

20 February 2024

Breastscreen Australia Review - Discussion paper

The Australian Society of Medical Imaging and Radiation Therapy (ASMIRT) is the peak body representing medical radiation practitioners in Australia. Our aims are to promote, encourage, cultivate and maintain the highest principles of practice and proficiency of medical radiation science, always mindful that the welfare of the patient should be at the centre of everything we do.

Please find some feedback on the above document:

Question 1: What are the biggest opportunities for breast cancer screening in Australia? What are the challenges?

Australia has a great service, however we are unable to compete if bureaucrats prevent progression which may lead to substandard services.

The opportunity to keep up with technologies that are no longer experimental or new (advanced or contemporary MR techniques, contrast enhanced mammography), and are widely used in the private sector and overseas at public screening, namely tomosynthesis, and breast density reporting, is being missed in Australia by many states. Much of the Australian public is educated and are wanting this information and benefit from their screen, and we are still unable to deliver due to policies that are exceedingly slow to change.

ASMIRT suggests that the following are additional opportunities that may improve outcomes for women utilising breast screen services.

- Revising screening pathway to include a stratified personalised screening regime that tailors extra imaging for higher risk clients and could extend screening interval for low-risk clients with fatty breasts.
- Meeting the increasing requests from public and doctors that women are notified of their density and any associated increased breast cancer risk.
- Embracing the use of upcoming technology eg. Volpara image quality systems, breast density and first reads.
- Al software packages for measuring breast density.
- Alternative breast cancer testing like breath testing trialled years ago or blood tests that are able to determine which women need to be sent for breast imaging - whether MRI for high risk or 3D mammography.
- Enabling medical radiation practitioners to increase their scope of practice ie. breast ultrasound.

Challenges

 Funding to have access to equipment and new technologies, to ensure availability for all to facilitate equity and access across Australia.



- Workforce available and with appropriate expertise for reporting.
- Messaging and education of new pathways and varying screening protocols
- Rising costs equipment, staff.
- Challenges related to workforce and participation are already known.
- Reluctance from the community to participate. This may be for many reasons, however the community has become more diverse and Breastscreen must effect change to cater to all user groups.
- Some women do come into the program as self-referred as they did not receive an invitation from BS. This may be because they are not in the electorate on the electoral roll or have changed address? In this event women in the target age group are missed.

Question 2: Could the Breast Screen Australia Program be more effective at reducing illness and death from breast cancer?

ASMIRT suggests that the Breast Screen Australia program can be more effective by utilising the recommendations of ROSA project, with introduction of stratified screening. ASMIRT appreciates that the participation rate of this project has remained well below the aim of 70% since commencement.

Increased detection through use of the latest and best technologies at the point of screening and through increased participation.

Organise campaigns/booths in public areas such as shopping malls eg. where staff of the screening sites have opportunities to engage with public to promote the program; have breast models with lumps so that women can actually palpate to appreciate the various different textures in the breast (to be more breast aware).

Question 3. If you could make one change to improve the BreastScreen Australia service, what would you suggest?

ASMIRT suggests that any new state of the art equipment and new technology is maintained and upgraded as required and that a regular check of growing areas in Australia, to ensure that services are reaching these areas. Many areas serviced by mobiles now have the need for permanent fixed site screening.

For the clients, any new technology that is able to remove compression from imaging and remove the need to touch the breast will have significant impact.

Other suggested changes are 3D screening and education and training for managers to ensure that they are supportive of their staff.

Have specific sites for LGBTIQA+, trans, gender diverse people in each region. Consideration should be given to screening by gender diverse staff for gender diverse patients where, when and if this is possible, recognising the difficulties that this presents. Cisgender staff should not be excluded from working with gender diverse patients in order to avoid discriminating against either patient or practitioner.

Question 4: How could BreastScreen Australia be more effective in detecting breast cancer early and saving lives? Do you have any related research or evidence to share?

ASMIRT suggests that planning for future screening utilising all the technology available, which may look entirely different with the introduction of new technology, cone beam breast CT and the use of AI if validated.

Having an Open Day once a year would be a very positive way of demonstrating, with no pressure to have a mammogram; what a mammogram involves and how firm the compression is. This will allow women to see another breast being compressed. Fear is a significant factor which may prevent women having mammograms.

Breast Screen Australia could consider messaging that indicates it is a screening program where women can choose not to attend if they do not wish to. Some women feel pressured and anxious when they attend the program and subsequently engage aggressively with the staff.

Question 5: Do you have any suggestions for how BreastScreen Australia can put evidence into practice nationally?

Risk based screening has been discussed for a long time. A national approach to implementing the changes and improvements, would benefit all women of Australia, and increase the equity of the program and the overall outcomes for women. At present, this is not consistent across all states.

Other suggestions include:

- Personalised stratified screening with pilots of this option and monitoring of take up by women
- Tomosynthesis implementation for routine imaging
- · Reporting of breast density nationally

Engage a research officer stationed at each Reading and Assessment Service (RAS) working with the local RAS staff to conduct research on the local data, reflective of the local population outcomes.

The outcome of the research should be published in the local daily (whether through e-news or newspaper; local radio stations), to inform the locals on our efforts on early detection of breast cancer. This action will have an effect on encouraging participation of the locals in the screening program.

Question 6: What changes would ensure the Program is responsive to future evidence of best practice screening?

ASMIRT suggests the following changes:

Improved data collection and sharing of breast cancer diagnoses across diagnostic and screening and of annual screening results.

Continued work to improve participation of under-screened groups such as First Nation women, those living in very remote areas and women living with disabilities or women who live with obesity.

Control from a national level, as compared to the current state led implementation. There needs to be consistency in service to service and state to state, to ensure that there is no inequity.

Actively pursuing advances in technology through early adaptation, research and innovation.

Breast Screen Australia must be cognisant that women are not thrilled with compression in mammograms. Most women still attend the program despite this. Participation rate can be increased by informing women that Breast Screen Australia is aware of their concerns and are working with stake holders / innovators of new technology (eg Siemens/Hologic/GE) where compression will be completely eliminated. Innovators of

the new technology will consult with radiographers as these professionals are the first line of contact for women when undergoing a mammogram.

Question 7: Thinking about diverse communities and population groups in Australia, what are the enablers of participation in BreastScreen Australia? What are the barriers? Do you have any case studies to support your comments?

Enablers

Build on work already done by the States working on range of strategies to meet needs of target age group whether better access, better experiences, better education of GPs, and assistances such as interpreting services, extra time allocations etc.

Interpreters, education for staff, promotional officers (taking information to the public, community groups, diverse groups, and health professionals), flexible appointment times, wheelchair access at all sites and all mobile vans, remote servicing, use of community health workers in remote communities to spread education and encourage participation,

Have specific sites for LGBTIQ, trans, gender diverse people in each region/state- consideration should be given to screening by gender diverse staff for gender diverse patients where, when and if this is possible, recognising the difficulties that this presents. Cisgender staff should not be excluded from working with gender diverse patients in order to avoid discriminating against either patient or practitioner.

Barriers

Obese / bariatric women - research supports that plus size women are underrepresented in screening programs due to their experiences and shaming.

Lack of accessibility, mobile vans visits when not around, language, understanding of different cultures /beliefs.

Women who believe they will know inherently if they have something wrong or have a cancer.

Women who have resigned themselves to "what will be will be".

Funding /workforce issues. Staffing can be challenging. Attempting to employ administrative staff may not be challenging, but getting trained clinical staff can be the biggest challenge (radiographers, nurses, doctors).

Mental health is a barrier and is rarely addressed in the BreastScreen context.

Question 8: How could the BreastScreen Australia improve the user experience?

Continued and improved representation of consumers and ambassadors to ensure client focus care and inclusion in screening decisions and planning and also in messaging to public.

More thought and development of 'sensory lab' screening and assessment environment /rooms - colours/calming murals/etc.

Having option of women's wellness sessions where can have screening alongside information or specialist nurse around menopause symptoms/ hearing tests /relaxation massage.



Consideration for the patient with a disability/neurodiversity.

Provision of information on breast density risk and advice for surveillance.

Provision of an improved service by way of better technology (3D screening) and information to the client who has willingly subjected her breasts to radiation. Women should be provided reliable and consistent information to make their own informed decision. Provision of research demonstrating improvements in outcomes should also be made available.

Education for participants to understand what Breastscreen does. If there was an understanding that BreastScreen is committed to being involved in the future direction of breast imaging and improvements, the service may be viewed in a more positive way.

Compression is the most disliked aspect of the procedure, but with the current modality it is essential for image quality and therefore the sensitivity and specificity of the examination. Information detailing how good mammography is at detecting breast cancer (in the screening setting) in comparison to other modalities, may make clients more tolerant. They also need to be reassured that there is constant research and improvement in the area and that BreastScreen Australia is actively involved in it and aware of its implications moving forward.

Essentially, BreastScreen Australia need to make people more aware of what they are doing to improve client experience, to ensure that the personalised care message is emphasised and the same policies and procedures should be utilised nationwide.

Breast Screen Australia is already doing an amazing job by sending out surveys post examination allowing feedback to be provided by the women about how they managed their examination. Breast Screen Australia is equally working on improving the experience for women for their disabled clientele.

Whilst there are many policies and procedures in place for the service that is provided to clients further work needs to be done on protecting staff members. Breast Screen Australia could engage with staff on a daily basis; definitely not after each client but daily check-in so that information relating to abusive clients is reporting/alerted to ensure the safety of the staff is protected and not just skewed to just the clients.

Question 9: What are the drivers for some women seeking breast cancer screening (i.e., not diagnostic) outside of the BreastScreen Australia? Do you have any evidence or case studies to share?

Advised by family/friend or GP with referral for diagnostic imaging so can have 3D imaging as maybe known dense /sensitive breasts. GP referral (mastalgia to be Medicare compliant), would be the number one reason; GP education is essential to ensure the correct imaging pathway is followed.

Preferring option of one stop for mammogram and further imaging /biopsy at same time/site.

Clients who cannot stand the waiting time for receiving results with screening.

Tomosynthesis more readily available.

Not so prevalent but there was a period of time where women did think because the service was free, it would not be as thorough or professional. This may still be a perception from older Australians.

Some women want a thorough personalised approach to their care and subsequent personalised report that includes known conditions such as benign cysts. Clients do feel that if this is not mentioned that they have received an inferior service.

The ability to have a mammogram, ultrasound and possibly biopsy all done together in the same practice. Ultrasound is not offered routinely in the screening program. Clients do not trust mammogram alone, as they believe it would be able to detect the presence of breast cancer.

Poor understanding of the screening tools available in breast cancer - that mammogram is the gold standard and ultrasound is used as a complementary tool to the mammogram findings.

Previous poor experience with BreastScreen services.

Ability to have annual screens when clients fall outside the Breastscreen criteria.

Falling out of timing with Breast Screen service delivery in areas serviced by mobiles.

Women who have commenced annual check-ups under the age of 40 continuing with their private provider for continuity/known experience.

Perception that paid imaging is "better" (tomosynthesis).

Clients' belief that:

- > Private is better
- > Closer to home/easier access
- ➤ Quicker results
- ➤ 3D availability
- ➤ Ultrasound while they are there, and regardless of need because it is believed that this is a more thorough examination
- > Ultrasound alone, as an option for frightened or very sensitive (breast sensitive) women

Question 10: What are your views on the balance between the benefits of early cancer detection and the potential risk of overdiagnosis and unnecessary investigation for women participating in breast screening, and what factors influence your views?

ASMIRT believes that the information provided needs to include risks vs benefits and that whilst for a small number of women that may be "over diagnosed', this is not as yet able to determine which small cancers will develop and become invasive and which will not develop in their lifetime. ASMIRT does appreciate that this may contribute greatly to unnecessary costs in the health system.

ASMIRT suggests that the majority of women understand the concept of early detection and would prefer to not take the risks of a cancer sitting there undetected. It is a risk that needs to be clearly articulated to women; the online commentary can currently be seen as working against screening.

Women who attend the screening program would not be able to predict if they will be receiving a positive or negative result.

Overdiagnosis caused heightened anxiety in the women as they are being subjected to numerous tests; which increases the cost of the service but by not being screened we are also potentially missing the early signs of breast cancer which later increases the cost for additional tests.

New research in of molecular level and biomarkers may assist with identifying those who need further imaging etc.

Research continues in search for alternative population-based test that is simple with no radiation but will indicate when a possible risk of breast cancer and the need for a mammogram or alternative imaging to check So minimising those women requiring imaging.

Given the improved imaging, treatment and improved quality and mortality stats if a cancer was discovered early, AMSIRT feels that women will continue to want and should be encouraged to access the program.

Given the role of compression and handling required to produce resultant mammograms of consistent high quality, any new technology that removes the need for both handling and compressing may be much better tolerated and embraced.

Other factors may include peer-reviewed research and clinical experience.

Additional Feedback

ASMIRT suggests that the Australian Breast Screening programs provide excellent access to services, on the whole and the issue is perhaps not a lack access, but more a utilisation of the service as a result of many varied barriers. For instance, mobile vans have stairs, and whilst mobile vans are fitted with lifts on the van, each service must consider their clients' needs when detailing their policies and provide a service that complies with legislation and provides an equitable service.

Dedicated population-based mammography screening programs have reduced morbidity and mortality from breast cancer worldwide.^[1] However, despite its success, mammography has inherent issues, including the need for manual manipulation of the breast for imaging, breast compression, and the fact that neither conventional 2D mammography nor digital breast tomosynthesis (DBT) can image all breast tissue. The techniques used for breast positioning can cause pain and embarrassment and are a known barrier for women to undergo mammography.^[2] Indeed, the Australian Institute of Health and Welfare reported that for 2021–2022, only half of the 3.6 million women aged 50–74 who were eligible for screening mammograms participated in the national BreastScreen Australia program.^[3] These issues have driven the development of dedicated 3D cone-beam breast computed tomography (CBBCT).

Commercially available third-generation FDA-approved, CBBCT requires no breast manipulation, uses no compression, and, most importantly, images all breast tissue. Scans take seven seconds per breast with a dose similar to 2D mammography. [4] Radiologist Dr Etta Pisano, has been integral to both the Digital Mammographic Imaging Screening Trial (DMIST), which validated the use of full-field digital mammography, and the current Tomosynthesis Mammographic Imaging Screening Trial (TMIST), which is the first randomised controlled trial that seeks to identify women in which digital breast tomosynthesis may outperform (2D) digital mammography. She also led the final study on which the FDA based its approval of



CBBCT. She herself has stated: "...cone beam breast CT will surpass 2D imaging as the way we image the breast in the future".

The technology represents a significant advance in medicine and presents a unique opportunity to increase screening participation rates by removing the current barriers to screening, particularly in underrepresented demographics, including Culturally and Linguistically Diverse (CALD) women and indigenous populations. Increased participation increases the potential to find cancers in their pre-clinical stage and decreases morbidity and mortality from the disease. The technology may also serve to address critical BreastScreen workforce issues. Currently, the preferred gender for the BreastScreen workforce is female; the nature of CBBCT positioning would enable an expanded workforce with all genders being able to assist women onto the scanner, mirroring other CT examinations.

- 1. Dunn, N., et al., Breast-cancer mortality in screened versus unscreened women: Long-term results from a population-based study in Queensland, Australia. Journal of Medical Screening, 2021. 28(2): p. 193-199.
- 2. Jamal, J., F. MacMillan, and K.A. McBride, Barriers and Facilitators of Breast Cancer Screening amongst Culturally and Linguistically Diverse Women in South Western Sydney: A Qualitative Explorative Study. International Journal of Environmental Research and Public Health, 2021. 18(17): p. 9129.
- 3. Australian Institute of Health and Welfare, Cancer screening programs: quarterly data. 2023, AIHW: Canberra.
- 4. Koning Health. 2023; Available from: https://www.koninghealth.com/

