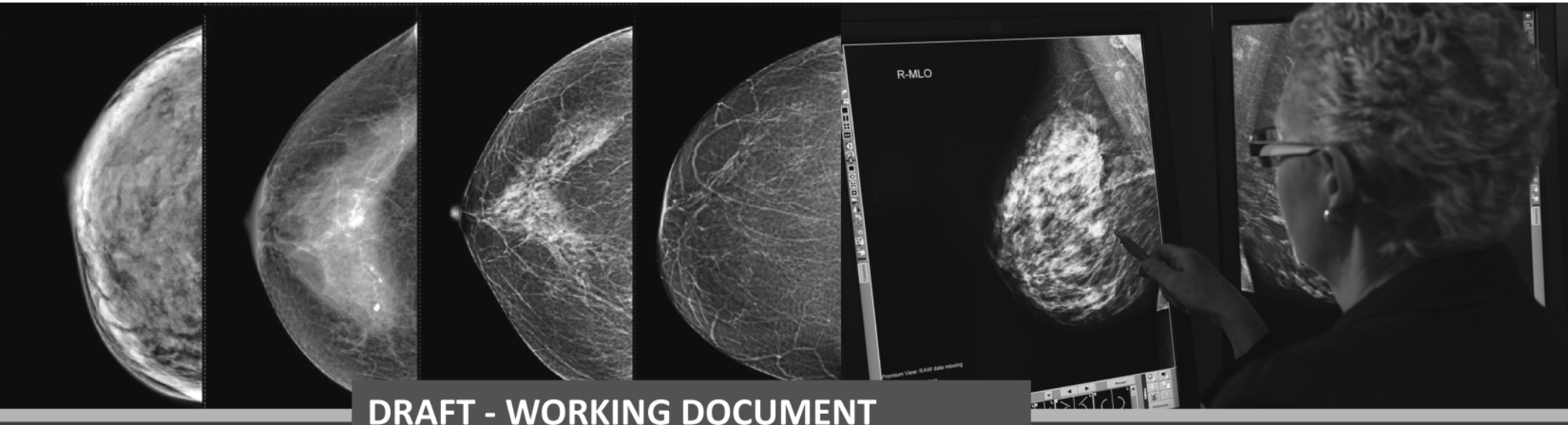
FINANCIAL IMPLICATIONS: No specific financial amount is being requested. However, the solutions BCRS are suggesting do have significant financial implications with varying amounts.

ADVICE:

- We value the work of radiologists and the BCRS in helping to diagnose and care for patients across BC.
- We appreciate the BCRS sharing its key areas to be addressed to continue to support access to medical imaging and note that progress is being made in several areas.
- We encourage the BCRS to continue to work with the Ministry and health authorities to continue to advance medical imaging in the province.

JOINT MINISTER MEETING: N
IF SO, CAN THIS MATERIAL BE SHARED: N/A

Program ED/Branch/Division: Medical Imaging Strategy, Hospital and Provincial Health Services Division
Date: October 27, 2022



DRAFT - WORKING DOCUMENT

Breast Imaging Services – Access and Wait Times

February 2023

BRITISH COLUMBIA | Ministry of Health

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DRAFT - WORKING DOCUMENT

1. Breast Biopsy

DRAFT - WORKING DOCUMENT

- Breast imaging often refers to mammography, but includes other modalities (e.g., ultrasound, MRI)
- Breast imaging is often used to detect breast cancer, but is also required to evaluate other breast conditions (e.g., benign tumours, cysts, mastalgia)
- ~3,400 patients are diagnosed with breast cancer annually, with ~1,400 cancers found through the screening program.
- A breast cancer diagnose is often confirmed from pathology testing of breast tissue sample retrieved from a biopsy (Bx).
- Breast Bx can be performed using fine needle aspiration (FNA), core (standard of care), or surgically removed.
- The number of core breast Bx performed has increased by +1,778 (17%) from 5 years ago.
- ~12,000+ core breast Bx are performed annually, two patient streams:
  - Screening (Sx) = ~33% of all core bx
  - Diagnostic (Dx) = ~67% of all core bx

Wait Times – Sx Patient Stream

DRAFT - WORKING DOCUMENT

Data Source:

- WTs are collected by BC Cancer in a standardized manner year over year, but only represent around 33% of all biopsies.

Status:

- WTs were decreasing until 2020 but have been increasing since.
- The median wait time is 7.3 weeks with 90% receiving (P90) their bx in 17.6 weeks.
- The longest wait times are in VCHA and FHA.

Target:

- 90% of women should receive resolution of an abnormal screen:
  - within 5 weeks for those not requiring a Bx; and
  - within 7 weeks for those requiring a Bx.
- This national target was developed by Canadian Partnership Against Cancer (CPAC) and used by BC Cancer.

BC's Median wait times and 90th percentile, past 5 calendar years

BC Sx Program	2016	2017	2018	2019	2020	2021	2022 Q1
# Sx Patients +Bx	3,829	3,759	3,806	3,606	2,461	3,513	1,010
Median (weeks)	6.0	5.7	5.4	5.1	5.0	6.3	7.3
P90 (weeks)	15.4	15.4	14.4	14.3	13.7	17.7	17.6

NOTE: Includes MSP paid services for biopsy for needle core via stereotactic or ultrasound guided. Does not include Fine needle aspirations.

Median wait times and 90th percentile by geographic region

2022 Q1	In-Target	Median	P90
IHA	63%	5.6	14.1
FHA	29%	9.6	18.4
VCHA	50%	6.7	21.1
VIHA	88%	3.4	8.3
NHA	90%	2.3	5.1
MOBILE	27%	8.7	18.4
BC - TOTAL	47%	7.3	17.6

NOTES: 1) Only includes data from 2022 Q1 (Jan 1 – Mar 31), which are the most recent and just released numbers from BC Cancer. 2) Based on geographic regions, so includes community imaging clinics that are included the HA geographic region. BC Women's is included in VCHA.

Wait Times – Dx Patient Stream

DRAFT - WORKING DOCUMENT

Data Source:

- WTs are collected individually at a site level in a non-standardized manner, making them hard to report and compare.

Status:

- The longest wait times are in VCHA and FHA depending on site.
- IHA and VIHA reporting wait time between 1-4 weeks depending on site.
- NHA did not submit any wait times.

Benchmarks:

- Priority Level 2 (**≤ 7 days**) = >95% risk of malignancy (BI-RADS 5)
- Priority Level 3 (**≤ 30 days**) = 2 – 94% risk of malignancy (BI-RADS 4A, 4B, 4C)
- These were developed by Canadian Association of Radiologists (CAR) and Canadian Society of Breast Imaging (CSBI).

VCHA's + FHA's Estimated Wait Times

VPP US and Stereotactic Biopsy Attended, Waiting and Estimated Prospective Wait Times				
Site Prefix	BX Attended	Backlog Count	Ratio	Estimated Wait Time (Weeks)
BCC VA BC Cancer Vancouver Centre	40	269	6.73	26.90
BCW BC Womens Hospital	34	84	2.47	9.88
LGH Lions Gate Hospital	58	13	0.22	0.90
MSJ Mount Saint Joseph Hospital	35	24	0.69	2.74
SSH Sechelt Shishalh Hospital	7	0	0.00	0.00
RH Richmond Hospital	34	4	0.12	0.47
VPP Total	**208**	**394**	**1.89**	**7.58**

FHA US and Stereotactic Biopsy Attended, Waiting and Estimated Prospective Wait Times				
Site Prefix	BX Attended	Backlog Count	BX Ratio	Estimated Waits (Weeks)
AB Abbotsford Regional Hospital	55	95	1.70	6.88
BH Burnaby Hospital	18	3	0.20	0.65
CG Chilliwack General Hospital	15	22	1.50	5.83
DH Dlta Hospital	6	3	0.50	1.88
LM Langley Memorial Hospital	5	16	3.20	12.8
PA Peace Arch Hospital	13	10	0.80	3.13
RC Royal Columbian Hospital	110	182	1.70	6.65
RM Ridge Meadows Hospital	23	7	0.30	1.22
SU Jim Pattison Outpatient Centre	158	227	1.40	5.76
FHA Total	**403**	**565**	**1.40**	**5.61**
LMMI Total	**611**	**959**	**1.57**	**6.28**

NOTE: Bx attended is the average number completed procedures for each period from each site between FY 22/23 P01 to P10.

3. Fee Items

DRAFT - WORKING DOCUMENT

- Current fee items for outpatient breast imaging services are:

Billing Fees				Amount ($)
Diagnostic Radiology	Mammography	08610	Unilateral	104.11
		08611	Bilateral	145.91
	Incision	70041	Fine needle aspiration of solid or cystic lesion - operation only	48.20
		70042	Each additional cyst or lesion (maximum of 3) - operation only	12.07
	Stereotactic or ultrasound guided needle biopsy	70472	1 to 5 core samples - operation only	90.89
		70473	6 to 10 core samples - operation only	128.33
	Post biopsy marker	83045	Post biopsy radiological marker (clip) placement	150.00
Diagnostic Ultrasound	Breast Sonogram	86047	Unilateral	70.63
		86048	Additional side	35.62
Radiology	Screening Mammography			15.38*
Magnetic Resonance	MRI			159.50*

- * denotes Non-MSP fee items - therefore only includes professional fees. Screening mammos fees are paid via BC Cancer's Breast Screening Program and MRI fees are paid by the health authorities to the radiologists.
- All others are MSP fee items which includes both professional (60%) and technical fees (40%).

3. HHR - MI Technologists

DRAFT - WORKING DOCUMENT

CIHI's Health Care Providers Data

Health Profession	Year	British Columbia		Canada	
		Count	Per 100,000 pop	Count	Per 100,000 pop
Medical radiation technologists	2016	1,896*	39.0*	-	-
	2017	2,105*	42.8*	21,205	58.0
	2018	2,128*	42.6*	25,033	67.5
	2019	2,068*	40.6*	25,451	67.7
	2020	2,089*	40.6*	25,525	67.2
	2021	1,838*	35.2*	25,752	67.3

Source: Canadian Institute for Health Information (CIHI). Canada's Health Care Providers, 2016 to 2021 — Data Tables.

NOTES: 1) * Counts may be understated due to the non-regulatory status of the profession. Please use with caution. 2) Does not include sonographers.

- CIHI reports a rate of 35.2 MRTs /100,000 for BC, which is lower than Canada's rate of 67.3.
- To reach Canada's rate, BC would need additional 1,370 MRTs.

MI Tech Actions

DRAFT - WORKING DOCUMENT

BCRS Request: Recruitment, retention and training incentives to expand the number of medical imaging technologists in BC.

Actions Completed:

- **EDUCATION MODELS:** Launched in January 2023 the **new direct-entry MRI technologist training program** at BCIT that will ensure a steadier supply of graduates. This new MRI program will no longer require an existing medical imaging certification, so recruitment of high school graduates can replace recruitment of other medical imaging staff with roles in X-ray, nuclear medicine, radiation therapy, or sonography.
- **BURSARY PROGRAMS:** The MRI **Technologist Bursary Program** that started in Spring 2022 provides tuition and stipend funding to BCIT students who are health authority employees. The Ministry provided $2.5M in funding for this bursary, which was designed to support students to complete the part-time, self-paced program at BCIT in an accelerated timeframe.
- **SEAT EXPANSION:** Doubled the total number of annual diagnostic medical sonography seats in BC, from 40 to 80, since 2019. **Sonography seat expansions** include more seats offered at BCIT, and net-new programs at the College of New Caledonia in Prince George and Camosun College in Victoria.
- **EDUCATION MODELS:** The **new sonography teaching clinic**, operated by Island Health on the Camosun Interurban campus, is now operational. This is the first of its kind in Canada, offering students greater opportunity for clinical experiences throughout their program, while also increasing ultrasound services in the South Island region.
- **EDUCATION MODELS:** BCIT is now offering 1-part of the breast microcredentials curriculum, Breast Sonography Theory. The Breast Sonography Clinical is forthcoming.

Actions Underway *[under the BC's Health Human Resources Strategy]***:**

- New bursary programs designed to increase student enrollment and public sector recruitment are in development.
- Developing provincial peer support and mentoring programs, intended to retain current healthcare providers and recruit out-of-province and international care providers by easing transition to practice in BC.
- Strengthening clinical practice leader and clinical educator support to decrease the number of direct reports, support quality practice and learning environments, improve team morale and decrease burnout.
- Attracting more internationally trained healthcare workers through improvements to the credential recognition process and an expansion of the Career Paths for Skilled Immigrants Program.
- Implementing a New Graduate Transition Program to better support new healthcare workers in their new roles and transition to practice.

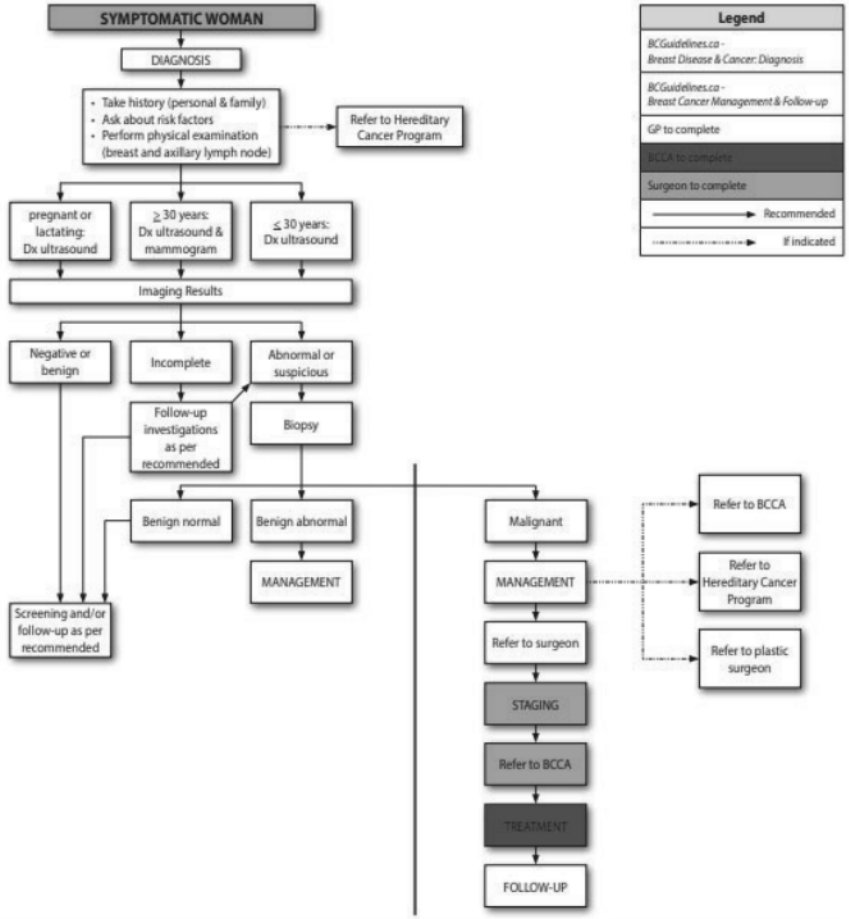
REFERENCE SLIDES

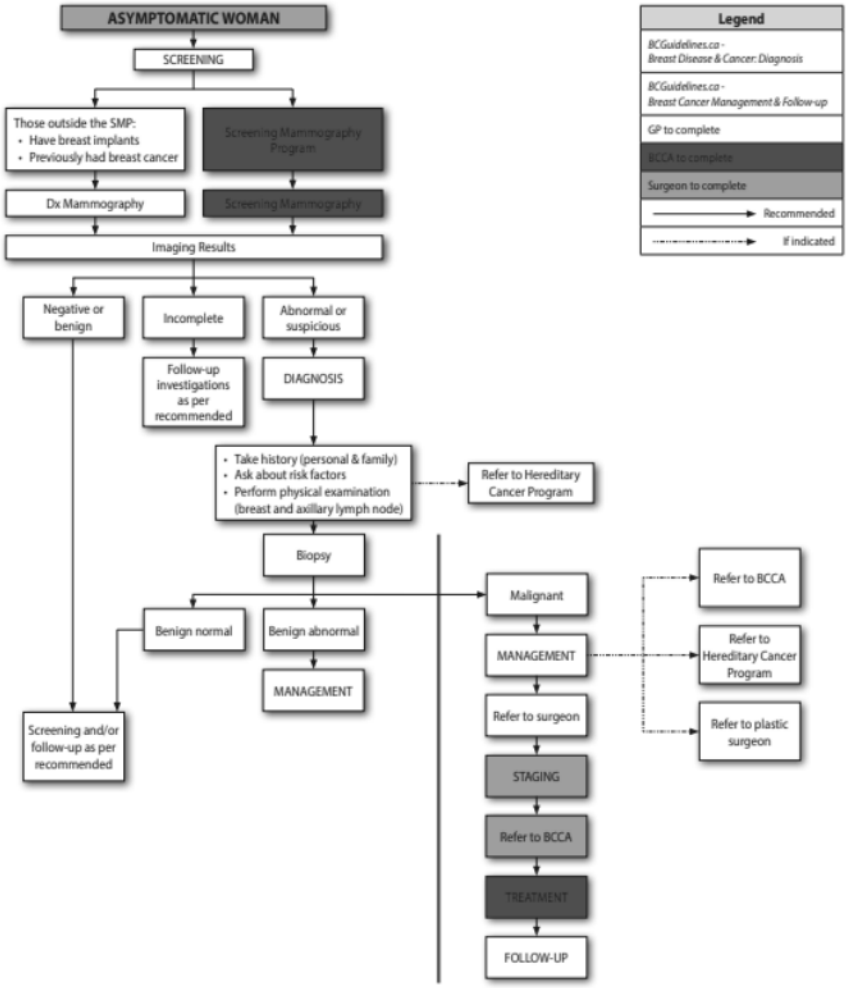
BRITISH COLUMBIA | Ministry of Health

Patient Clinical Pathways

BCGuidelines.ca

Appendix A: Algorithms of Breast Cancer & Disease Guidelines





Breast Sx Program

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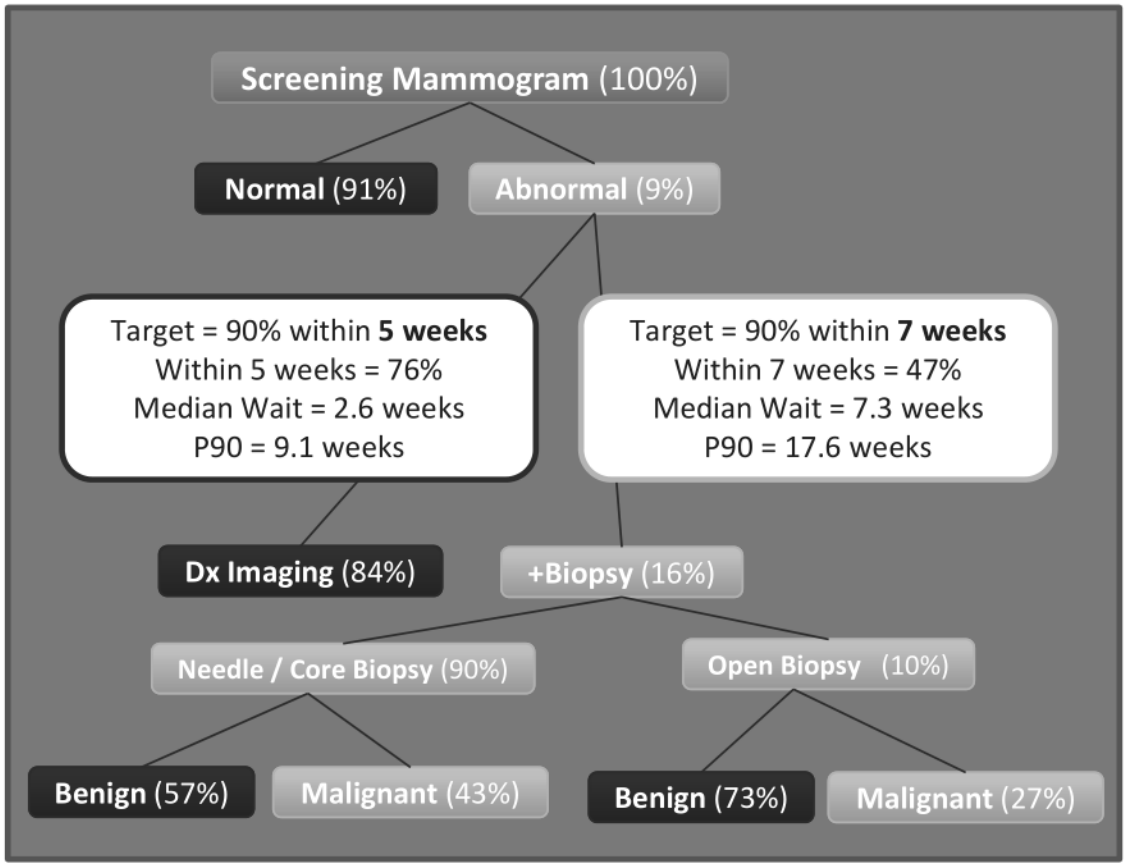
2022 Q1	In-Target	Median	P90
IHA	80%	2.3	7.3
FHA	73%	2.4	12.9
VCHA	73%	2.6	12.0
VIHA	92%	2.0	4.1
NHA	87%	0.9	6.1
MOBILE	56%	4.6	8.0
BC - TOTAL	76%	2.6	9.1



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Data notes: 1) Only includes data from 2022 Q1 (Jan 1 – Mar 31), which are the most recent and just released numbers from BC Cancer. 2) Only includes bx from Breast Screening Program. 3) Based on geographic regions, so includes community imaging clinics that are included the HA geographic region. BC Women's is included in VCHA.

Breast Imaging Services - Billing Fees

Billing Fees				Amount ($)
Diagnostic Radiology	Mammography	08610	Unilateral	104.11
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* denotes Non-MSP fee items - therefore only includes professional fees. All others are MSP fee items which includes both professional (60%) and technical fees (40%).

Definitions of Breast Imaging Services

Term		Definition
Mammography (Mammogram)		An x-ray examination of the breast. Mammography enable detections of breast cancers, benign tumours, and other breast diseases. Mammography can be performed for Screening purposes: on an asymptomatic person, images of all four quadrants of both breasts are taken Diagnostic purposes: on a symptomatic person or follow-up from an abnormal screening mammogram, images of a specific area of concern within the breast(s) to evaluate findings of concern, usually with magnified views.
BI-RADS® - Breast Imaging Reporting and Database System		A standardized classification system (scale 0-6) radiologists can use to communicate mammogram findings and follow-up recommendations to the referring practitioner. There is also a letter scale (A-D) for comparing dense (fibrous) to non-dense (fatty) tissue, with the C and D categories referred to as dense breasts.
Breast Ultrasound	Screening	An ultrasound exam an asymptomatic person receives of all four quadrants of both breasts to detect abnormalities (i.e., breast cancer). It is available to people with dense breasts when requested by a primary care provider who feels the situation warrants further investigation, generally following mammography.
	Diagnostic	A sound wave-based imaging exam done on a symptomatic person to evaluate any abnormalities in a specified area, sometimes in addition to mammography.
Biopsy	Ultrasound-guided	Use of ultrasound imaging to guide removal of a tissue sample from a specific area of concern for further pathology testing.
	Stereotactic	Use of x-ray (mammography) imaging to guide removal of a tissue sample from a specific area of concern for further pathology testing.
	MRI-guided	Use of Magnetic Resonance Imaging (MRI) to guide removal of a tissue sample from a specific area of concern for further pathology testing.
	Excisional	Surgical removal of the entire area of breast abnormality for further pathology testing.
Breast MRI		An MRI to examine a specified area of the breast to evaluate any abnormalities.

Screening Benchmarks Across Different Jurisdictions

Country / Region	Screen to Notification of Screen Result	Abnormal Screen to First Diagnostic Assessment	Other
Canada	≥ 90% within **2 weeks**	≥ 90% within **3 weeks**	**Abnormal Screen to Definitive Diagnosis** ≥ 90% within **5 weeks** if no tissue biopsy* performed ≥ 90% within **7 weeks** if tissue biopsy* performed. (*does not include fine needle aspiration)
Europe	90% screening mammography and result within **≤ 10 working days** (age 50-69) (acceptable level); (**≤ 5 working days** for symptomatic mammography)	90% result of screening mammography or diagnostic mammogram and offered assessment within **≤ 5 working days** (age 50-69) (acceptable level)	**Assessment to Issuing of Results** 90% within **≤ 5 working days** (age 50-69) (acceptable level)
United Kingdom	≥ 90% are sent their screening results within **2 weeks** (age 50-70) (minimum standard)	≥ 90% attend an assessment centre within **3 weeks** of their screening mammogram (age 50-70) (minimum standard);	**Decision to Refer to Surgeon to Surgical Assessment** ≥ 90% of women have a time interval of **≤ 1 week** (age 50-70) (minimum standard).
Australia	≥ 90% receive a letter informing them of their results within **14 days of screening** (age 50-69)	≥ 90% women requiring assessment attend an assessment visit within **28 days** of their screening visit(age 50-69)	**First Assessment to Last Assessment** ≥ 95% women attending assessment complete all assessment within a **2 week period** (age 50-69)
New Zealand	> 90–95% of women can be notified within **10 working days** of the screening mammogram (age 50-69)	90% of women are offered an assessment appointment within **15 working days** of their final screening mammogram (age 50-69)	

Technologist Education + Certification Breakdown

BRITISH COLUMBIA | Ministry of Health

Technologists	Needed for	Education + Certification	Additional Training + Certification Needed for
Sonographer	Ultrasound – cardiac, vascular + general	First discipline education + Sonography Canada certification	• Breast ultrasound = further theory + clinical training *(+ American Registry for Diagnostic Medical Sonography (ARDMS) certification for mammo techs)*
Medical Radiation Technologist (MR Tech)	X-ray, mammography, bone densitometry, CT, interventional radiology / fluoroscopy	First discipline education + CAMRT certification	• Mammography (Screening) = further theory + clinical training + additional CAMRT certification • Mammography (Diagnostic) = further theory + clinical training + additional CAMRT certification • Breast ultrasound = further theory + clinical training + certification • Bone Densitometry = further theory + clinical training + International Society for Clinical Densitometry certification • CT = further theory + clinical training + additional CAMRT certification • Interventional radiology / fluoroscopy = further theory + clinical training + additional CAMRT certification
Magnetic Resonance Imaging Technologist (MRI Tech)	MRI	Second discipline (current) First discipline (coming) + CAMRT certification	• PET/MRI = further theory (Michener Institute of Education course) + Nuclear Medicine Technology Certification Board certification
Nuclear Medicine Technologist (Nuc Med Tech)	Various radiation detectors (e.g., gamma camera, SPECT)	First discipline education + CAMRT certification	• PET/CT = further theory + clinical training

From:	Michelle Di Tomaso
To:	Brown, Sierra HLTH:EX
Subject:	Fwd: Fw:A message from Michelle from Dense Breasts Canada Ontario Health: Supplemental Screening as an Adjunct to Mammography for Breast Cancer Screening in People With Dense Breasts- public comment period
Date:	March 19, 2023 9:24:48 AM

---------- Forwarded message ---------
From: **Michelle Di Tomaso** <michelleditomaso70@gmail.com>
Date: Sun, Mar 19, 2023 at 9:13 AM
Subject: Fwd: Fw:A message from Michelle from Dense Breasts Canada Ontario Health: Supplemental Screening as an Adjunct to Mammography for Breast Cancer Screening in People With Dense Breasts- public comment period
To: Dix.MLA, Adrian <adrian.dix.mla@leg.bc.ca>, <HLTH.Minister@gov.bc.ca>, Rudden, Carolyn HLTH:EX <Carolyn.Rudden@gov.bc.ca>, SMP Medical Director <SMPMedicalDirector@bccancer.bc.ca>, <hlth.PatientandClientRelations@gov.bc.ca>, <premier@gov.bc.ca>

Just keeping you in the loop with Ontario…:)

---------- Forwarded message ---------
From: **Jennie Dale** <jenniedale@rogers.com>
Date: Thu, Mar 16, 2023 at 8:29 AM
Subject: Fw: Ontario Health: Supplemental Screening as an Adjunct to Mammography for Breast Cancer Screening in People With Dense Breasts- public comment period
To: Michelle Di Tomaso <michelleditomaso70@gmail.com>

Sent from Rogers Yahoo Mail for iPhone

Begin forwarded message:

On Thursday, March 16, 2023, 11:27 AM, Sikich, Nancy <nancy.sikich@ontariohealth.ca> wrote:

> Dear Jennie,
>
> I'm writing to share that today, Ontario Health has posted for public comment the health technology assessment and draft funding recommendation about:

Supplemental Screening as an Adjunct to Mammography for Breast Cancer Screening in People With Dense Breasts. Comments can be shared with Ontario Health via an online portal until April 6, 2023.

Best wishes,

Nancy

Nancy Sikich

Director, Health Technology Assessment

Clinical Institutes and Quality Portfolios

ontariohealth.ca

T 647-953-1279

Provincial Health Services Authority

CONFIDENTIAL ISSUE NOTE

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April 4, 2023 – Diagnostic delays for breast cancer screening

Summary:

Patients who require a diagnostic mammogram following an abnormal breast screening mammogram results are facing longer-than-usual waits at some Lower Mainland facilities.

These patients have been referred through the BC Cancer Breast Screening Fast Track referral process, an initiative aimed at reducing the time between an abnormal mammogram result and further testing. It is BC Breast Cancer Screening program policy that women will receive a call for additional imaging within one week and have their follow-up appointment within five weeks of the call to book.

As of June 2022, the B.C. median (50th percentile) wait time for a completed diagnostic exam for a BC Cancer Screening Program Fast Track Patient was 2.9 weeks. However, at the 90 percentile, the wait was 9.9 weeks for this exam and some Fast Track patients waited up to 35 weeks for their imaging to be completed at BC Women's Hospital.

Staff shortages at medical imaging facilities, including technologists, radiologists and support positions, together with an increase of patients returning to the system for cancer screening and diagnostic investigation have resulted in longer wait times than screening guidelines recommend.

PHSA, BC Cancer and Lower Mainland Medical Imaging continue to see a significant increase in public attention on wait times for diagnostic imaging via direct complaints to providers and staff, PCQO complaints and media requests.

Key messages

- We appreciate the stress that individuals may experience when waiting for important diagnostic tests, especially when the wait is longer than anticipated.
- Like so many areas of health care, Lower Mainland Medical Imaging is managing staffing shortages across the service, including technologists, radiologists and support positions.
- Meanwhile, demand for the service has returned to pre-pandemic levels. As a result, sites are experiencing longer wait times for appointments and results:
    - The national benchmark is for 90 per cent of people to have a definitive diagnosis within five weeks if no tissue biopsy is performed and within seven weeks if a tissue biopsy is performed.
- BC Cancer and Lower Mainland Medical Imaging, both part of PHSA are committed to reducing wait times for patients needing diagnostic mammograms and are exploring a number of strategies including new training opportunities for technologists, improving internal processes, offering overtime and looking at staffing options to ensure timely appointments for patients.

Background

- Approximately 10 per cent of women require additional testing after their screening mammogram. For these individuals, the BC Cancer Breast Screening Fast Track referral process generates a referral for additional diagnostic testing and the diagnostic facility is responsible for contacting the patient and arranging for the follow-up testing.
- Lower Mainland Medical Imaging is responsible for providing medical imaging services in hospitals across Fraser Health, Vancouver Coastal Health (VCH), Providence Health Care (PHC) and PHSA. A number of community imaging clinics also provide a large proportion of screening and diagnostic mammograms independently in the Lower Mainland. Diagnostic mammograms are delivered at select hospitals and community imaging clinics.
- Diagnostic wait times for Fast Track patients (April 1 to June 30 2022):

HA	Median	90th Percentile	Completed Exams	% Complete within 5 week Benchmark
FHA	3.0 weeks	10 weeks	1,559	76%
VPP	2.9 weeks	15.3 weeks	1,245	71%

- At the start of March 2023, there were at least four technologist postings (3.53 FTE) across VCH, PHSA, PHC and FH in mammography.
    - These four technologist postings represent a loss of up to 340 exams per period, though some losses are mitigated with overtime.
- Lower Mainland Medical Imaging is exploring strategies to address diagnostic imaging backlogs, including:
    - Created a Medical Imaging Sonographer Training program to train Diagnostic Mammography Technologists to perform breast ultrasound
    - Using extra workload and offering overtime
    - Running international recruitment campaigns
    - Employing locum radiologists
    - Exploring use of agency staffing to support current backlog
    - Increased efficiency by making process improvement changes to current clerical processes
    - Reducing the number of screening exams being performed at BCW and redirecting New Symptom Requests to other Medical Imaging facilities within VCH, PHC and PHSA until the backlog reaches the regional average

BC Cancer Breast Screening Program

- About 1 in 8 women will develop breast cancer in her lifetime.
- 43% of cancers diagnosed for BC women 40-79 in 2019 were detected through screening.
- Screening mammograms are considered the international gold standard for detecting breast cancer early. Mammograms can usually find lumps 2 or 3 years before you or your primary care provider can feel them. Research has shown a greater than 25 per cent reduction in deaths from breast cancer among those who regularly screen.
- Women in B.C. can self-refer starting at age 40 for regular screening mammograms. Women between the ages of 50-74 are recommended to screen every two years. Women ages 40-74 with a family history are recommended to screen annually.

- While a family history of breast cancer is cause for a higher-than-average risk, the biggest risk factor for breast cancer is being a woman over 50 years of age. Eighty per cent of breast cancer cases are diagnosed in women 50 years of age or older.
- Women whose screening mammogram results are abnormal usually require a diagnostic mammogram and/or breast ultrasound – they are referred to the associated diagnostic imaging centre through the BC Cancer Screening Fast Track referral process. The patient and provider result letters inform them that the patient will be contacted directly by the diagnostic imaging site for their appointment. The Medical Imaging facility then takes over management of the patient and is responsible for contacting the patient within seven days with their follow-up appointment – this is the screening program target.

Contact Information			
Contact	**Name**	**Title**	**Phone**
Program	Sukhbir Maheem Janette Sam	Director, Medical Imaging Operations Director, Breast Screening Program BC Cancer	Cell: 604-816-5270
Communications	Cassidy Olivier	Director, Communications and Issues Management, PHSA	**Cell:** 604-786-5496 **PHSA Media Line: 778 867 7472**
Spokesperson(s)			**Tel:**
Creation and Revision History			
01/23/23		Stephanie Dunn, Manager, Communications & Engagement, BC Cancer Tanya Colledge, Manager, Communications and Engagement, PHSA	

Hospital and Provincial Heath Services Division

Supplemental Notes – Advice to Minister

Date: April 6, 2023

Topic: Imaging for Breast Cancer

Commitments/Recent Media/Stakeholder Comments

Key Facts, Actions and Results:

Breast Screening Program Key Messages

- Early detection of cancer is critical to increasing the number of people cured and reducing the impact of cancer on the population.
- We know approximately one-third of people diagnosed with breast cancer each year come through the **Breast Screening Program**.
- These individuals who had no signs or symptoms of cancer are now getting treatment sooner due to screening program.
- However, participation rates in the **Breast Screening Program** remain around 50% of those eligible. More needs to be done to increase participation in such screening programs.
- This is why as part of the BC Cancer Plan, we are introducing personalized screening invitations for established screening programs such as the **Breast Screening Program** for high risk and underserved populations.
- BC Cancer **Breast Screening Program** provides free screening mammograms for eligible BC women age 40 and up.
- 2020 was an unusual year for the program due to the need to suspend screening services due to COVID-19 for a 10-week period from March 17, 2020, to May 29, 2020, however, breast screening volumes have returned to pre-COVID levels.
    - Where possible, BC Cancer centres have increased the volume of screening mammography availability to levels greater than pre-pandemic, which includes added additional shifts on evenings and weekends, to provide additional screening appointments.
- There were approximately 262,000 screens completed in 2021, and 254,000 screens in 2022.
- For abnormal mammogram screens from 2021, 90% were diagnosed within 8.3 weeks (without tissue biopsy) and within 17.7 weeks (with tissue biopsy). The benchmark is 5 weeks without biopsy and 7 weeks with biopsy.[1]

[1] Personal Communication with PHSA Communications and BC Cancer, September 23, 2022.

Supplementary Screening for Dense Breasts

- Screening breast ultrasounds are available to patients with dense breasts, when requested by a primary care provider who feels their patient's situation warrants further investigation. These are different than diagnostic ultrasounds as there are no symptoms.
- This change was made to MSP in December 2018, after BC became the first province in Canada to provide breast density scores to patients and their primary care provider following a screening mammogram in October 2018.
- There are known access and wait time issues with screening and non-emergency diagnostic ultrasounds including:
  1. A shortage of all types of sonographers, including those who perform breast imaging exams that require further specialization beyond what regular sonographer certification programs offer.
  2. A limited number of facilities offering breast screening ultrasounds.
- The Ministry of Health is:
  1) closely monitoring other research that is underway, that will help guide best practices for this patient group:
     - Ontario Health Technology Assessment on the value of the different imaging modalities for supplemental testing (expected publish date Spring 2023)[2]; and
     - the Japan Strategic Anti-Cancer Randomized Trial, examining the impact of supplemental ultrasound screening in detecting early breast cancers.
     - emerging technologies, such as the use of contrast-enhanced mammography.
  2) actively looking at building capacity by increasing the number technologists with the required specialized breast ultrasound training. BCIT is building a breast sonography curriculum, with the theory component already in action. Clinical component is still under development.

Breast Biopsy

- Benchmark wait times for breast biopsies are:
  - Priority Level 2 (**≤ 7 days**) = >95% risk of malignancy (BI-RADS 5)
  - Priority Level 3 (**≤ 30 days**) = 2 – 94% risk of malignancy (BI-RADS 4A, 4B, 4C)
- These benchmarks were developed by Canadian Association of Radiologists (CAR) and Canadian Society of Breast Imaging (CSBI).
- Actions underway to increase the number of breast biopsies performed include:
  - BC Cancer – Vancouver Cancer Centre: booking evenings and weekends to have 13 additional biopsy days from Jan-March 2023. This resulted in about 33 more stereo core biopsies plus 6 contrast enhanced mammography cases.
  - Lions Gate Hospital (LGH) – As of March 2023, LGH will start performing stereotactic breast biopsies. It is anticipated that this will result in an additional 200+ biopsies per year.

[2] A draft report was released for public external review, which recommends publicly funding supplemental screening as an adjunct to mammography for people with extremely dense breasts.

- BC Women's – BCWH is adding a new radiologist in June 2023, doing an appointment scheduling review and a capital project is underway to refresh equipment and improve space.

Tomosynthesis

- Digital tomosynthesis is a different modality than ultrasound to image breasts.
- It is a three-dimensional (3-D) imaging technique in which an X-ray tube moves along a limited angle arc and produces 2-D projections of the breast. From these 2-D projections, a 3-D volume of the breast is reconstructed.
- The Ministry has received the new fee item application for tomosynthesis with proposed funding from the New Fee Item Fund (NFIF). Unfortunately, the NFIF under the 2014 and 2019 Physician Master Agreements has been exhausted. With the establishment of the 2022 Physician Master Agreement and associated funding, applications for new fee items will be reviewed in order of date received, including the application for tomosynthesis.

Imaging Health Human Resources

- In September 2022, the Province launched the Health Human Resources Strategy, to optimize the health system, expand training and further improve recruitment and retention.
- Work is underway to increase training opportunities to increase the supply of imaging technologists.
- Actions to date to increase the supply of sonographers:
  - Increasing the number of education seats – sonography graduates in BC will double to 80 by 2023 as a result of the new programs and seat expansions. This includes a new sonography teaching clinic, operated by Island Health on the Camosun Interurban campus, opened in January 2023. This is the first of its kind in Canada, offering students greater opportunity for clinical experiences throughout their program, while also increasing ultrasound services in the South Island region.
  - Increasing the number of FTEs within Health Authorities. From 2017 to 2021, 121 FTE Sonographers were added to (21.5% growth), increasing the workforce from 386 FTEs in 2017 to 506 FTEs in 2021.[3]
- Actions to date to increase the supply of MRI technologists:
  - Developing a new direct-entry diploma program at B.C. Institute of Technology (BCIT). This new MRI program will no longer require an existing medical imaging certification, so recruitment of high school graduates can replace recruitment of medical imaging staff with roles in x-ray, nuclear medicine, radiation therapy or sonography. The new BCIT MRI direct-entry diploma will be a full-time 2-year program began January 2023;

[3] Fact Sheet: Diagnostic Medical Sonography (Allied Health Policy Secretariat), last approved October 2022. Updated numbers not expected until end of April 2023.

- Establishing an MRI Technologist Bursary Program (Interim until the First-discipline program is established). This program is to encourage more MRI technologist students currently enrolled to enter the workforce sooner by providing supports for them to graduate earlier. Since the bursary program was first offered in March 2022, 34 students have taken advantage of the opportunity to complete their MRI training in an accelerated timeframe over three terms.

LEGISLATIVE SESSION – ESTIMATES NOTE

Dense Breast and Supplementary Imaging

Topic: Access issues to supplemental breast ultrasound screening for individuals with dense breasts. Advocacy group 'Dense Breasts Canada' has advocated for supplemental imaging for these individuals.

Key Messaging and Recommended Response:

- **Early detection of cancer is critical to increasing the number of people cured and reducing the impact of cancer on the population.**
- **BC was the first province in Canada to provide breast density scores to individuals and their providers in 2018.**
- **As of December 2018, BC has publicly funded supplemental screening, as an adjunct to mammography, for people with extremely dense breasts when clinically indicated.**
- **Mammography remains the recommended imaging modality for breast cancer screening.**
- **Some individuals with dense breasts may benefit from a supplementary ultrasound to find possible cancerous tumours with a negative mammogram result.**
- **However, there is not enough evidence to include supplemental breast screening ultrasound for individuals with dense breast tissue as a sole risk factor into a population-based screening program.**
- **The Canadian Task Force on Preventive Health Care and the US Preventive Services Task Force do not recommend supplemental breast ultrasound screening based on dense breast tissue alone.**

CURRENT SITUATION

- Dense Breasts Canada has advocated for all individuals who have dense breasts following a screening mammogram (asymptomatic) to have supplementary testing with a screening breast ultrasound.
- Supplemental screening breast ultrasound is an insured medical benefit when requested by a primary care provider for individuals with dense breasts if they feel further investigation is needed. This change was made to Medical Services Plan (MSP) in December 2018, after BC became the first province in Canada to provide breast density scores to individuals and their primary care provider from screening mammograms in October 2018.
- There are known access and wait time issues with screening and non-emergency diagnostic ultrasounds due to:
    1) A shortage of all types of sonographers, including those who perform breast imaging exams that require further specialization beyond what regular sonographer certification programs offer.[1]
    2) A limited number of facilities offering breast screening ultrasounds.

[1] FACT SHEET: Diagnostic Medical Sonography.

- To support further guidance on supplemental screening and access, the Ministry of Health (the Ministry), through the Medical Imaging Advisory Committee initiated a Breast Imaging Services Project in 2021.
- Clinical consensus on which patients should receive supplemental breast ultrasound screening was not reached on this project.
- The Ministry is:
    1) closely monitoring other research that is underway, that will help guide best practices for this patient group:
        - a Health Technology Assessment on the value of the different imaging modalities for supplemental testing from Ontario (expected publish date Spring 2023)[2]; and
        - the Japan Strategic Anti-Cancer Randomized Trial, examining the impact of supplemental ultrasound screening in detecting early breast cancers.
        - emerging technologies, such as the use of contrast-enhanced mammography.
    2) actively looking at building capacity by increasing the number technologists with the required specialized breast ultrasound training. BCIT is building a breast sonography curriculum, with the theory component already in action. Clinical component is still under development.

<u>Breast Density Scores</u>

- Breast density is measured by comparing the amount of fibrous and glandular (dense) to fatty (non-dense) tissue within the breast when a radiologist is assessing a mammogram.
- It is scored by a radiologist on a 4-point letter scale, with the C and D scoring categorized as dense breasts.
- Having dense breasts can have 2 effects:
    1) An increased cancer risk, though breast density is one factor amongst many other well-established risk factors including: sex, age, family history, genetic mutations (e.g., BRCA-1), 2
    2) A reduced ability to detect abnormalities by mammography due to a masking effect of dense tissue.
- In 2019, 34% of participants in BC Cancer's Breast Screening Program scored a C, and 7% a D in breast density. This equates to approximately 109,226 individuals with dense breasts in the BC screening program.[3]
- On October 1, 2018, BC became the first province in Canada to provide breast density assessments to patients and their primary care providers following screening mammogram. Other provinces have started reporting since that time.
- In 2021/22, there were 101,044 unilateral breast ultrasounds performed, and 17,793 of those were bilateral exams.[4] With the addition of supplemental screening ultrasounds as an insured service, and if the 100,000+ patients with a C and D score requested supplementary ultrasound testing, it could result in an increase of 600% from current bilateral ultrasound volumes.

<u>Supplementary Imaging for Individuals with Dense Breasts</u>

- Mammography remains the recommended imaging modality for breast cancer screening.
- Some individuals with dense breasts may benefit from a supplementary ultrasound to find possible cancerous tumours with a negative mammogram result.
- There is not enough evidence to include supplemental breast screening ultrasound for individuals with dense breast tissue as a sole risk factor into a population-based screening program. The

[2] A draft report was released for public external review, which recommends recommends publicly funding supplemental screening as an adjunct to mammography for people with extremely dense breasts.
[3] BC Cancer, BIRADS % Distribution from Discussion Guide: Breast Density, January 2021, page 1, link: http://www.bccancer.bc.ca/screening/Documents/Breast-Density-Discussion-Guide.pdf and Program Participants from BC Cancer Breast Screening 2019 Program Results, September 2020, page 16, link: http://www.bccancer.bc.ca/screening/Documents/Breast-Screening-Program-Report-2019.pdf
[4] MSP Database for 2021/22 for Fee Items #86047 (Breast Sonogram – unilateral) and #86048 (Breast Sonogram – additional side), https://www2.gov.bc.ca/assets/gov/health/practitioner-pro/medical-services-plan/msp_ffs_payment_analysis_20172018_to_20212022.pdf

Canadian Task Force on Preventive Health Care and the US Preventive Services Task Force do not recommend supplemental breast ultrasound screening based on dense breast tissue alone.

Breast Imaging Wait Times

The Ministry does not collect ultrasound wait times for data analysis and reporting from health authorities or community imaging clinics.

FINANCIAL IMPLICATIONS

An increase in screening breast ultrasounds would have an impact on MSP budgets. The amount is unknown at this time as the number of breast ultrasounds performed due to dense breasts is unknown.

KEY BACKGROUND

N/A

LAST UPDATED

The content of this fact sheet is current as of April 6, 2023, as confirmed by Shana Ooms.

APPROVALS

2023 04 08 – Kristy Anderson, Hospital & Provincial Health Services Division
2023 04 13 – Eric Larson obo Martin Wright, Health Sector Information, Analysis & Reporting Division

Hospital and Provincial Heath Services Division

Supplemental Notes – Advice to Minister

Date: April 18, 2023

Topic: Imaging for Breast Cancer – COMPREHENSIVE

Key Words: breast imaging, mammograms, ultrasound, screening, biopsy, dense breasts, radiologists

Key Facts:

Breast Imaging

General

- Breast imaging often refers to mammography, but includes other modalities (e.g., ultrasound, MRI).
- Breast imaging is often used to detect breast cancer, but is also required to evaluate other breast conditions (e.g., benign tumours, cysts, mastalgia).

Breast Cancer - General

General

- 1 in 8 women will be diagnosed with breast cancer in their lifetime.
- This year in BC, 4,455 females are projected to be newly diagnosed with breast cancer.
- Early detection of cancer is critical to increasing the number of people cured and reducing the impact of cancer on the population.
- Approximately one-third of people diagnosed with breast cancer each year come through the Breast Screening Program.

	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	Total
0-19	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	10.0
20-39	170.0	175.0	180.0	180.0	185.0	185.0	190.0	190.0	195.0	195.0	1,820
40-59	1,330	1,330	1,335	1,335	1,335	1,340	1,350	1,365	1,375	1,390	13,475
60-79	2,135	2,210	2,285	2,360	2,425	2,490	2,540	2,565	2,595	2,630	24,220
80+	530.0	545.0	560.0	585.0	615.0	640.0	670.0	715.0	760.0	805.0	6,405
Total	4,160	4,255	4,355	4,455	4,555	4,650	4,740	4,830	4,925	5,015	45,925

Source: Projected New Cancer Diagnoses, BC Cancer Registry, Date Retrieved: 27 Oct 2022, Cancer Statistics Online Dashboard (bccancer.bc.ca)

Breast Screening Program

General

- Screening mammograms are considered the international gold standard for detecting breast cancer early.

- In BC, the Breast Screening Program is led by BC Cancer and provides free screening mammograms for eligible people, age 40 and up who have no signs or symptoms of cancer.
- Screening mammograms are performed at designated community imaging clinics and hospitals, as well by BC Cancer's mobile mammography unit at certain communities.
- In 2021, 261,905 screens were performed in 2021, and 254,663 screens performed in 2022.
- Screening volumes have returned to pre-pandemic levels.
- Participation rates in the Breast Screening Program remain around 50% of those eligible.

Increasing Participation Rates

- More needs to be done to increase participation in such screening programs.
- A noted barrier for potential participants is that they do not have a primary care provider (i.e., unattached patients).
    - Patients must have a have a primary care provider to be part of the screening programs (i.e., breast, colon, cervix, lung). This is a regulatory requirement.
    - Patients who do not have a primary care provider are advised to: 1) call HealthLink BC to speak with a Health Service Navigator to assist finding a Primary Care practitioner accepting new patient, or 2) accessing a walk-in clinics, including virtual care 'walk-in' services.
- Actions taken or underway to increase participation are:
    - Introducing personalized screening invitations for high risk and underserved populations.
    - Launched an online booking tool for those being notified for the routine screening mammogram in August 2021. Since its launch, this online portal has facilitated almost 50% of all breast screening bookings.
    - Forming a provincial group to work on finding ways to improve cancer screening access and follow-up care for unattached patients.

Supplementary Screening for Dense Breasts

Breast Density & Scores

- Breast density is measured by comparing the amount of fibrous and glandular (dense) to fatty (non-dense) tissue within the breast when a radiologist is assessing a mammogram.
- Having dense breasts can have 2 effects:
    1) An increased cancer risk, though breast density is one factor amongst many other well-established risk factors including: sex, age, family history, genetic mutations (e.g., BRCA-1),
    2) Harder to detect abnormalities to a masking effect of dense tissue.
- Breast density is scored by a radiologist using a 4-point letter scale (based Breast Imaging Reporting and Data System (BI-RADS)), with the C and D scoring categorized as dense breasts.

  - C = one or both breasts are composed of a mixture of non-dense (fatty) tissue and dense tissue. ~40% of the female population.
  - D = one or both breasts are composed of almost entirely dense tissue. ~10% of the female population.
- In 2019, 34% of participants in BC Cancer's Breast Screening Program scored a C, and 7% a D in breast density. This equates to approximately 109,226 individuals with dense breasts in the BC screening program.

Advocacy for Supplemental Screening

- Dense Breasts Canada has advocated for all individuals who have dense breasts following a screening mammogram (asymptomatic) to have supplementary screening testing.

Evidence for Supplemental Screening

- Mammography remains the recommended imaging modality for breast cancer screening.
- There is not enough evidence to recommend supplemental breast screening, such as breast ultrasounds, for individuals with dense breast tissue with the sole risk factor.
- The Canadian Task Force on Preventive Health Care and the US Preventive Services Task Force do not recommend supplemental breast ultrasound screening based on dense breast tissue alone.
- The evidence does show that supplemental screening may find additional cancers in individuals with dense breast tissue. Some individuals with dense breasts may benefit from a supplementary ultrasound to find possible cancerous tumours with a negative mammogram result.
- However, breast ultrasound testing can have a high rate of false-positive results. A false positive result is an abnormal test result that turns out to be normal after further follow-up testing.
- The Ministry of Health is closely monitoring other research that is underway, that will help guide best practices for this patient group, such
  - Ontario Health Technology Assessment on the value of the different imaging modalities for supplemental testing (expected publish date Spring 2023)[1]; and
  - the Japan Strategic Anti-Cancer Randomized Trial, examining the impact of supplemental ultrasound screening in detecting early breast cancers.
  - emerging technologies, such as the use of contrast-enhanced mammography.

Access to Supplemental Screening

- In BC, screening breast ultrasounds are available to patients with dense breasts, when requested by a primary care provider who feels their patient's situation warrants further investigation. These are different than diagnostic ultrasounds as there are no symptoms.
- This change was made to MSP in December 2018, after BC became the first province in Canada to provide breast density scores to patients and their primary care provider following a screening mammogram in October 2018.

[1] A draft report was released for public external review, which recommends publicly funding supplemental screening as an adjunct to mammography for people with extremely dense breasts.

- There are known access and wait time issues with screening and non-emergency diagnostic ultrasounds including:
  1. A shortage of all types of sonographers, including those who perform breast imaging exams that require further specialization beyond what regular sonographer certification programs offer.
  2. A limited number of facilities offering breast screening ultrasounds.
- The Ministry of Health is actively looking at building capacity by increasing the number technologists with the required specialized breast ultrasound training. BCIT is building a breast sonography curriculum, with the theory component already in action. Clinical component is still under development.
- Wait times for supplemental screening are not known at this time, as the Ministry does not collect ultrasound wait times for data analysis and reporting from health authorities or community imaging clinics.
- Volumes for supplemental screening are not know at this time, as there is no method to distinguish screening exams from diagnostic ones in the Medical Services Plan database.

Diagnostic Follow-Up to an Abnormal Screen (Fast Track)

- Approximately 10% of screening patients require follow testing as a result of an abnormal screen.
- For these individuals, the BC Cancer's Breast Screening Fast Track referral process generates a referral for additional diagnostic testing (i.e., diagnostic mammogram, diagnostic breast ultrasound) and the diagnostic facility is responsible for contacting the patient and arranging for the follow-up testing.
- The patient and provider result letters informs them that the patient will be contacted directly by the diagnostic imaging site for their appointment.
- These diagnostic facilities can include designated community imaging clinics and health authority facilities.
- For abnormal mammogram screens from 2021, 90% were diagnosed within 8.3 weeks (with further imaging only) and within 17.7 weeks (with tissue biopsy). The benchmark is 5 weeks without biopsy and 7 weeks with biopsy.

Breast Biopsy

General

- A breast cancer diagnose is often confirmed form pathology testing of breast tissue sample retrieved from a biopsy.
- The standard of care is a image-guided core biopsy performed by a radiologist.

Ultrasound-guided	Use of ultrasound imaging to guide removal of a tissue sample from a specific area of concern for further pathology testing.
Stereotactic	Use of x-ray (mammography) imaging to guide removal of a tissue sample from a specific area of concern for further pathology testing.

MRI-guided	Use of Magnetic Resonance Imaging (MRI) to guide removal of a tissue sample from a specific area of concern for further pathology testing.
Excisional	Surgical removal of the entire area of breast abnormality for further pathology testing.

- ~12,000 core breast biopsies are performed annually within the two patient streams:
  - Screening = ~33% of all core biopsies
  - Diagnostic = ~67% of all core biopsies

Screening Patient Stream

Benchmark Wait Times Targets

- 90% of women should receive resolution of an abnormal screen:
  - within 5 weeks for those requiring further imaging; and
  - within 7 weeks for those requiring further imaging and a biopsy.
- This national target was developed by Canadian Partnership Against Cancer (CPAC) and used by BC Cancer.

Wait times

- Wait times for screening patients are collected by BC Cancer in a standardized manner year over year, but only represent around 33% of all biopsies.
- Wait times were decreasing until 2020 (pandemic) but have been increasing since.
- The median wait time is 7.9 weeks with 90% receiving (P90) their biopsy in 22.0 weeks.
- The longest wait times have been recorded at VCHA and FHA sites.

BC Sx Program	2016	2017	2018	2019	2020	2021	2022 Q1	2022 Q2
# Sx Patients +Bx	3,829	3,759	3,806	3,606	2,461	3,513	1,010	872
Median (weeks)	6.0	5.7	5.4	5.1	5.0	6.3	7.3	7.9
P90 (weeks)	15.4	15.4	14.4	14.3	13.7	17.7	17.6	22.0

Source: BC Cancer, updated April 18, 2023 with Q2 numbers.

Diagnostic Patient Stream

Benchmark Wait Times Targets

- Benchmark wait times for breast biopsies are:
  - Priority Level 2 (**≤ 1 week**) for those with a >95% risk of malignancy (BI-RADS 5)
  - Priority Level 3 (**≤ 4 weeks**) for those with a 2 – 94% risk of malignancy (BI-RADS 4A, 4B, 4C)
- These benchmarks were developed by Canadian Association of Radiologists (CAR) and Canadian Society of Breast Imaging (CSBI).

Wait times

- Wait times are collected individually at a site level in a non-standardized manner, making them hard to report and compare. The Ministry does not collect wait times for breast biopsies.
- IHA and VIHA report wait times between 1 – 4 weeks (depending on site).

- The longest wait times have been recorded at VCHA and FHA sites at 5 – 7 weeks (depending on site).

VCHA's + FHA's Estimated Breast Biopsy Wait Times

VPP US and Stereotactic Biopsy Attended, Waiting and Estimated Prospective Wait Times				
Site Prefix	BX Attended	Backlog Count	Ratio	Estimated Wait Time (Weeks)
BCC VA BC Cancer Vancouver Centre	40	269	6.73	26.90
BCW BC Womens Hospital	34	84	2.47	9.88
LGH Lions Gate Hospital	58	13	0.22	0.90
MSJ Mount Saint Joseph Hospital	35	24	0.69	2.74
SSH Sechelt Shishalh Hospital	7	0	0.00	0.00
RH Richmond Hospital	34	4	0.12	0.47
VPP Total	**208**	**394**	**1.89**	**7.58**

FHA US and Stereotactic Biopsy Attended, Waiting and Estimated Prospective Wait Times				
Site Prefix	BX Attended	Backlog Count	BX Ratio	Estimated Waits (Weeks)
AB Abbotsford Regional Hospital	55	95	1.70	6.88
BH Burnaby Hospital	18	3	0.20	0.65
CG Chilliwack General Hospital	15	22	1.50	5.83
DH Dlta Hospital	6	3	0.50	1.88
LM Langley Memorial Hospital	5	16	3.20	12.8
PA Peace Arch Hospital	13	10	0.80	3.13
RC Royal Columbian Hospital	110	182	1.70	6.65
RM Ridge Meadows Hospital	23	7	0.30	1.22
SU Jim Pattison Outpatient Centre	158	227	1.40	5.76
FHA Total	**403**	**565**	**1.40**	**5.61**
LMMI Total	**611**	**959**	**1.57**	**6.28**

NOTE: Bx attended is the average number completed procedures for each period from each site between FY 22/23 P01 to P10.

Access to Breast Biopsies

- Actions underway to increase the number of breast biopsies performed include:
  - BC Cancer – Vancouver Cancer Centre: booking evenings and weekends to have 13 additional biopsy days from Jan-March 2023. This resulted in about 33 more stereo core biopsies plus 6 contrast enhanced mammography cases.
  - Lions Gate Hospital (LGH) – As of March 2023, LGH will start performing stereotactic breast biopsies. It is anticipated that this will result in an additional 200+ biopsies per year.
  - BC Women's – BCWH is adding a new radiologist in June 2023, doing an appointment scheduling review and a capital project is underway to refresh equipment and improve space.

Health Human Resources

General

- Staff shortages at medical imaging facilities, includng technologists, radiologists nad support positions, together with an increase of patients retrunign to the system for cancer screening and diagnostic investigation have resulted in longer wait times.
- In September 2022, the Province launched the Health Human Resources Strategy, to optimize the health system, expand training and further improve recruitment and retention.

- Work is underway to increase training opportunities to increase the supply of imaging technologists.

Sonographers

- Sonographers are technologists that perform ultrasound exams.
- Actions to date to increase the supply of sonographers:
    - Increasing the number of education seats – sonography graduates in BC will double to 80 by 2023 as a result of the new programs and seat expansions. This includes a new sonography teaching clinic, operated by Island Health on the Camosun Interurban campus, opened in January 2023. This is the first of its kind in Canada, offering students greater opportunity for clinical experiences throughout their program, while also increasing ultrasound services in the South Island region.
    - Increasing the number of FTEs within Health Authorities. From 2017 to 2021, 121 FTE Sonographers were added to (21.5% growth), increasing the workforce from 386 FTEs in 2017 to 506 FTEs in 2021.[2]

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- MRI technologists are technologists that perform MRI exams.
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    - Developing a new direct-entry diploma program at B.C. Institute of Technology (BCIT). This new MRI program will no longer require an existing medical imaging certification, so recruitment of high school graduates can replace recruitment of medical imaging staff with roles in x-ray, nuclear medicine, radiation therapy or sonography. The new BCIT MRI direct-entry diploma will be a full-time 2-year program began January 2023;
    - Establishing an MRI Technologist Bursary Program (Interim until the First-discipline program is established). This program is to encourage more MRI technologist students currently enrolled to enter the workforce sooner by providing supports for them to graduate earlier. Since the bursary program was first offered in March 2022, 34 students have taken advantage of the opportunity to complete their MRI training in an accelerated timeframe over three terms.

New Breast Imaging Technologies

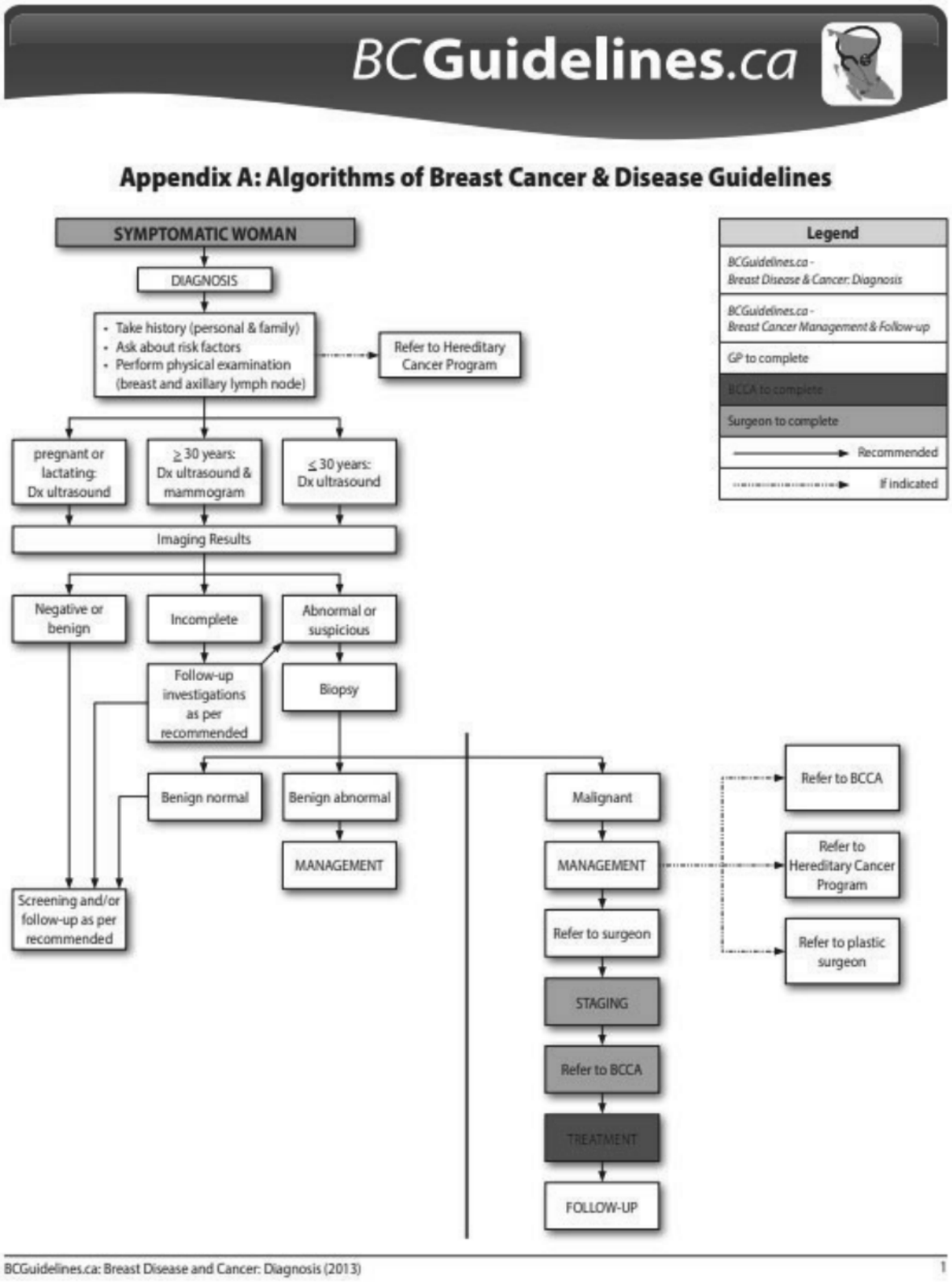
Tomosynthesis

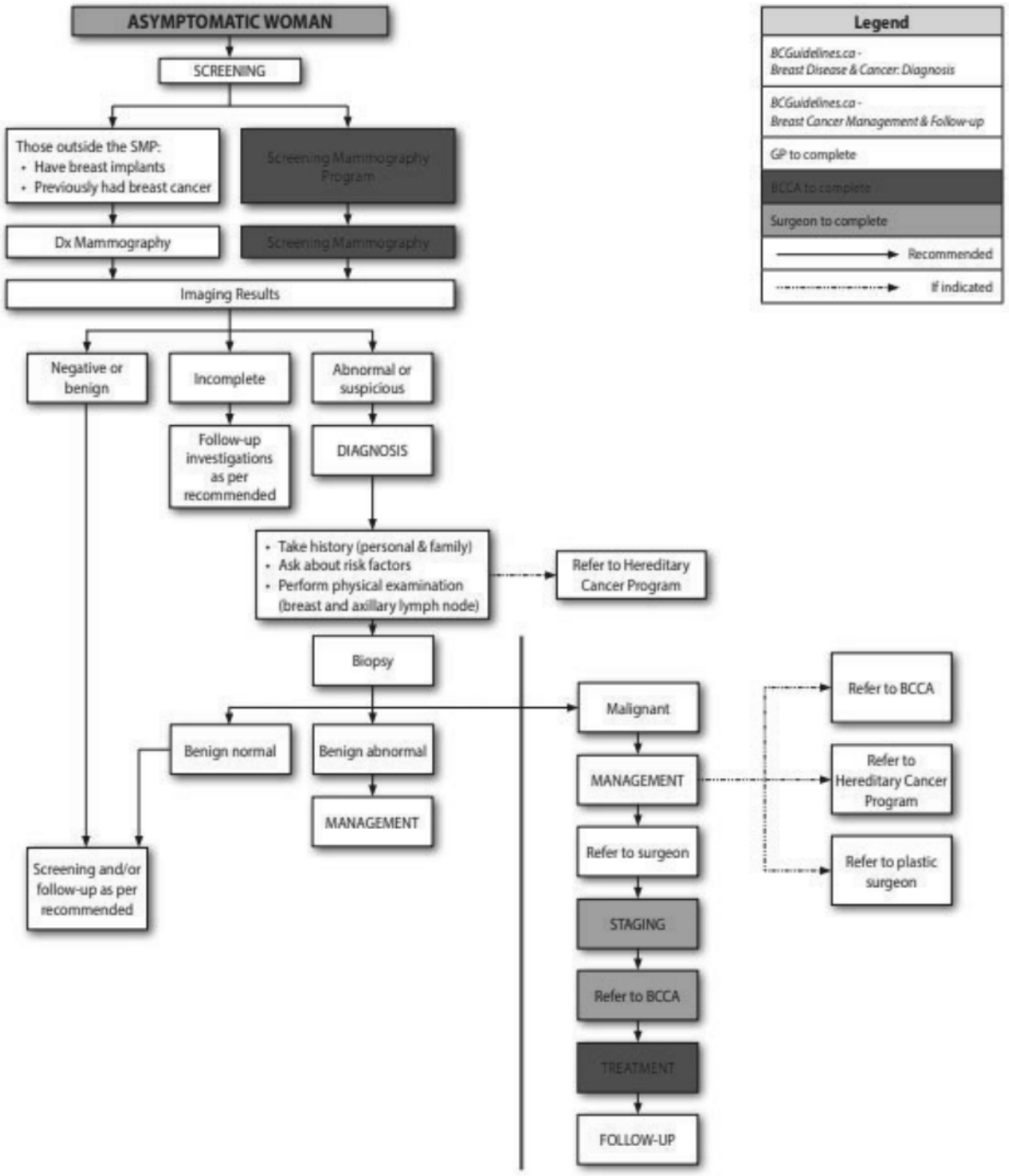
- Digital tomosynthesis is a different modality than ultrasound to image breasts.
- It is a three-dimensional (3-D) imaging technique in which an X-ray tube moves along a limited angle arc and produces 2-D projections of the breast. From these 2-D projections, a 3-D volume of the breast is reconstructed.

[2] Fact Sheet: Diagnostic Medical Sonography (Allied Health Policy Secretariat), last approved October 2022. Updated numbers not expected until end of April 2023.

- The Ministry has received the new fee item application for tomosynthesis with proposed funding from the New Fee Item Fund (NFIF). Unfortunately, the NFIF under the 2014 and 2019 Physician Master Agreements has been exhausted. With the establishment of the 2022 Physician Master Agreement and associated funding, applications for new fee items will be reviewed in order of date received, including the application for tomosynthesis.

APPENDIX:


BCGuidelines.ca
Appendix A: Algorithms of Breast Cancer & Disease Guidelines
SYMPTOMATIC WOMAN
DIAGNOSIS
• Take history (personal & family)
• Ask about risk factors
• Perform physical examination (breast and axillary lymph node)
Refer to Hereditary Cancer Program
pregnant or lactating: Dx ultrasound
≥ 30 years: Dx ultrasound & mammogram
≤ 30 years: Dx ultrasound
Imaging Results
Negative or benign
Incomplete
Abnormal or suspicious
Follow-up investigations as per recommended
Biopsy
Benign normal
Benign abnormal
MANAGEMENT
Screening and/or follow-up as per recommended
Malignant
MANAGEMENT
Refer to surgeon
STAGING
Refer to BCCA
TREATMENT
FOLLOW-UP
Refer to BCCA
Refer to Hereditary Cancer Program
Refer to plastic surgeon
Legend
BCGuidelines.ca - Breast Disease & Cancer: Diagnosis
BCGuidelines.ca - Breast Cancer Management & Follow-up
GP to complete
BCCA to complete
Surgeon to complete
Recommended
If indicated
BCGuidelines.ca: Breast Disease and Cancer: Diagnosis (2013)
1


ASYMPTOMATIC WOMAN
SCREENING
Those outside the SMP:
• Have breast implants
• Previously had breast cancer
Screening Mammography Program
Dx Mammography
Screening Mammography
Imaging Results
Negative or benign
Incomplete
Abnormal or suspicious
Follow-up investigations as per recommended
DIAGNOSIS
• Take history (personal & family)
• Ask about risk factors
• Perform physical examination (breast and axillary lymph node)
Refer to Hereditary Cancer Program
Biopsy
Benign normal
Benign abnormal
MANAGEMENT
Screening and/or follow-up as per recommended
Malignant
MANAGEMENT
Refer to surgeon
STAGING
Refer to BCCA
TREATMENT
FOLLOW-UP
Refer to BCCA
Refer to Hereditary Cancer Program
Refer to plastic surgeon
Legend
BCGuidelines.ca - Breast Disease & Cancer: Diagnosis
BCGuidelines.ca - Breast Cancer Management & Follow-up
GP to complete
BCCA to complete
Surgeon to complete
Recommended
If indicated

Grieve, Katie CITZ:EX

From: Rudden, Carolyn HLTH:EX
Sent: June 8, 2023 1:02 PM
To: Dr. Sandra Lee; 'Doug McTaggart [s.22] '; Parte, Maura HLTH:EX
Cc: Brown, Sierra HLTH:EX; Mumblo, Melissa HLTH:EX
Subject: FW: Task Force Expedites Update to 2018 Breast Cancer Guideline

Interesting…. I don't remember CTFPHC ever expediting guidelines before.

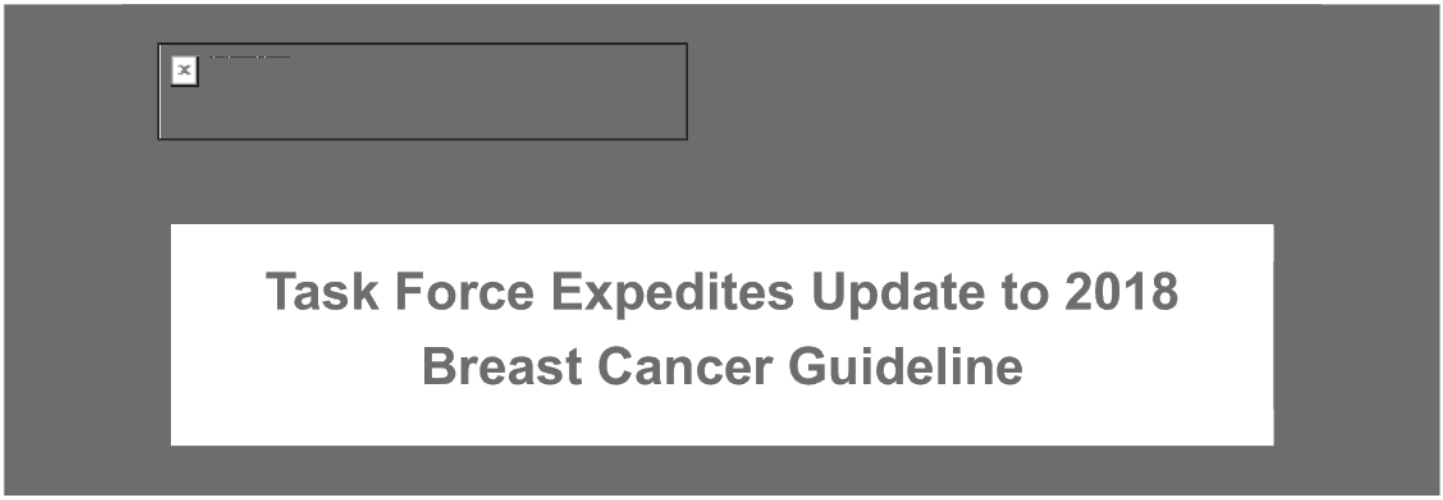
But looks like they may be going back towards starting breast sx at 40 for the general population.

They state this is because of the USPSTF changes, but also will impact supplemental sx for dense breast, in which Ontario HTAC is putting their final touches on their report. Supplemental Screening as an Adjunct to Mammography for Breast Cancer Screening in People With Dense Breasts - Health Quality Ontario (HQO) (hqontario.ca). However, their recommendation is: Ontario Health, based on guidance from the Ontario Health Technology Advisory Committee, recommends publicly funding supplemental screening as an adjunct to mammography for people with extremely dense breasts.

As a background on current status: BC currently offers sx for all aged of 40 - 79, but only recommends for those starting at age 40 with a first-degree family history and at 50 for general population. So this will have impact on BC.

Cheers, Carolyn

From: CTFPHC <info@canadiantaskforce.ca>
Sent: Thursday, June 8, 2023 12:46 PM
To: Rudden, Carolyn HLTH:EX <Carolyn.Rudden@gov.bc.ca>
Subject: Task Force Expedites Update to 2018 Breast Cancer Guideline



BREAST DISEASE GUIDELINE

BREAST DISEASE EXPERT PANEL MEMBERS

Dr. Matthew Seidler (Chair), Radiologist, Breast imaging, Centre hospitalier de l'Université de Montréal, Montréal, QC

Barb Avard, Patient and Family Advisor, North York General Hospital, Toronto, ON

Dr. Connie Hapgood, Radiologist, St. Clares Mercy Hospital, St. Johns, NL

Dr. Vivianne Freitas, Assistant Professor, University of Toronto, Staff of Joint Department of Medical Imaging, Breast Division, Princess Margaret Cancer Centre, Sinai Health System, and Women's College Hospital, Toronto, ON

Dr. Carolyn Flegg, Radiologist, Medical Director of Breast Imaging, Irene and Les Dubé Breast Health Centre, Saskatoon City Hospital, Saskatoon, SK

Dr. Supriya Kulkarni, Radiologist, Princess Margaret Cancer Centre, Toronto, ON

Dr. Pamela Lenkov, General Practitioner in Oncology, Women's College Hospital, Breast Clinic and Sunnybrook Hospital, Odette Cancer Centre, Toronto, ON

Evidence Reviewer and Guideline methodologist: Dr. Candyce Hamel, Senior Epidemiologist, Canadian Association of Radiologists, Ottawa, ON

Evidence reviewer: Dr. Leila Esmaeilisaraji, Epidemiologist, Canadian Association of Radiologists, Ottawa, ON

Acknowledgements: We would like to thank: Becky Skidmore for creating the search strategies; Maude Labelle for reviewing the French recommendations; and Harry Ingleby and Thor Bjarnason for contributing to the section on ionizing radiation exposure.

June 2023

Correspondence: chamel@car.ca

Canadian Association of Radiologists
L'Association canadienne des radiologistes

From: Rudden, Carolyn HLTH:EX
To: Mumblo, Melissa HLTH:EX; Brown, Sierra HLTH:EX; Parte, Maura HLTH:EX; Vandermolen, Kayla S HLTH:EX; Davidson, Heather HLTH:EX
Subject: FW: What is the breast cancer screening guidance in Canada?
Date: July 6, 2023 10:39:38 AM
Attachments: image002.png

FYI.....

From: CTFPHC <info@canadiantaskforce.ca>
Sent: Thursday, July 6, 2023 10:35 AM
To: Rudden, Carolyn HLTH:EX <Carolyn.Rudden@gov.bc.ca>
Subject: What is the breast cancer screening guidance in Canada?

What is the breast cancer screening guidance in Canada?

Are you a clinician wondering what the guidance is for breast cancer screening in Canada after the recent US Preventive Services Task Force (USPSTF) draft update?

Update underway

We have expedited the scheduled review of the 2018 breast cancer screening recommendations, with a draft expected late fall 2023.

Current Guidance

The current Canadian guideline emphasizes **shared decision-making** when it comes to breast cancer screening. We recommend that:

- Women aged 40-49 (and aged 50-74) who want to be screened for breast cancer should talk to their doctor or other health care professional.
- This conversation should consider the pros and cons of screening, as well as their personal values and preferences.
- If a woman wants a mammogram after this discussion, she should have a mammogram.
- We believe in empowering women to make informed decisions about their health. This is the fundamental foundation of shared decision-making.

Read the new FAQ document

Read the new FAQ document

These recommendations:

- Apply to average risk women
- Do not apply to women with family history, genetic markers or signs or symptoms

What is shared decision-making?

- Patients and clinicians openly talk about the benefits and harms of mammography screening, and make decisions based on patient preferences and values.
- The clinician's role is to describe the options and support the patient to make a decision.

Tools to help with shared decision-making:

FAQs
What is screening?
To share or not to share When is shared decision making the best option?
Shared decision-making and 1000 person tools

Related reading

Conversations are critical when it comes to breast cancer screening
Systematic review on values and preferences
New US breast cancer recommendation sparks discussion
Task Force Expedites Update to 2018 Breast Cancer Guideline




The Canadian Task Force on Preventive Health Care is composed of experts who develop evidence-based recommendations for clinical preventive health services delivered by primary care practitioners.

The Task Force is supported by the Global Health and Guidelines Division of the Public Health Agency of Canada, Evidence Review and Synthesis Centres from the University of Ottawa and the University of Alberta, and the Knowledge Translation Team from St. Michael's Hospital, Unity Health Toronto.

info@canadiantaskforce.ca | www.canadiantaskforce.ca

Our mailing address is:
Canadian Task Force on Preventive Health Care
Centre for Health Care Innovation, 3rd Floor, Chown Building
753 McDermot Avenue, University of Manitoba
Winnipeg, Manitoba R3E 0T6
Canada

Hospital and Provincial Services

Question Preparation – Advice to Minister

Date: September 2023

Issue/topic: s.13 **Breast Cancer Screening**

- Screening mammograms are considered the international gold standard for detecting breast cancer early.
- In BC, the Breast Screening Program (BSP) is led by BC Cancer and provides free screening mammograms for eligible people, age 40 and up who have no signs or symptoms of cancer.
- s.13 Approximately one-third of people diagnosed with breast cancer each year come through the BSs.13
- These individuals who had no signs or symptoms of cancer are now getting treatment sooner due to screening program.
- Screening mammograms are performed at designated community imaging clinics and hospitals, as well by BC Cancer's mobile mammography unit ins.13certain communities.

Response:

Increasing Participation Rates

- In 2021, 261,905 screening mammograms were performed, and 254,663 screening mammograms were performed in 2022.
- Screening volumes have returned to pre-pandemic levels.
- Participation rates in the Breast Screening Program remain around 50% of those eligible.
- More needs to be done to increase participation ins.13 screening programs.
- A noted barrier for potential participants is that they do not have a primary care provider (i.e., unattached patients).
    - Patients must have a have a primary care provider to be part of the screening programs (i.e., breast, colon, cervix, lung). This is a regulatory requirement.
    - Patients who do not have a primary care provider are advised to: 1) call HealthLink BC to speak with a Health Service Navigator to assist finding a Primary Care practitioner accepting new patient, or 2) accessing a walk-in clinics, including virtual care 'walk-in' services.
- Actions taken or underway to increase participation are:
  s.13
    - Introducing personalized screening invitations for high risk and underserved populations.

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- Launched an online booking tool for those being notified for the routine screening mammogram in August 2021. Since its launch, this online portal has facilitated almost 50% of all breast screening bookings.
- Forming a provincial group to work on finding ways to improve cancer screening access and follow-up care for unattached patients.
- s.13

Supplementary Screening for Dense Breasts

In BC, screening breast ultrasounds are available to patients with dense breasts, when requested by a primary care provider who feels their patient's situation warrants further investigation. These are different than diagnostic ultrasounds as there are no symptoms.

- This change was made to MSP in December 2018, after BC became the first province in Canada to provide breast density scores to patients and their primary care provider following a screening mammogram in October 2018.
- There are known access and wait time issues with screening and non-emergency diagnostic ultrasounds including:
  1. A shortage of all types of sonographers, including those who perform breast imaging exams that require further specialization beyond s.13 regular sonographer certifications s.13
  2. A limited number of facilities offering breast screening ultrasounds.
- Wait times for supplemental screening are not known s.13 as the Ministry does not collect ultrasound wait times for data analysis and reporting from health authorities or community imaging clinics.
- Volumes for supplemental screening are not know s.13 as there is no method to distinguish screening exams from diagnostic ones in the Medical Services Plan database.

Diagnostic Follow-Up to an Abnormal Screen (Fast Track)

- Approximately 10% of screening patients require follow testing as a result of an abnormal screen.
- For these individuals, the BC Cancer's Breast Screening Fast Track referral process generates a referral for additional diagnostic testing (i.e., diagnostic mammogram, diagnostic breast ultrasound) and the diagnostic facility is responsible for contacting the patient and arranging for the follow-up testing.
- The patient and provider result letters informs them that the patient will be contacted directly by the diagnostic imaging site for their appointment.
- These diagnostic facilities can include designated community imaging clinics and health authority facilities.

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- For abnormal mammogram screens from 2021, 90% were diagnosed within 8.3 weeks (with further imaging only) and within 17.7 weeks (with tissue biopsy). The benchmark is 5 weeks without biopsy and 7 weeks with biopsy.

Breast Biopsy

Benchmark Wait Times Targets

- 90% of women should receive resolution of an abnormal screen:
  - within 5 weeks for those requiring further imaging; and
  - within 7 weeks for those requiring further imaging and a biopsy.
- Benchmark wait times for breast biopsies are:
  - Priority Level 2 (≤ **1 week**) = >95% risk of malignancy (BI-RADS 5)
  - Priority Level 3 (≤ **4 weeks**) = 2 – 94% risk of malignancy (BI-RADS 4A, 4B, 4C)
- These benchmarks were developed by Canadian Association of Radiologists (CAR) and Canadian Society of Breast Imaging (CSBI).
- Wait times are collected individually at a site level in a non-standardized manner, making them hard to report and compare. The Ministry does not collect wait times for breast biopsies.
- Actions underway to increase the number of breast biopsies performed include:
  - BC Cancer – Vancouver Cancer Centre: booking evenings and weekends to have 13 additional biopsy days from Jan-March 2023. This resulted in about 33 more stereo core biopsies plus 6 contrast enhanced mammography cases. Time to biopsy has improved from an average of 17 weeks (Mar 31, 2023) to an average of 8.5 weeks from receiving referral. Improved the working experience for staff by simplifying the booking process.
  - Lions Gate Hospital (LGH) – s.13 In April 2023, LGH s.13 started performing stereotactic breast biopsies. In May, BC Cancer – Vancouver began redirecting suitable sterotactic core biopsies to LGH. BC Cancer – Vancouver requisitions are evaluated weekly and redirect to LGH whenever possible. It is anticipated that this will result in an additional 200+ biopsies per year.
  - BC Women's – BCWH has successfully recruited a new radiologist to increase the number of mammography exams and breast procedures performed daily. New equipment has been purchased to improve the patient biopsy experience. A quality improvement project is underway to meet infection control standards as well as renovations to the work environment to improve staff satisfaction and ergonomics.
  - s.13

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- By extending hours on evenings and weekends at BC Cancer Centre-Vancouver between Jan-March 31, 2023, approximately 52 additional biopsies were performed (157 total biopsies).

Wait Times

- ~12,000 core breast biopsies are performed annually within the two patient streams:
  - Screening = ~33% of all core biopsies
  - Diagnostic = ~67% of all core biopsies
- Wait times for screening patients are collected by BC Cancer in a standardized manner year over year.
- Wait times were decreasing until 2020 (pandemic) but have been increasing since.
- The median wait time is 7.9 weeks with 90% receiving (P90) their biopsy in 22.0 weeks.
- The longest wait times have been recorded at VCHA and FHA sites.

BC Sx Program	2016	2017	2018	2019	2020	2021	2022 Q2	2022 Q2	2022 Q3	2022 Q4
# Sx Patients +Bx	3,829	3,759	3,806	3,606	2,461	3,513	1,010	872	733	**707**
Median (weeks)	6.0	5.7	5.4	5.1	5.0	6.3	7.3	7.9	7.1	**6.9**
P90 (weeks)	15.4	15.4	14.4	14.3	13.7	17.7	17.6	22.0	17.9	**14.9**

Source: BC Cancer, updated s.13 Sept 27, 2023 with s.13 Q4 numbers.

Health Human Resources

Sonographers

- Sonographers are imaging technologists that perform ultrasound exams.
- Actions to date to increase the supply of sonographers:
  - Increasing the number of education seats – sonography graduates in BC will double to 80 by 2023 as a result of the new programs and seat expansions. This includes a new sonography teaching clinic, operated by Island Health on the Camosun Interurban campus, opened in January 2023. This is the first of its kind in Canada, offering students greater opportunity for clinical experiences throughout their program, while also increasing ultrasound services in the South Island region.
  - The Ministry of Health is actively looking at building capacity by increasing the number technologists with the required specialized breast ultrasound training. BCIT is building a breast sonography curriculum, with the theory component already in action. Clinical component is still under development.

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Commented [VKSH5R4]: Hi Melissa, we received updated info from BC Cancer on September 8, 2023. I have included it here.

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- Increasing the number of FTEs within Health Authorities. From 2017 to 2022, the number of sonographers in the province has increased by 292 FTE (growth of 68%) – increasing the workforce from 433 FTE in 2017 to 725 FTE in 2022. [1]

MRI Technologists

- MRI technologists are imaging technologists that perform MRI exams.
- To increase the supply of MRI technologists, several strategies have been established, including:
  - In April 2022, BC Institute of Technology launched the MRI Bursary Program to increase the supply of new imaging technologist graduates by providing financial aid to complete their studies sooner. Over 3 terms, 53 students have taken advantage of the opportunity to complete their MRI training in an accelerated timeframe[2].
  - Developing a new direct-entry diploma program at B.C. Institute of Technology (BCIT). The new BCIT MRI direct-entry diploma is a full-time 2-year program that began in January 2023; the first cohort consists of 12 students who will graduate in 2025.

New Breast Imaging Technology
Tomosynthesis

- Digital s.13 tomosynthesis is s.13 s.13
- s.13 a three-dimensional (3-D) imaging technique in which an X-ray tube moves along a limited angle arc and produces 2-D projections of the breast. From these 2-D projections, a 3-D volume of the breast is reconstructed.
- The Ministry has received the new fee item application for tomosynthesis with proposed funding from the New Fee Item Fund (NFIF). Unfortunately, the NFIF under the 2014 and 2019 Physician Master Agreements has been exhausted. With the establishment of the 2022 Physician Master Agreement and associated funding, applications for new fee items will be reviewed in order of date received, including the application for tomosynthesis.

Additional Reference Documents:

To include relevant fact sheets, reports, documents

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[1] HSCIS v. 20230306. Includes both diagnostic and cardiac sonographers. Historic FTE are subject to change following annual data updates. Sept 2023

[2] Correspondence with BCIT MRI Program Head, September 12, 2023.

Hospital and Provincial Services

Question Preparation – Advice to Minister

Date: September 2023

Issue/topic: Cancer Breast Screening

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- In BC, the Breast Screening Program is led by BC Cancer and provides free screening mammograms for eligible people, age 40 and up who have no signs or symptoms of cancer.
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Source: BC Cancer, updated April 18, 2023 with Q2 numbers.

Commented [MMH3]: I have requested this info from PHSA and BC Cancer, they are looking into it. Will update once I have received

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  - Increasing the number of FTEs within Health Authorities. From 2017 to 2021, 121 FTE Sonographers were added to (21.5% growth), increasing the workforce from 386 FTEs in 2017 to 506 FTEs in 2021.[1]

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Tomosynthesis

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