# MIXED METHODS DEVELOPMENT OF AN INTERVENTION FRAMEWORK TO IMPROVE BREAST SCREENING PARTICIPATION AMONG WOMEN WITH OBESITY AND/OR A PHYSICAL DISABILITY.

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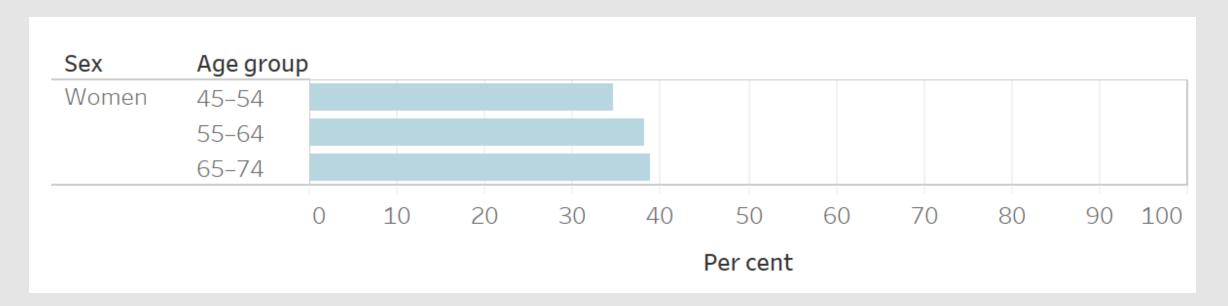






# Background and Rationale

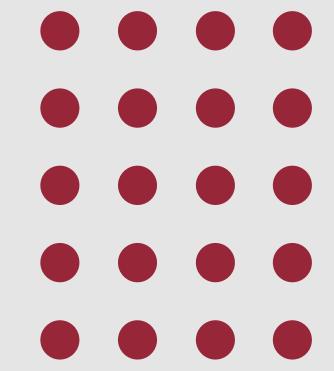
- Higher BMI in postmenopausal women linked to increased breast cancer risk and more aggressive presentations
- In 2017-18, more than 1 in 3 Australian women had obesity (AIHW, 2023)
- Women 50-74 with overweight/obesity~30% less likely to screen than healthy/underweight (McBride, 2024)
- Women 50-74 with higher BMI also less likely to rescreen, irrespective of screening round (Pirikahu, 2024)



Rates of obesity women in BreastScreen target age groups 2017-18 (AIHW, 2023)

# Background and Rationale

- Body shame and avoidance deter women with obesity from mammographic screening (McBride, 2019a)
- Women with obesity and mobility limitations even less likely to screen (Bussiere, 2014)
- Breast screening and rescreening rates also suboptimal among women with a physical disability (Magasi, 2019)
- Radiographers may also have negative experiences screening women with obesity: practical and mechanical problems (McBride, 2019b)



# BreastScreenPlus: Anovel intervention to increase participation in breast screening for women in larger bodies.

#### **OVERALL AIM**

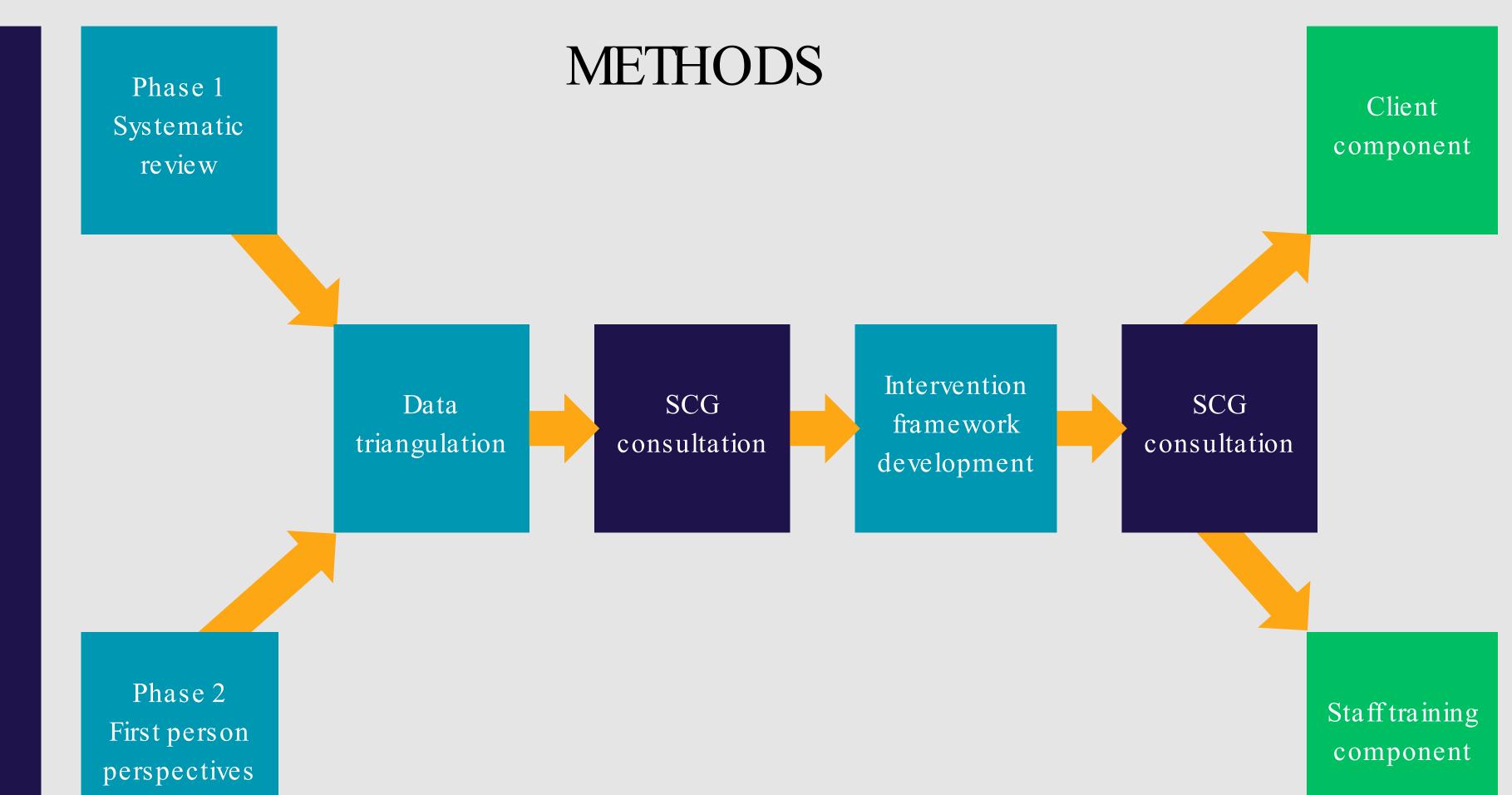
- As part of the BreastScreenPlus Project mixed methods approach to develop a novel intervention framework for women to target obesity and disability related barriers to mammography screening.
  - Staff component involving in-service training and practical workshops to optimise management of women living with obesity and improve radiographer experience
  - Aclient component involving promotional material about what to expect at mammography which normalises body shapes and sizes.

#### **METHODS**

- Concurrent mixed methods design
- Stakeholder Consultant Group (SCG) formed to provide oversight of BreastScreenPlus and to contribute to co-design process







### PHASE 1 SYSTEMATIC REVIEW



Systematically find studies either intervening with women with obesity and/or physical disability or included strategies based on first person recommendations to improve engagement and experiences of screening (using PRISMA framework)

#### Results

- n = 6 studies met the inclusion criteria
- Included 2 intervention studies which used tailored or targeted education
- Only tailored education based on individual risk increased intention to attend mammographic screening
- No studies measured rescreening rates
- Recommendations to improve screening engagement/experience: partnerships, targeted messaging, and enhanced professional development for breast screening staff

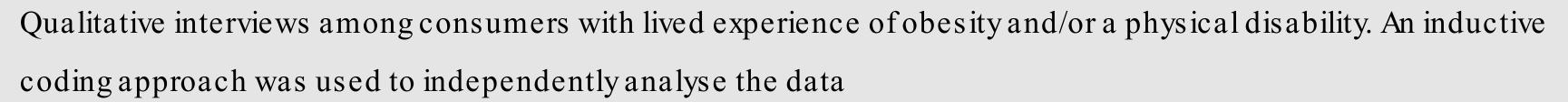




# PHASE 2 QUALITATIVE STUDY



#### Aim/Approach



#### Participants suggested

- Targeted messaging including positive imagery of larger and diverse women as well as more information of the screening process itself.
- Marketing should provide some sort reassurance service staff were kind and able to care for anybody e.g. "we are here to care for you and can look after anyone irrespective of shape or size"
- Enhanced professional development on communication, empathy and understanding of obesity also recommended for service staff
- Volunteer buddies or reception staff being upskilled to mitigate anxiety





TARGETED EDUCATION	TAILORED EDUCATION	STAKEHOLDER PARTNERSHIPS	IMPROVING THE EXPERIENCE	ENHANCED STAFF TRAINING
- Diversity and representation in marketing materials - Images emphasising care and empathy from screening staff - Comprehensive explanations screening process + detailed information for women with obesity who may require additional time, images, and physical handling - Videos - Tailoring to different communities	- Risk based education incorporating weight	- Consumers, support, and advocacy groups to raise awareness of screening services, address barriers and inform more appropriate care - Stakeholders involved in the development, implementation and evaluation interventions	- Undressing and redressing - Improve physical accessibility: robust chairs, adequately sized changing spaces - Support persons or buddies available — potentially receptionists trained to identify anxiety/respond appropriately	- Training focused on empathy and enhanced consideration of the diversity of women's physical attributes and psychosocial concerns - Appropriately sensitive communication, to improve interactions between women seeking breast screening and screening staff - Determinants of obesity

## **CLIENT COMPONENT**

Combined results presented to SCG, feedback sought on which intervention components should be incorporated



Short video for distribution with screening invites (randomised) decided on consensus with SCG

Diversity and representation in women who took part

Emphasising care and empathy from screening staff

Demonstrates the screening process + physical handling



Video script developed based on review and qualitative interviews.  $3 \times 6$  x focus groups held with n = 27 women to review and refine the script. Actors inc SCG members then paid to take part in the filming



# STAFF COMPONENT

Combined results presented to SCG, feedback sought on what intervention components should incorporate



In service training day/practical workshops outline developed based on components agreed with SCG:

Staff experiences

Determinants of obesity

Lived experience perspectives of screening and stigma in healthcare

Compassionate connections with personas

Receptionist 'navigator' training (actors)

Positioning for optimal images and WHS (plus hands on workshops



Presentations shared with SCG and feedback sought

# BreastScreenPlus Study Team

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Ann White, Australian Breast Density Consumer Advisory Council

Thank you to the Stakeholder Consumer Group

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