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Drawing on Consumers' and Clinicians' Experiences to Co-design a Haemodialysis Vascular Access Self-management Program

Colette WEMBENYUI[1,2], Nicole MARSH[1,3], Emily LARSEN[1,3], Amanda CORLEY[1,3], & Ann BONNER[1,2]

1. School of Nursing and Midwifery, Griffith University, Brisbane, Queensland, Australia.
2. Kidney Health Service, Royal Brisbane Women's Hospital, Herston, Queensland, Australia.
3. Nursing and Midwifery Research Centre, Royal Brisbane Women's Hospital, Herston, Queensland, Australia

Presenter: Colette Wembenyui



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Background

- Haemodialysis (HD) relies on a well-functioning vascular access
- 82% of Australians receiving HD use an arteriovenous fistula (AVF) or graft (AVG)
- Complications are a major cause of morbidity and healthcare burden
- Effective self-management is critical
- Education is limited, variable and, often not shaped by lived experience
- Co-design helps align clinical priorities with consumer realities

(ANZDATA, 2023; Canaud et al., 2019; Walker et al., 2015; Wembenyui et al., 2025)

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Aim

To use a co-design process to develop a vascular access self-management education intervention for adults receiving HD

Research Questions

1. What are **consumer and healthcare professionals' priorities for the content** of a co-design of a nurse led education intervention?
2. What are **consumers' preferences for the processes** around mode of delivery and teaching approaches of the co-design education intervention?

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Method

Design

- Experienced-based co-design process
- Informed by the **Capability, Opportunity, Motivation and Behaviour (COM-B) model**
  - Physical and psychological Capability (knowledge, skill, stamina)
  - Physical and social Opportunity (time, location, resources)
  - Automatic and reflective Motivation (experiences, emotional responses
- COM-B model was used to **identify support needs for self-management behaviours**

(Donetto et al., 2015; Michie et al., 2011)

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Method

Setting

- Kidney Health Services, Metro North Hospital and Health Services, Queensland, Australia
  - 6 separate HD units

Participants

- Adults (aged ≥ 18 years) with an AVF/AVG receiving HD
- Carers or family members with lived experience
- Healthcare professionals (dialysis nurses, nephrologists, social worker)

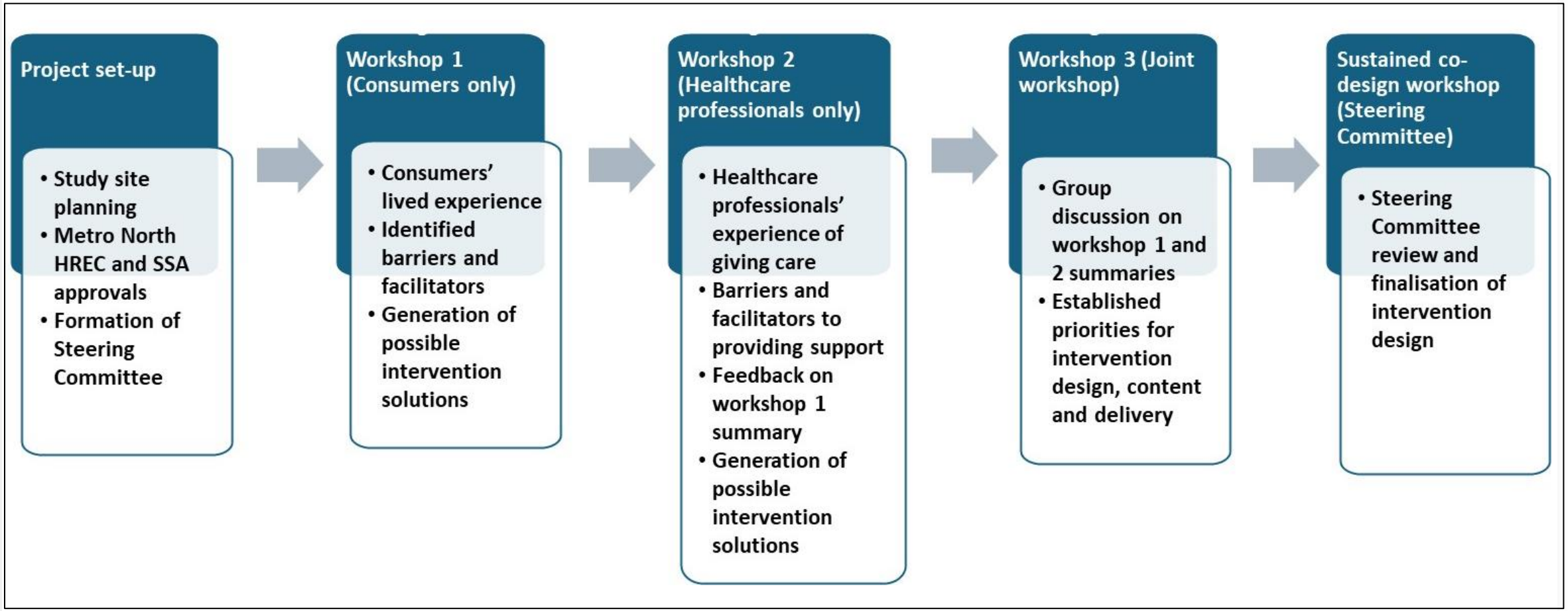
Study Details

- **Sample size**: No formal calculation, minimum **12 participants**
- **Ethics approval:** Metro North HREC/2025MNH/116665

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Development of education intervention



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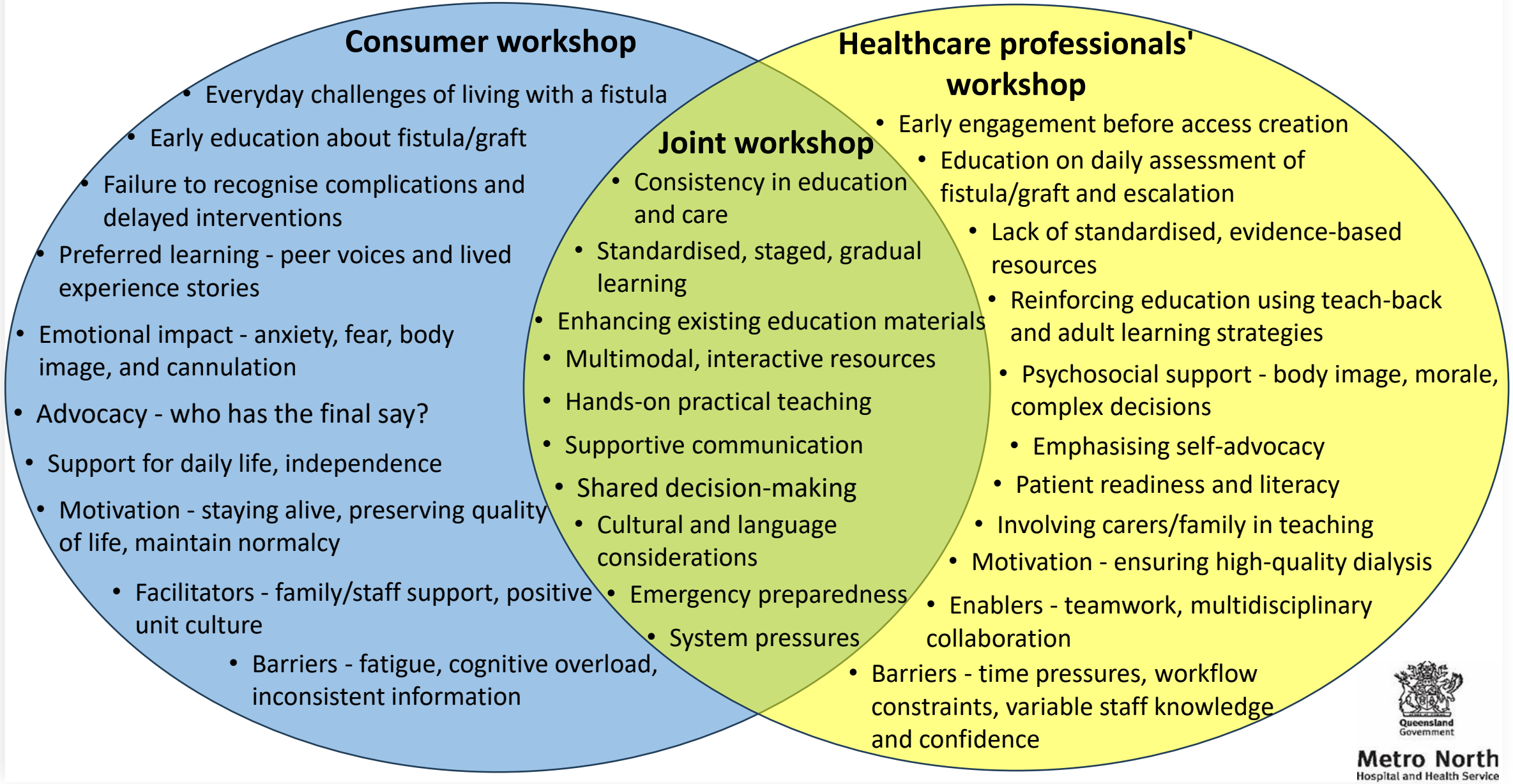
Results

- **Workshop 1:** Consumers only
  - n=8 participants (6 patients and 2 carers/family members)
  - Age range: 25-82 years, most were males (75%)
  - Years on HD: 1.5-25 years
  - Current access age: 1.5-29 years
- **Workshop 2:** Healthcare professionals only
  - n=9 participants (6 dialysis nurses, 2 nephrologists and 1 social worker)
  - Most were females (66.6%)
  - Years of HD experience: 6-25 years
- **Workshop 3:** Joint consumer and healthcare professionals
  - n=13 participants (7 consumers and 6 healthcare professionals)

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Co-design Workshops



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Proposed Intervention Content

- Multimodal, multi-platform education package



- Culturally responsive and inclusive

- Education package content:
  - Pre dialysis/pre-fistula or graft education
  - Day-to-day care
  - Ongoing maintenance
  - Recognising warning signs
  - What to do in emergencies

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Next Steps

- Insights will inform a **nurse-delivered education intervention**
- **Active involvement of stakeholders** ensures clinical relevance and responsiveness
- Could **enhance person-centred nephrology care**
- May serve as a **'Readiness Toolkit'** to support consistent education
- Will be tested in a feasibility randomised control trial



https://metronorth.health.qld.gov.au/wp-content/uploads/2021/12/co-design-home-what.jpg

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