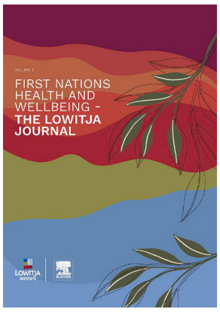


Original Research

Supporting shared decision-making about cardiovascular disease prevention: Yarning with Aboriginal and Torres Strait Islander health workers/practitioners and consumers

Judith Parnham[a,b], Shannon McKinn[a], David Follent[b,c], Michelle Dickson[d,1], Carissa Bonner[a,,1]*

[a] Leeder Centre for Health Policy, Economics and Data, School of Public Health, Faculty of Medicine and Health, University of Sydney, City Road, Camperdown, New South Wales, Australia
[b] National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners (NAATSIHWP), Townshend Street, Phillip, Australian Capital Territory, Australia
[c] Agency for Clinical Innovation, NSW Government, Reserve Road, St Leonards, New South Wales, Australia
[d] Poche Centre for Indigenous Health, University of Sydney, City Road, Camperdown, New South Wales, Australia

Abstract

Purpose Revised Australian guidelines for heart health checks (cardiovascular disease [CVD] risk assessment) provide an opportunity to better support shared decision-making with Aboriginal and Torres Strait Islander communities. Various models and tools have been developed to support shared decision-making, but their usefulness for Aboriginal and Torres Strait Islander communities has not been well explored. Aboriginal and Torres Strait Islander health workers/practitioners already play a key role in health promotion, and could support shared decision-making about the new guidelines. This study explored the experiences of Aboriginal and Torres Strait Islander community members (consumers) and health workers/practitioners (health professionals) on shared decision-making in the context of cardiovascular disease prevention, to inform the development of new guideline resources.

Methods An online yarning workshop with Aboriginal and Torres Strait Islander community members (consumers) was conducted in 2022 to introduce them to shared decision-making resources. This was followed by individual yarning sessions with nine consumers and eight Aboriginal and Torres Strait Islander

---

*Corresponding author.
E-mail address: carissa.bonner@sydney.edu.au (C. Bonner).

https://doi.org/10.1016/j.fnhli.2025.100098

[1] Joint senior authors.

health workers/practitioners. Interview transcripts were analysed using a yarning process and thematically coded.

Main findings The workshop was used to build rapport and introduce participants to key concepts through shared stories and a demonstration of shared decision-making tools. For consumers, sharing stories about healthcare identified several themes associated with good experiences, including: rapport, continuity, culturally appropriate communication, addressing health literacy needs and different ways of being involved in shared decision-making. Aboriginal and Torres Strait Islander health workers/practitioners explained how they already support shared decision-making about CVD prevention, including pre-screening for CVD risk factors and providing culturally safe healthcare. They also identified opportunities for a greater role in CVD risk assessment for heart health checks, to enable health promotion and education for early prevention.

Principal conclusions Existing tools and models to support shared decision-making about CVD need to reflect a more holistic model of care for Aboriginal and Torres Strait Islander communities, including cultural considerations. Including Aboriginal and Torres Strait Islander health workers/practitioners in cardiovascular disease risk assessment may provide a more culturally safe and appropriate environment in which to enable shared decision-making about heart health checks.

Keywords: Cardiovascular disease; Prevention; Shared decision-making; Indigenous health; Health promotion; Primary healthcare

Highlights

- There are cultural barriers to effective heart disease risk prevention.
- Shared decision-making resources may partially address cultural barriers.
- It is important to involve Aboriginal and Torres Strait Islander health practitioners.

Introduction

This study explored Aboriginal and Torres Strait Islander community perceptions of shared decision-making about heart health checks in primary care, and the role of Aboriginal and Torres Strait Islander health workers/practitioners in supporting this. It used shared decision-making tools developed in other health promotion contexts (an Indigenous model developed with and for communities during COVID-19) to explore how existing heart health check tools could be adapted to better meet the needs of Aboriginal and Torres Strait Islander peoples in primary care settings.

Cardiovascular disease prevention

Cardiovascular disease (CVD) is 1.5 times more common among Australian Indigenous peoples (Australian Bureau of Statistics 2019) and age-adjusted mortality is 1.5 times higher compared with non-Indigenous Australians (Australian Institute of Health and Welfare [AIHW] & National Indigenous Australians Agency [NIAA] 2023). Some progress has been made to address this gap, but CVD still contributes to 23% of Aboriginal and Torres Strait Islander deaths (AIHW & NIAA 2023) and 19% of all premature years of life lost (AIHW 2022). Aboriginal and Torres Strait Islander peoples develop and die from CVD 10 to 20 years earlier than non-Indigenous Australians (Agostino et al. 2020). New national CVD prevention guidelines for heart health checks released in July 2023 recommend using an absolute risk approach to CVD risk assessment (National Vascular Disease Prevention Alliance [NVDPA] 2023), with earlier assessment of risk factors for Aboriginal and Torres Strait Islander communities (Agostino et al. 2020). The implementation of these revised guidelines represents an opportunity to better support Aboriginal and Torres Strait Islander communities in shared decision-making about CVD prevention.

Shared decision-making

Shared decision-making has become an essential part of patient-centred care. In Australia, there is increasing recognition of the need to involve patients in decisions about their health, including consideration of their preferences and values (Trevena et al. 2017). Shared decision-making is the process of the health professional and the patient both being involved in health decision-making, and this is explicitly recommended in the new CVD guidelines (NVDPA 2023). For the CVD prevention context, this means that evidence-based risk assessment and recommendations from the health professional are combined with consideration of the patient's preferences and values around medication and lifestyle change. This approach enables each patient to decide together with their healthcare team what is best for their CVD health journey. Shared decision-making involves discussion and education between the patient and health professional to work in collaboration regarding treatment, enabling a more patient-centred style of care that makes the care holistic, appropriate and achievable for both patient and health professional (Trevena et al. 2017). This approach is also reflected in broader policy, including National Safety and Quality Health Service Standards established by the Australian Commission for Safety and Quality in Healthcare (ACSQHC), which emphasise the importance of shared decision-making in creating a person-centred health system (ACSQHC 2021). However, there has been little research exploring whether established shared decision-making processes and tools are suitable for use with Aboriginal and Torres Strait Islander communities. To address this gap, a new model of shared decision-making was developed with Aboriginal and Torres Strait Islander communities in the context of COVID-19 vaccination (Dimopoulos-Bick and Follent 2021). Further codesign processes are needed to understand how to apply this model to other health promotion areas, such as CVD prevention.

Role of Aboriginal and Torres Strait Islander health workers and practitioners

Aboriginal and Torres Strait Islander health workers and practitioners play a critical role in health promotion and community healthcare (Briscoe 2022). However, their role has been overlooked in funding drivers for CVD risk assessment (National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners [NAATSIHWP] 2020) and the implementation of shared decision-making more broadly in Australia (Trevena et al. 2017). The Australian Aboriginal and Torres Strait Islander health worker and practitioner roles are two similar yet distinct professions that make up a unique and essential workforce (Briscoe 2022). This workforce was created for and by Aboriginal and Torres Strait Islander peoples who recognised the need for a culturally appropriate and geographically specific workforce to assist in improving and raising the quality of healthcare and life expectancy rates throughout all of Australia and the islands of the Torres Strait. The role of the Aboriginal and Torres Strait Islander health worker and health practitioner are unique as a culturally-based workforce underpinned by national training and regulation (Briscoe 2022).

Aim

With the release of revised heart health check guidelines in 2023 (NVDPA 2023), there was a need to develop new tools to enable culturally appropriate communication about CVD risk in communities, to enable shared decision-making and contribute to more equitable outcomes. This study explored the views of Aboriginal and Torres Strait Islander community members (consumers) and health workers/practitioners on existing shared decision-making tools for CVD prevention. It explored how to make heart health checks in primary care more culturally appropriate, using a new Indigenous shared decision-making model developed in a different health promotion context.

Methods

Yarning approach

The study method was based on the following definition:

> *Yarning in a semi-structured interview is an informal and relaxed discussion through which both the researcher and participant journey together visiting places and topics of interest relevant to the research study. Yarning is a process that requires the researcher to develop and build a relationship that is accountable to Indigenous people participating in the research* (Bessarab and Ng'andu 2010).

More broadly, yarning can be defined as a method of having conversations and sharing stories in a way that recognises and reflects Indigenous principles and norms around communication (Kennedy et al. 2022). Aboriginal and Torres Strait Islander peoples use yarning as a form of education, communication and sharing of knowledge. It has been used as a way to pass on culturally specific ways of knowing, being and doing from generation to generation, person to person and Elder to child (Walker et al. 2014). Yarning can also be used in clinical settings. Lin et al. (2016) identified three types of clinical yarning: 1) social yarn, where trust, rapport and common ground are built; 2) diagnostic yarn, where the patient may describe or share stories about themself so that the health professional can interpret this in relation to a clinical diagnosis; and 3) management yarn, using stories and metaphors to assist a patient's understanding of health issues and to promote shared decision-making. The yarning method in this study was guided by a senior Indigenous health researcher (MD) and is reflected in the data collection (rapport building and sharing stories in the workshops including MD, JP and DF; followed by individual yarning sessions led by JP) and analysis (yarning by JP and MD about the data to interpret shared stories and develop themes) stages of the project.

Participants

A convenience recruitment strategy was employed, using existing networks of the authors, with invitations by email. Aboriginal and Torres Strait Islander health workers/practitioners were recruited through the networks of the National Australian Association of Aboriginal and Torres Strait Islander Health Workers and Health Practitioners (NAATSIHWP). Consumers were recruited via a referral process from Aboriginal and Torres Strait Islander health worker/practitioners and the networks of the research team. A purposive sampling approach was used to ensure that the sample included a range of age, gender (in this study, some participants self identified as women or men through yarning), location and experience with CVD risk factors. Consumer participants were required to be aged 18 years or over, and to be of Aboriginal and/or Torres Strait Islander background. Aboriginal and Torres Strait Islander health workers/practitioners were required to be practicing. All participants were reimbursed with gift cards to recognise the time they gave up to participate in workshops and interviews.

To ensure anonymity in a relatively small health profession and within community networks, individual participant characteristics were not formally recorded in this study. This was based on feedback from the advisory group and approval by the ethics committee. An overview of the range of demographic characteristics at a group level is provided in the results.

Procedure

An online yarning workshop with Aboriginal and Torres Strait Islander consumers was conducted in 2022 to share stories about healthcare and introduce them to existing shared decision-making tools. This included an established health literacy-sensitive CVD decision aid (Bonner et al. 2022) and a new shared decision-making model co-designed with Aboriginal and Torres Strait Islander communities: Finding Your Way (Dimopoulos-Bick and Follent 2021). The consumer workshop was used to build rapport and trust before the individual yarning sessions, and introduce key concepts through shared stories, in line with established yarning methods (Bessarab and Ng'andu 2010; Kennedy et al. 2022). The yarning workshop lasted 90 minutes. This was followed by 17 individual yarning sessions (via online video call) with consumers and Aboriginal and Torres Strait Islander health workers/practitioners. Individual yarning sessions were conducted by a qualified Aboriginal and Torres Strait Islander health worker (JP). Consumer yarning sessions focused on personal experiences of shared decision-making and healthcare, within and beyond CVD. Aboriginal and Torres Strait Islander health workers/practitioners' yarning sessions focused on awareness of CVD screening tools, the role of the Aboriginal and Torres Strait Islander health worker/practitioner in CVD screening and opinions of the current CVD screening tool. Workshops were 90 minutes long, and follow-up individual yarning sessions were up to 30 minutes long. These were audio recorded with consent. Transcripts were analysed using a yarning process. Initial coding of a selection of transcripts was conducted by JP and MD (Indigenous researchers), and CB (non-Indigenous researcher with expertise in the health topic). Guided by a senior researcher (MD), analytical yarning among the team was used to share personal insights and reflections to develop a shared understanding of the data and refine the coding framework, which was then applied to all transcripts by JP. Data summaries were then discussed with all authors to develop thematic findings related to shared decision-making.

Ethics approval

Ethics approval was obtained from the Australian Institute of Aboriginal and Torres Strait Islander Studies (approval number EO294-20210826). All participants were provided with written information about the study, including the option to remove culturally sensitive information from study files, which was verbally reiterated prior to yarning sessions. All participants provided signed consent to participate.

Relationship

Priority was given to create a culturally appropriate and sensitive space while collaborating between researchers and the broader Indigenous community. This study was part of a broader project on CVD prevention with a pre-existing Aboriginal and Torres Strait Islander reference group, Thiitu Tharrmay, including community members from different geographical areas across Australia. Thiitu Tharrmay guided the overall project, including reviewing the study design and giving recommendations on the research processes before submission to ethics. Aboriginal and Torres Strait Islander peoples were involved as researchers in all stages of the project, including study design, leading yarning workshops and individual sessions for data collection, analysis, interpretation and writing (JP, DF, MD).

Results

The 17 participants included nine consumers and eight Aboriginal and Torres Strait Islander health workers/practitioners. The sample included people living in regional and metropolitan areas across three Australian states, both men and women (with the majority being women), a range of ages (from 20s to 60s), and varying experience with CVD (including risk factors only and experience of a CVD event). This paper focused on themes relating to shared decision-making in the context of CVD prevention, describing consumer views in part one and health professional views in part two. Specific feedback on existing shared decision-making tools and the co-design of new resources is separately reported (McKinn et al. 2025).

Part 1: Consumer themes relating to experiences of healthcare

For Aboriginal and Torres Strait Islander consumers, sharing stories of healthcare revealed themes associated with good experiences that also reflected shared decision-making concepts. This included rapport, continuity of care, culturally appropriate communication, addressing health literacy needs and different ways of being involved in health decisions.

Rapport with health professional

Rapport was a common theme when yarning with consumers about what happened the last time that they saw a doctor. All participants felt that they had a good recent health experience. A few participants felt that having a same-sex health professional made it easier for them to communicate their needs and feel that their expectations were met. This created a feeling of trust, comfort and safety. Rapport was also built when the health professional listened and did not talk over the patient, gave a feeling of encouragement, showed awareness of family history, was thorough with tests and follow-ups, and included them in decision-making. Overall, health professionals were seen to be reassuring and caring once rapport was established:

> *My doctor… she listens to what I have to say all the time… she doesn't speak over me or anything… because before I had her, I had a doctor who, you know, never listened to me and always would speak before I had finished my sentences and yeah. She's – and she encourages me as well* (C3).

Continuity of care

The importance of continuity of care was identified by participants who utilised a long-time family doctor. In some cases, the doctor was aware of the participant's family history over several generations. Examples of continuity and coordination of care covered diverse health issues beyond CVD, including: addressing vision changing over time through regular eye checks, annual health check results being sent to a new health service after moving to another state so that identified health concerns could be reviewed, and GP antenatal care being handed over to a midwifery team. Continuity over time through seeing the same health professional was a key feature of positive experiences in healthcare, but good handover processes could mitigate a change in health professional:

> *I had everything, my bloodwork done and what dates and stuff I had to have it done by and referring me to*

> *the hospital with the midwife who you know taken over now* (C1).

Cultural issues

Yarning highlighted differences between Indigenous and non-Indigenous health contexts, and the importance of being able to access culturally safe care. One participant shared the view that due to uncontrolled chronic disease, many Aboriginal and Torres Strait Islander peoples lost independence at earlier stages. This could lead to mob losing physical independence and dignity, although the mind still had the full capacity of a younger person:

> *So that was part of [why] I think Dad gave up because he just was someone there that they could just prick and prod… He's still a young man in his mind* (C2).

The same participant also had the feeling of being judged by non-Indigenous healthcare workers about taking care of an elderly family member. They identified the need for Indigenous health workers in all stages of health, from prevention to long-term care arrangements, to ensure that staff could communicate appropriately and effectively to the patient at all stages of their healthcare. Other participants mentioned that it was important to have an Aboriginal or Torres Strait Islander health worker available to assist with specific issues, including mediation, advocacy, cultural barriers and to create holistic care.

We can help our people but it's in that communication of if they get hospitalised if they get non-Indigenous workers coming in and caring for them over a particular time. It's that gap (C2).

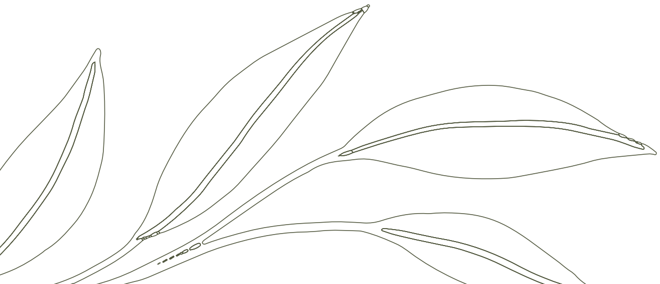
Understanding of cultural roles around family and gender (in this study, some participants self-identified as women or men through yarning) was linked to patients having good experiences in their healthcare. For example, one participant shared how she as a daughter was unable to interfere or know about her father's private information and healthcare, but non-Indigenous health staff did not know how to communicate appropriately and effectively with an elderly Indigenous male. Another participant described how having a female health professional made her experience feel safe and comfortable, but this wasn't always available. The participant also mentioned that while she was open to seeing a male health professional if she needed to, she would not see a male health professional who was related to her.

> *Yeah. It's always a good experience when I have a female doctor. And as you know with doctor shortages or supply of females, well if I need to speak to a male, a health professional I will, provided it's not a relative* (C6).

Understanding health information

Several participants mentioned concepts relating to understanding of health information. For example, one participant explained that medical terminology should be explained at an everyday language level to build confidence and understanding of the patient and the care that they are receiving. Another related that she likes to be involved in her health issues and often prefers to listen to what the doctors are saying and then paraphrase what she heard so that she knows that she understood what advice was shared with her.

> *I also want them to hear what I'm saying and be able to answer it like you know in a civilian way so it's understandable like you know not just chucking big words around like just make you understand, so you don't go home with a worried mind* (C1).



Involvement in decision-making

Through sharing stories of good healthcare, consumers identified a variety of ways they preferred to give input and be involved in shared decision-making whilst receiving healthcare. Participants liked to share information with their service provider in various forms. One participant described advocating for and encouraging family members to make lifestyle changes, and liked to be very involved in decision-making. This allowed her to make the best-informed decisions needed for each situation:

> *A lot of input. Considering that it's my body and I go to them for advice and seek advice* (C7).

Other participants explained that when discussing health issues, they did like to give input but tended to go along with what the health professional had to say. Sometimes they would prefer to listen and take the recommendations from the doctor. For example, one participant had been through a lot of serious health issues so had some understanding of her health needs, but not all of her health experiences had been positive. Because her issues were complex, she found that it was easier to just listen and take the health professionals' advice:

> *See, I'm influenced, I'm very influenced by anyone that says something to me, so I've come to this point now that I'll just listen to the medical staff* (C2).

Others described more of a shared decision-making approach. One participant described how sharing information with their health professional gave them an opportunity to identify cultural barriers and alternative medical approaches (e.g. Eastern medicine, naturopathy). Another described discussing medications and side effects, with consideration of lifestyle choices. The health professional explicitly went through the pros and cons of the medication to allow the best possible decision for her situation:

> *During my health check, I asked my doctor about the weight loss EpiPen the Ozempic. She told me the pros and cons of it and the cost of it… the effects of it* (C7).

Part 2: Aboriginal and Torres Strait Islander health workers/practitioners' experiences of supporting health

Aboriginal and Torres Strait Islander health workers/practitioners explained how they already support shared decision-making about CVD prevention, including pre-screening for CVD risk factors and providing culturally safe healthcare. They also identified opportunities for a greater role in CVD risk assessment to enable health promotion and education for early prevention.

Pre-screening for CVD risk factors

The participants highlighted various ways that their profession was already supporting CVD risk screening through the assessment of risk factors. However, their involvement in the full risk assessment process outlined in the guidelines (NVDPA 2012 and ACDPA 2023) was limited due to the need to involve the GP for financial claims:

> *I don't believe they do specific screening. If anything, their role in it would be doing their obs [observations], and escalating their blood pressures, or taking bloods, and then the GP would do the blood results and medications, and all that side to it* (HWP8).

As a result, participants' experience in CVD risk assessment was highly variable, with some participants being unfamiliar with risk calculators and others having greater involvement:

> *If we see them before they see the doctor, we'll complete the screening tool and talk to the doctor*

> *about it when we take them in, especially if there's a high risk, we usually alert the doctor* (HWP7).

Role in prevention

Participants identified issues with continuity of care in their communities, including a risk of poor or no maintenance and follow-up for people with ill health. For the prevention context, there was a shared view that Aboriginal and Torres Strait Islander health workers/practitioners cannot provide early intervention, as well as they could if they were involved in the CVD screening process. In the experience of participants, the need for health promotion was often identified at the post-CVD stage rather than pre-CVD, focusing on secondary prevention. Some participants felt like they were providing first aid rather than prevention:

> *It means that we can't provide early intervention as well as what we should. We provide a lot of promotion, which has aspects of early intervention, but we don't actually provide a survey or questionnaire, per se, to indicate these are the signs and symptoms that you should be looking out for towards cardiovascular* (HWP1).

Several participants noted that the CVD risk assessment calculator could be used more directly by Aboriginal and Torres Strait Islander health workers/practitioners to support health promotion and education at an earlier stage. Participants in this study wanted more opportunity to be involved in the CVD risk assessment process, to provide the patient with a more thorough review and management plan to reduce their CVD risk.

> *I think for Aboriginal health workers, it would give more ability for them to do more of the screening and education, which would help, obviously get all of that education out to the community* (HWP7).

Providing culturally safe healthcare

Aboriginal and Torres Strait Islander health workers/practitioners described their role in providing holistic healthcare to their patients in a primary healthcare setting. Participants described enabling a comfortable and safe space for patients to give and receive information about their health. For example, one participant described how patients may not always provide the full information about their risk factors to health professionals if they are uncomfortable:

> *I tell the doctors not always all the information, and I'm sure that happens with health workers as well, but I think health workers can see through that a bit more sometimes and be a bit more informal and relaxed and get that information off patients in a non-judgemental way* (HWP3).

Another participant identified that Aboriginal and Torres Strait Islander peoples in their community do not like talking about things like CVD or negative issues regarding their health:

> *We don't like talking about those kind of negative possibilities as well but if there's a way that it can be done, I think – and just to educate people I guess, if you do – and I guess it would just highlight if they fall within some of those higher risk categories and what they mean* (HWP3).

Several participants noted the importance of the Aboriginal and Torres Strait Islander health worker/practitioner being able to provide a culturally appropriate environment to enable important conversations between practitioners and patients. They were aware of family history, cultural foods and medicines, community knowledge and taboos for their communities. This cultural knowledge could facilitate more realistic answers about health behaviours, to inform a more accurate CVD risk assessment.

> *I think that having those health workers being able to have those yarns in a culturally safe way with patients and patients would give clearer and better results in terms of using the tool, in terms of that holistic approach and patients feeling safer and more comfortable talking to an Aboriginal health worker, so you're going to get more realistic results I think* (HWP3).

Participants explained how they created a sense of security and trust in the health facility as they are health professionals with the same or similar cultural backgrounds, and are often from the same community or area, so can provide an understanding of the Aboriginal and Torres Strait Islander ways of knowing, being and doing:

> *Aboriginal health workers were the first point of contact unless we were short-staffed. So, it's really important because especially as an Aboriginal health worker or practitioner, working in that role within your community, you know your community and the Aboriginal people that are coming in. So they feel comfortable and safe to be able to do those screenings, and they trust you* (HWP6).

Discussion

Summary of findings

For Aboriginal and Torres Strait Islander consumers, sharing stories of healthcare showed the importance of building rapport, continuity of care, culturally appropriate communication and varied ways they want to be involved in shared decision-making about CVD and health issues more generally. In separate yarning sessions, Aboriginal and Torres Strait Islander health workers/practitioners explained how they address these issues to provide culturally safe care to their communities. To support shared decision-making about CVD prevention guidelines, Aboriginal and Torres Strait Islander health workers/practitioners could be more directly involved in CVD risk assessment processes, and communication tools need to prompt non-Indigenous health professionals to recognise and address cultural issues.

Comparison with broader literature

The findings align with other research on the cultural barriers to healthcare faced by Aboriginal and Torres Strait Islander peoples, which have been reflected in health guidelines. For example, the Queensland Health patient care guidelines (Queensland Health 2017) explain in great depth the intricacies of cultural etiquette when engaging with an Aboriginal and Torres Strait Islander person in a healthcare setting. In healthcare, it is essential to build rapport and respect boundaries such as touch and personal space. There are also cultural taboos around men's and women's business and other sensitive subjects, such as death and dying. There are many intricate concepts and ideas that are best supported by Aboriginal and Torres Strait Islander ways of knowing, being and doing; the things that are not learnt but formed as part of the culture and spirituality that Aboriginal and Torres Strait Islander peoples innately know.

As reflected in some of the consumer stories, there can be communication barriers between non-Indigenous health professionals and Aboriginal and Torres Strait Islander patients (O'Neill et al. 2018). Non-Indigenous health professionals may create social awkwardness through poor communication and poor understanding of cultural protocol in healthcare contexts (Dudgeon et al. 2014; Markwick et al. 2014; Queensland Health 2017). Research conducted with Indigenous peoples globally has shown that reciprocal trust and respect are crucial requirements for shared decision-making to occur (Groot et al. 2020; Jull et al. 2015). When health information is translated using culturally appropriate knowledge, Indigenous peoples are more likely to participate in shared decision-making and to have more trust in healthcare professionals (Groot et al. 2020).

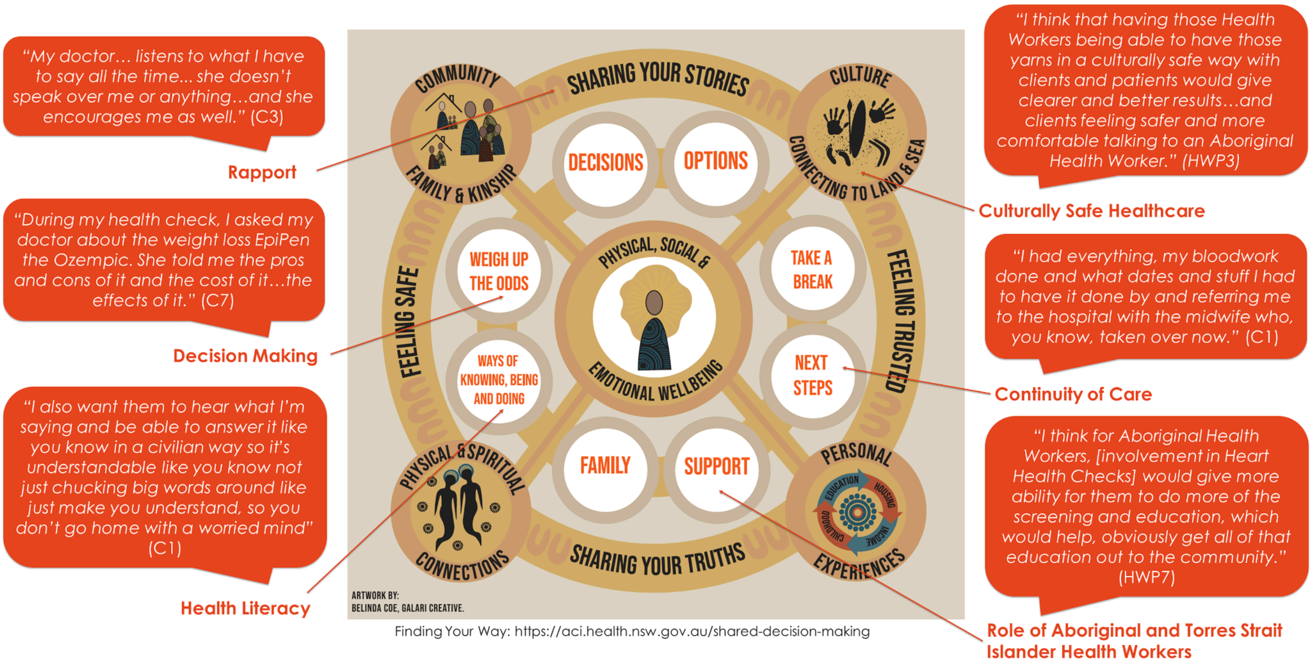
Healthcare must be delivered in a way that acknowledges that Aboriginal and Torres Strait Islander peoples may feel judged or made to feel inferior and can carry a disposition of shame (O'Neill et al. 2018). This is an after-effect of colonisation and the trauma that has been carried forward from one generation to the next. McKendrick et al. (2017) suggest that intergenerational trauma comes from the mistrust, abuse and racism that Aboriginal and Torres Strait Islander peoples have endured (Dudgeon et al. 2014; Human Rights and Equal Opportunity Commission 1997).

Implications for practice and policy

Both groups of participants identified key issues around cultural safety and appropriateness that are essential to address, to enable shared decision-making about the new CVD prevention guidelines with Aboriginal and Torres Strait Islander communities. Two key areas that could be addressed are: 1) using more culturally appropriate shared decision-making models for CVD prevention communication tools; and 2) enabling a clear role for Aboriginal and Torres Strait Islander health workers and practitioners in CVD risk assessment and management.

For shared decision-making tools, the findings align with the Finding Your Way model (Dimopoulos-Bick et al. 2023), which was originally co-designed with communities for COVID-19 prevention (Dimopoulos-Bick and Follent 2021). The model was developed during a time when there was a high rate of vaccine hesitancy regarding COVID-19 and national targets for vaccinations were not being met. Many Indigenous communities in New South Wales were left unprotected or at risk of the effects of COVID-19. To tackle this, the New South Wales Government and Agency for Clinical Innovation initiated a co-designed model that was created with Aboriginal and Torres Strait Islander peoples for Aboriginal and Torres Strait Islander peoples: 'by mob for mob'. The Finding Your Way model is an innovative and interactive tool that encourages the user to identify what choices are available and empowers the user to ask questions about the options and how this could affect their decisions. It supports a holistic two-way process that assists health professionals and patients to have these discussions and make decisions together. The Figure provides examples of how themes from this study map to the model, illustrating generalisability of this model to CVD prevention and other health contexts. Following this study, the structure of the Finding Your Way model was used to co-design a new resource to support culturally appropriate shared decision-making about heart health checks (available at www.heartyarningtool.com). The development of this tool has been separately reported (McKinn et al. 2025).

Participants in both the consumer and health professional groups highlighted how the Aboriginal and Torres Strait Islander health worker and practitioner role could support shared decision-making about CVD prevention. The experiences of these participants show how their expertise is underutilised in current CVD screening processes, including awareness of, access to and communication of CVD risk calculators. Although Aboriginal and Torres Strait Islander health workers/practitioners may be involved in completing the basic clinical observations for risk factor pre-screening, the risk assessment and



"My doctor… listens to what I have to say all the time… she doesn't speak over me or anything…and she encourages me as well." (C3)

Rapport

"During my health check, I asked my doctor about the weight loss EpiPen the Ozempic. She told me the pros and cons of it and the cost of it…the effects of it." (C7)

Decision Making

"I also want them to hear what I'm saying and be able to answer it like you know in a civilian way so it's understandable like you know not just chucking big words around like just make you understand, so you don't go home with a worried mind" (C1)

Health Literacy

"I think that having those Health Workers being able to have those yarns in a culturally safe way with clients and patients would give clearer and better results…and clients feeling safer and more comfortable talking to an Aboriginal Health Worker." (HWP3)

Culturally Safe Healthcare

"I had everything, my bloodwork done and what dates and stuff I had to have it done by and referring me to the hospital with the midwife who, you know, taken over now." (C1)

Continuity of Care

"I think for Aboriginal Health Workers, [involvement in Heart Health Checks] would give more ability for them to do more of the screening and education, which would help, obviously get all of that education out to the community." (HWP7)

Role of Aboriginal and Torres Strait Islander Health Workers

Finding Your Way: https://aci.health.nsw.gov.au/shared-decision-making

Figure: Examples of study themes mapped to Finding Your Way model components (original model co-authored by DF, as outlined from Dimopoulos-Bick et al. 2023).

communication process is passed on to other health professionals for billing purposes or if the patient is identified as being at high risk of CVD. While this can be appropriate and necessary for prescribing medications, more explicitly involving the Aboriginal and Torres Strait Islander health worker/practitioner in the screening process could reduce barriers to opportunistic screening, education and health promotion, and enable culturally appropriate care before CVD conditions develop. This may require changes to the financial incentives for heart health checks specifically (NVDPA 2023), and better integration with Medicare billing items for broader health assessments for Aboriginal and Torres Strait Islander patients (NAATSIHWP 2020). Greater involvement of Aboriginal and Torres Strait Islander health workers/practitioners in the screening process could also help to address health literacy needs in a culturally appropriate manner that encompasses cultural aspects of health literacy. Culture is a social determinant of health that can influence an individual's health literacy (Institute of Medicine Committee on Health Literacy 2004). While there is little research looking at Aboriginal and Torres Strait Islander conceptualisations of health literacy, a draft framework for the National Health Literacy Strategy in Australia is being developed with input from Aboriginal and Torres Strait Islander communities via the National Aboriginal Community Controlled Health Organisation (Department of Health and Aged Care 2022). Previous studies (Smith et al. 2020; Vass et al. 2011) have highlighted the importance of looking beyond the biomedical paradigm to cultural concepts of health (e.g. taking part in cultural practices, connection to Country), and the significance of peers, family and community in understanding and navigating health (Smith et al. 2020).

Strengths and limitations

The use of Indigenous research methods was a key strength of this work. Using culturally appropriate processes for the workshop included leadership by Aboriginal and Torres Strait Islander members of the team (JP, MD, DF) and a yarning process to share stories developed rapport with consumers. The individual yarning sessions were conducted by an Aboriginal and Torres Strait Islander health worker (JP). The broader research team included researchers with experience in cardiovascular disease prevention, health literacy and shared decision-making (CB, SM). There were some limitations to the method that could be improved in future research. The lack of detailed information about the study participants, due to ethical concerns, limited understanding of the transferability of these findings to the wider Aboriginal and Torres Strait Islander population. Due to travel restrictions and outbreaks during the COVID-19 pandemic, the yarning sessions were conducted online rather than in person. Several participants stated they would have liked to have a more hands-on and face-to-face approach to interact with the shared decision-making tools. It was also suggested that in future workshops, the groups could possibly be separated into men's and women's groups, and different age groups, to further explore the unique perspectives of different community groups. This approach may also help to address gender imbalance among the participants, which was a limitation of this study. Wenitong et al. (2014) describe that for sensitive health issues, it may be more effective to separate conversations into gender-specific groups to focus on topics in a more culturally friendly and sensitive manner (e.g. to focus on women's or men's business).

Conclusion

The findings highlight the importance of addressing cultural and communication barriers to enable shared decision-making about heart health checks, as well as broader access issues such as low literacy and a lack of continuity of care. Community members in this study preferred a culturally adapted model of shared decision-making, which was used to co-design new tools for heart health checks. A more explicit role for Aboriginal and Torres Strait Islander health workers/practitioners is needed to support the implementation of heart health check guidelines.

Author contributions

J. Parnham: Conceptualisation, data curation, formal analysis, methodology, project administration, writing – original draft; S. McKinn: Conceptualisation, data curation, formal analysis, methodology, project administration, writing – review/editing; D. Follent: Conceptualisation, methodology, writing – review/editing; M. Dickson: Conceptualisation, formal analysis, methodology, writing – review/editing, supervision; C. Bonner: Conceptualisation, formal analysis, methodology, writing – original draft, funding acquisition, supervision.

Declarations of interests

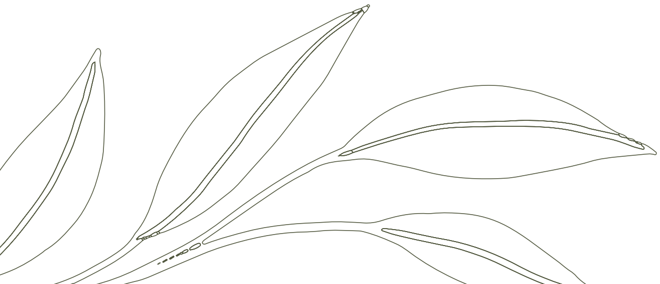
Judith Parnham and David Follent are board members of the National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners (NAATSIHWP).

Funding

This work was supported by funding from the Australian Government Department of Health - First Nations Health Division. The funding body had no role in the writing of this article.

Acknowledgements

We thank the members of advisory group Thiitu Tharrmay for their advice on the study design, and the community members who participated in the study.



Author biographies

Judith Parnham is a proud Ankamuthi and Erub descendant. She is the Queensland Representative, Deputy Chair and Board Director at the National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners (NAATSIHWP). This research was conducted as part of her Master of Philosophy (MPhil) degree.

David Follent is a Global Atlantic Fellow, Senior Project Officer in Chronic Care for Aboriginal People at the Agency of Clinical Innovation (ACI), and the current chairperson of the NAATSIHWP. He is a proud Bundjalung man living on Gadigal lands. The yarning method in this paper was conducted under the guidance of a senior Indigenous health promotion academic.

Prof Michelle Dickson is a Darkinjung/Ngarigo Aboriginal Australian and Director of the Poche Centre for Indigenous Health at the University of Sydney.

A/Prof Carissa Bonner is a non-Indigenous researcher who has developed several shared decision-making tools for heart health checks, and co-supervised Judith Parnham's MPhil with Prof Michelle Dickson.

Dr Shannon McKinn is a non-Indigenous researcher with expertise in qualitative research and shared decision-making.

References

Australian Bureau of Statistics, 2019. National Aboriginal and Torres Strait Islander Health Survey, 2018–19. Vol. Cat No. 4715.0. Australian Bureau of Statistics, Canberra, Australia.

Australian Chronic Disease Prevention Alliance (ACDPA), 2023. Australian guideline and calculator for assessing and managing cardiovascular disease risk. ACDPA.

Australian Commission on Safety and Quality in Health Care, 2021. In: National Safety and Quality Health Service Standards, 2nd ed. version 2. Australian Commission on Safety and Quality in Health Care, Sydney, Australia.

Agostino, J.W., Wong, D., Paige, E., Wade, V., Connell, C., Davey, M. E., Peiris, D.P., Fitzsimmons, D., Burgess, C.P., Mahoney, R., Lonsdale, E., Fernando, P., Malamoo, L., Eades, S., Brown, A., Jennings, G., Lovett, R.W., Banks, E., 2020. Cardiovascular disease risk assessment for Aboriginal and Torres Strait Islander adults aged under 35 years: a consensus statement. Med J Aust 212 (9), 422–427. https://doi.org/10.5694/mja2.50529.

Australian Institute of Health and Welfare, 2022. Australian Burden of Disease Study: impact and causes of illness and death in Aboriginal and Torres Strait Islander people 2018. Australian Burden of Disease Study series no. 26, catalogue number BOD 32. Australian Institute of Health and Welfare, Canberra, Australia.

Australian Institute of Health and Welfare & National Indigenous Australians Agency, 2023. Measure 1.05 Cardiovascular disease, Aboriginal and Torres Strait Islander Health Performance Framework. Accessed on 1 May 2025 at: https://www.indigenoushpf.gov.au/measures/1-05-cardiovascular-disease.

Bessarab, D., Ng'andu, B., 2010. Yarning about yarning as a legitimate method in Indigenous research. Int J Crit Indig Stud 3 (1), 37–50. https://doi.org/10.5204/ijcis.v3i1.57.

Bonner, C., Batcup, C., Ayre, J., Cvejic, E., Trevena, L., McCaffery, K., Doust, J., 2022. The impact of health literacy-sensitive design and heart age in a cardiovascular disease prevention decision aid: randomized controlled trial and end-user testing. JMIR Cardio 6 (1), e34142. https://doi.org/10.2196/34142.

Briscoe, K., 2022 The vital roles of Aboriginal and Torres Strait Islander health workers and health practitioners. Agency for Clinical Innovation Clin Connect 31/10/2022. Accessed on 1 May 2025 at: https://aci.health.nsw.gov.au/about/clinician-connect/editorial/2022/vital-roles-of-aboriginal-health-workers.

Department of Health and Aged Care, 2022. National Health Literacy Strategy Framework Consultation. Accessed on 12 May 2025 at: https://consultations.health.gov.au/national-preventive-health-taskforce/national-health-literacy-strategy-framework-consul/.

Dimopoulos-Bick, T., Follent, D., 2021. Yarning with mob about COVID-19 vaccines. Insight+. Accessed on 1 May 2025 at: https://insightplus.mja.com.au/2021/39/yarning-with-mob-about-covid-19-vaccines/.

Dimopoulos-Bick, T., Follent, D., Kostovski, C., Middleton, V., Paulson, C., Sutherland, S., Cawley, M., Files, M., Follent, S., Osten, R., Trevena, L., 2023. Finding Your Way – a shared decision making resource developed by and for Aboriginal people in Australia: perceived acceptability, usability, and feasibility. Patient Educ Couns 115, 107920. https://doi.org/10.1016/j.pec.2023.107920.

Dudgeon, P., Milroy, H., Walker, R. (Eds.), 2014. Working together: Aboriginal and Torres Strait Islander mental health and wellbeing principles and practice, 2nd ed. Commonwealth of Australia, Canberra, Australia.

Groot, G., Waldron, T., Barreno, L., Cochran, D., Carr, T., 2020. Trust and world view in shared decision making with indigenous patients: a realist synthesis. J Eval Clin Pract 26, 503–514. https://doi.org/10.1111/jep.13307.

Human Rights and Equal Opportunity Commission, 1997. Bringing them home: report of the National Inquiry into the Separation of Aboriginal and Torres Strait Islander Children from Their Families. Human Rights and Equal Opportunity Commission, Sydney, Australia.

Institute of Medicine Committee on Health Literacy, 2004. in: Nielsen-Bohlman, L., Panzer, A.M., Kindig, D.A. (Eds.), Health literacy: a prescription to end confusion. National Academies Press, Washington DC, USA.

Jull, J., Giles, A., Lodge, M., The Aboriginal Women's Support Centre, Boyer, Y., Stacey, D., 2015. Cultural adaptation of a shared decision making tool with Aboriginal women: a qualitative study. BMC Med Inform Decis Mak 15, 1. https://doi.org/10.1186/s12911-015-0129-7.

Kennedy, M., Maddox, R., Booth, K., Maidment, S., Chamberlain, C., Bessarab, D., 2022. Decolonising qualitative research with respectful, reciprocal, and responsible research practice: a narrative review of the application of yarning method in qualitative Aboriginal and Torres Strait Islander health research. Int J Equity Health 21 (1), 1–134. https://doi.org/10.1186/s12939-022-01738-w.

Lin, I., Green, C., Bessarab, D., 2016. Yarn with me: applying clinical yarning to improve health professional-patient communication in Aboriginal health care. Aust J Primary Health 22 (5), 377–382. https://doi.org/10.1071/PY16051.

Markwick, A., Ansari, Z., Sullivan, M., Parsons, L., McNeil, J., 2014. Inequalities in the social determinants of health of Aboriginal and Torres Strait Islander people: a cross-sectional population-based study in the Australian state of Victoria. Int J Equity Health 13 (1), 91. https://doi.org/10.1186/s12939-014-0091-5.

McKendrick, J., Brooks, R., Hudson, J., Thorpe, M., Bennett, P., 2017. Aboriginal and Torres Strait Islander healing programs - a literature review. Healing Foundation. Accessed on 1 May 2025 at: https://healingfoundation.org.au/?s=Aboriginal+and+Torres+Strait+Islander+Healing+Programs+-+A+Literature+Review.

McKinn, S., Parnham, J., Follent, D., Tracy, M., Wyber, R., Freeman, N., Puranik, R., Dickson, M., Bonner, C., 2025. The heart health yarning tool: co-designing a shared decision-making tool with Aboriginal and Torres Strait Islander people for cardiovascular disease prevention and risk management. Health Expect 28 (4), e70387. https://doi.org/10.1111/hex.70387.

National Vascular Disease Prevention Alliance, 2023. Australian guideline and calculator for assessing and managing cardiovascular disease risk. Accessed on 19 September 2025 at: https://www.cvdcheck.org.au/.

National Association of Aboriginal and Torres Strait Islander Health Workers and Practitioners, 2020. A&TSI Health Worker & Health Practitioner Exemplar Health Assessment.

Accessed on 1 May 2025 at: https://www.naatsihwp.org.au/sites/default/files/naatsihwp_atsi_health_worker-health_practitioner_exemplar_health_assessment_updated.pdf.

National Vascular Disease Prevention Alliance (NVDPA), 2012. Guidelines for the management of absolute cardiovascular disease risk. NVDPA.

O'Neill, L., Fraser, T., Kitchenham, A., McDonald, V., 2018. Hidden burdens: a review of intergenerational, historical and complex trauma, implications for Indigenous families. J Child Adolesc Trauma 11 (2), 173–186. https://doi.org/10.1007/s40653-016-0117-9.

Queensland Health, 2017. Communicating effectively with Aboriginal and Torres Strait Islander People. Accessed on 18 November 2025 at: https://www.safetyandquality.gov.au/sites/default/files/2019-05/health-literacy-fact-sheet-5-supporting-staff-to-meet-health-literacy-needs.pdf.

Smith, J.A., Merlino, A., Christie, B., Adams, M., Bonson, J., Osborne, R., Judd, B., Drummond, M., Aanundsen, D., Fleay, J., 2020. 'Dudes are meant to be tough as nails': the complex nexus between masculinities, culture and health literacy from the perspective of young Aboriginal and Torres Strait Islander males – implications for policy and practice. Am J Men's Health 14 (3). https://doi.org/10.1177/1557988320936121.

Trevena, L., Shepherd, H.L., Bonner, C., Jansen, J., Cust, A.E., Leask, J., Shadbolt, N., Del Mar, C., McCaffery, K., Hoffmann, T., 2017. Shared decision making in Australia in 2017. Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen 123, 17–20. https://doi.org/10.1016/j.zefq.2017.05.011.

Vass, A., Mitchell, A., Dhurrkay, Y., 2011. Health literacy and Australian Indigenous peoples: an analysis of the role of language and worldview. Health Promot J Austr 22 (1), 33–37. https://doi.org/10.1071/he11033. PMID: 21717835.

Walker, M., Fredericks, B., Mills, K., Anderson, D., 2014. "Yarning" as a method for community-based health research with Indigenous women: the Indigenous women's wellness research program. Health Care Women Int 35 (10), 1216–1226. https://doi.org/10.1080/07399332.2013.815754.

Wenitong, M., Adams, M., Holden, C., 2014. Engaging Aboriginal and Torres Strait Islander men in primary care settings. Med J Aust 200 (11), 632–633. https://doi.org/10.5694/mja14.00160.