

'I have been asking for years for this': Remote Aboriginal and Torres Strait Islander men's perspectives on preventive health assessments



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Abstract

Purpose Aboriginal and Torres Strait Islander men demonstrate strong interest in maintaining their health and wellbeing, grounded in holistic concepts of care, responsibility and connection to community. However, men in very remote Australia experience a disproportionate burden of disease and lower life expectancy, alongside lower uptake of preventive health checks, reflecting structural barriers to access. This study aimed to explore factors that enable and hinder Aboriginal and Torres Strait Islander men in a very remote community from accessing health checks, and to explore perspectives on a co-designed health check initiative.

Methods This descriptive qualitative study was conducted in Nauiyu, a very remote community in the Northern Territory, Australia. Data were collected between June 2023 and July 2024. A thematic analysis of two linked data sources was undertaken: relevant yarning group transcripts about experiences of preventive healthcare from the overarching 'Enough Talk, Time for Action' research program and semi-structured interviews conducted after participation in a co-designed, men-only, pop-up health check

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initiative. The initiative was developed at the request of men in the Nauiyu men's group and co-designed with the local research governance group and community organisations.

Main findings Eighteen men contributed data to this study: 13 through 11 yarning groups and 10 through individual semi-structured interviews, with five represented in both datasets. Three global themes were identified: Motivations for accessing preventive healthcare; Preferred model of service delivery; and Strong relationships with key stakeholders. Participants strongly valued services that were co-designed and co-led with the community. Men-only, community-based, pop-up clinics were strongly preferred as they reduced shame, improved privacy and aligned with cultural protocols. Group attendance with peers and kinship networks facilitated engagement, while long waiting times and lack of confidentiality at mainstream clinics were key barriers. Trust in familiar providers and endorsement by respected community members were critical enablers.

Principal conclusions Preventive healthcare for Aboriginal and Torres Strait Islander men in very remote settings is most effective when it is co-designed, men-specific, community-based and relationally grounded. Embedding these principles into routine service delivery has the potential to substantially improve rates of uptake for health checks.

Keywords: Aboriginal and Torres Strait Islander health; Indigenous health; First Nations health; Men's health; Primary care; Preventive health

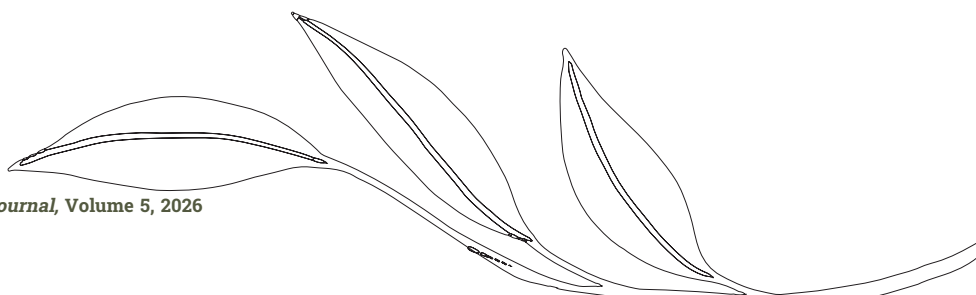
Highlights

- Men value preventive health but face structural barriers to access.
- Co-designed, men-only clinics improved engagement with health checks.
- Community-based delivery reduced shame, privacy concerns and barriers.
- Kinship, peer support and trusted leaders drive participation.
- Community-led models are key to improving First Nations men's health.

Introduction

Aboriginal and Torres Strait Islander Peoples have maintained the world's oldest continuing cultures for over 65,000 years (Clarkson et al. 2017). Across more than 250 language groups, they have developed complex and enduring social and legal systems (Australian Institute of Aboriginal and Torres Strait Islander Studies 2024). Australia's colonial legacy and ongoing inequities have been particularly harmful to the health and wellbeing of Aboriginal and Torres Strait Islander men in very remote areas, where life

expectancy is 67 years compared with 71 years for Aboriginal and Torres Strait Islander women; in major cities, these figures rise to 73 and 77 years, respectively (Australian Institute of Health and Welfare 2024). In very remote areas, Aboriginal and Torres Strait Islander men lose 3.1 times more healthy life years than non-Indigenous men, based on disability-adjusted life year data (Australian Institute of Health and Welfare 2022). Nationally, life expectancy differs by 8.8 years between these groups (Australian Institute of Health and Welfare 2024). In





the Australian healthcare context, regional, remote and very remote areas are determined using the Modified Monash Model, based on how far they are from urban population centres ([Australian Government Department of Health, Disability and Ageing 2024](#)).

The Australian Government funds preventive health assessments for Aboriginal and Torres Strait Islander Peoples, known as ‘715 health checks’ due to the corresponding item number on the Medicare Benefits Schedule ([Australian Government Department of Health, Disability and Ageing 2025](#)). General practitioners (GPs) in Aboriginal community-controlled health organisations (ACCHOs) conduct 42% of these assessments, despite comprising 2% of the GP workforce ([Australian Institute of Health and Welfare 2025](#)). In 2023–24, 26% of men had a health check compared with 30% of women; 24% of people in very remote areas had a health check compared with 28% nationally ([Australian Institute of Health and Welfare 2025](#)). People in very remote areas also wait longer between checks (32 months versus 27 months) ([Australian Institute of Health and Welfare 2025](#)). These figures highlight inequities in access for Aboriginal and Torres Strait Islander men, particularly in very remote communities.

Barriers to accessing care for these men include confidentiality concerns, shame, lack of trust, and limited culturally safe men-specific services ([Canuto et al. 2018a](#)). Low service use is often blamed on individual behaviour rather than recognised as a response to structural barriers ([Durey and Thompson 2012](#); [Robinson and Smith 2023](#)). Evidence shows that Aboriginal and Torres Strait Islander men are interested in their health but face obstacles to accessing culturally appropriate care ([Canuto et al.](#)

[2017](#)). Many men report that they would attend more if services better met their needs ([Canuto et al. 2018b](#)).

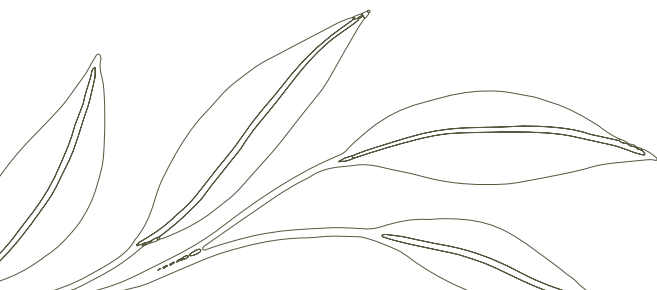
Research on motivators and barriers to Aboriginal and Torres Strait Islander health checks is scarce. A recent scoping review ([Usher et al. 2023](#)) identified three studies, including two on staff perspectives in a mainstream urban general practice ([Schutze et al. 2016](#)) and an urban ACCHO ([Jennings et al. 2014](#)), and a study on preventive care for children ([Reid et al. 2022](#)). Perspectives of Aboriginal and Torres Strait Islander men, particularly in very remote settings, remain largely unexplored.

This study addressed this gap by examining the factors that enable and prevent men in a very remote community from accessing health checks. These insights aim to inform service design and delivery to increase uptake and improve outcomes locally, with potential relevance to other rural and remote Indigenous contexts nationally and globally.

Methods

Community context

This study was conducted in Nauiyu, a very remote ([Australian Government Department of Health, Disability and Ageing 2025](#)) Aboriginal community 230 km south of Garramilla (Darwin) in Australia’s tropical north. Although usually accessible by road, flooding during the wet season (November to April) can isolate the community for months at a time. The 2021 Census recorded 350 residents, 91% of whom were Aboriginal or Torres Strait Islander Peoples (Australian Bureau of Statistics [[ABS](#)] 2025a). Kriol (54%) and Ngan’gikurunggurr (10%) are the main languages spoken other than English ([ABS 2025a](#)). Local services include a store, school, health clinic, airstrip, employment services, charities and a sporting club





([Northern Territory Government 2025](#)). The health clinic is run by the NTG.

Research program context

This study is part of the NHMRC and MRFF funded 'Enough Talk, Time for Action' (ETTA) research program, examining the impacts of a co-designed men's group on the social and emotional wellbeing (SEWB) of Aboriginal and Torres Strait Islander men in Nauiyu. The group was developed collaboratively with local men, Green River Aboriginal Corporation, NT Government Health Services, Mamulbak (a local Indigenous business) and the Daly River Buffaloes Football Club, with support from other community organisations. It began in February 2023 and meets weekly, averaging 12 participants. Sessions are community-led and facilitated by co-author JB through Mamulbak, with regular attendees fostering a supportive environment.

Aboriginal and Torres Strait Islander leadership, governance and engagement

The ETTA research team used an Aboriginal and Torres Strait Islander-led, cross-cultural, co-design approach focusing on capacity building and reflexive practice. The study was led by senior author KC, a Wagadagam man with extensive experience in men's health research and strong relationships with Elders and community leaders nationally. The project was managed by co-lead author CS, a Wagadagam and Warumungu man currently undertaking a Bachelor of Public Health with over 10 years of experience with Aboriginal and Torres Strait Islander community engagement.

Guided by Aboriginal Participatory Action Research ([Dudgeon et al. 2020](#)), an Indigenist methodology that privileges Indigenous ways of knowing, being and doing, the study positioned community members as co-researchers and decision-makers, ensuring that the work aligned with community priorities and

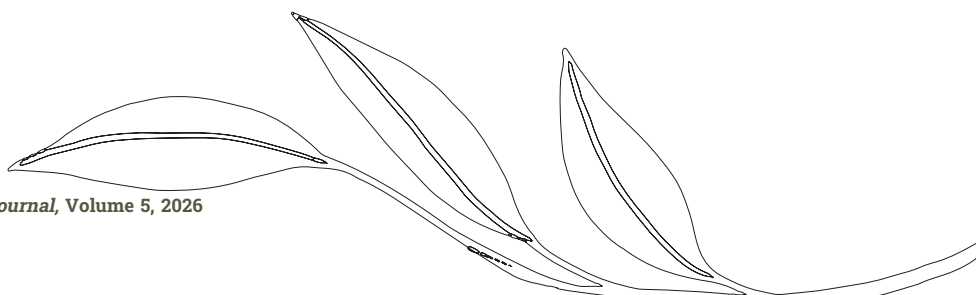
cultural protocols while supporting Australia's national research priorities ([Australian Government Department of Industry, Science and Resources 2024](#)).

The project was co-designed and co-led with Nauiyu men and local organisations. A governance group of nine local men, including Elders and emerging leaders, oversaw and approved all research activities. Coordinated by Mamulbak, the group formed organically when leaders from the men's group decided to step into advisory roles. Aboriginal and Torres Strait Islander men were involved at all stages, shaping the study and contributing their knowledge through culturally grounded methods such as yarning and storytelling. This manuscript followed the CONSIDER statement guidelines on reporting of health research involving Indigenous peoples ([Huria et al. 2019](#)) and the COREQ guidelines for reporting on qualitative research ([Tong et al. 2007](#)). Corresponding appendices were submitted with this manuscript for the consideration of the editors.

Ethics approval was obtained from the NT Department of Health and Menzies School of Health Research Human Research Ethics Committee (#2022-4446), and informed consent was provided by all participants in this study.

Co-design and co-implementation of health checks

During Nauiyu men's group gatherings, members expressed a need for men-only health checks in familiar, culturally safe spaces rather than the local clinic. This was unprompted by researchers and expressed at the initiative of the men themselves. In response, researchers partnered with the governance group, Mamulbak, Green River Aboriginal Corporation, the local Aboriginal health practitioner, and the NT sexual health and blood borne viruses team to co-design and deliver health checks outside the health clinic.





Five ‘by men for men’ pop-up clinics were scheduled between April and July 2024. Two had to be cancelled due to conflict in the community. Clinics were held in familiar, non-clinical community spaces such as the council-owned meeting room used by the Nauiyu men’s group. Governance group members and Elders supported attendance by providing cultural and language support, promoting participation, and assisting researchers to provide men with transport to the venue. Promotion occurred through the Nauiyu men’s group, word of mouth, and community social media. To encourage participation, men who completed a health check entered a raffle for fishing gear, with winners announced on social media each clinic day. A total of 34 men (31% of eligible men aged 15 years or older in the community) (ABS 2025b) participated in a health check at a pop-up clinic.

Recruitment and selection of study population

Study participants were recruited from those already enrolled in the ETTA research program. Eligibility criteria were: being men, aged 14 years or older, residing in Nauiyu, and identifying as Aboriginal and/or Torres Strait Islander. ETTA research program participants were recruited through a combination of convenience, purposive and snowball sampling. Participants in this study were recruited from the ETTA sample. Participants included nine local research governance group members and other men identified by them who attended the men’s group. Recruitment for the ETTA research program occurred face-to-face at men’s group gatherings.

All ETTA participants were invited to take part in yarning groups throughout the project. While the health check initiative was open to all men in the community, only ETTA participants were invited to complete a brief interview after the health check. The available sample for this study was therefore drawn

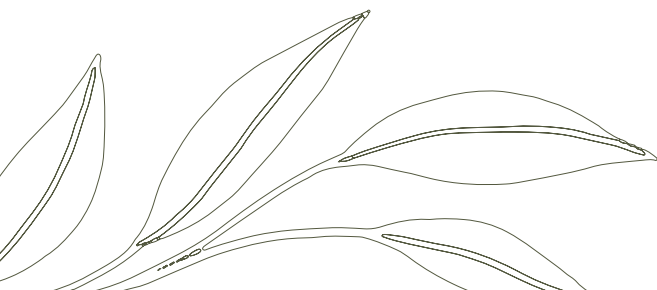
from a defined group of ETTA participants. The study did not use data saturation as the basis for determining sample size. Instead, consistent with an information power approach, the research team assessed during analysis whether the available data were sufficiently rich, specific and relevant to address the study aims (Malterud et al. 2016). The interview and yarning group data were deemed to provide sufficient information power, and no further recruitment was undertaken.

Data collection

Data collection was undertaken in-person by CS and co-author BB, a non-Indigenous male researcher, both part of the Aboriginal and Torres Strait Islander men’s health and wellbeing research team at Flinders University NT. Both researchers have been engaged with the community since 2022, during which time they have built trust and rapport with participants through attending the men’s group every week and joining in activities such as Australian rules football training, fishing for barramundi and barbecues.

Yarning group data pertaining to perspectives on preventive healthcare

Yarning group sessions were conducted in 2023 and 2024 as part of the broader ETTA SEWB research program. Open-ended questions facilitated yarning and storytelling as a culturally appropriate method of data collection. Sessions were facilitated by CS with BB assisting, in culturally safe settings such as the men’s group meeting room and during on-Country trips. Participants received a \$50 local store voucher. Sessions were audio recorded, transcribed via NVivo Transcription and checked by CS with Aboriginal co-author GAM. Transcripts were not returned to individual participants for comment or correction; instead, researchers prioritised community involvement in the analysis process through ongoing engagement with the research governance group.





Twenty men (including all nine research governance group members) participated in a yarning group between June and September 2023, and 11 men between May and June 2024. The co-designed health check initiative occurred in 2024, after the 2023 yarning group sessions were completed and while the 2024 yarning group sessions were ongoing.

The discussions in these groups focused on men’s SEWB and included content addressing participants’ perspectives and experiences accessing preventive healthcare. These relevant data were identified and extracted by CS and BB for analysis in this study. Discussion questions linked with these extracted data are listed in [Table 1](#).

Interviews following health checks

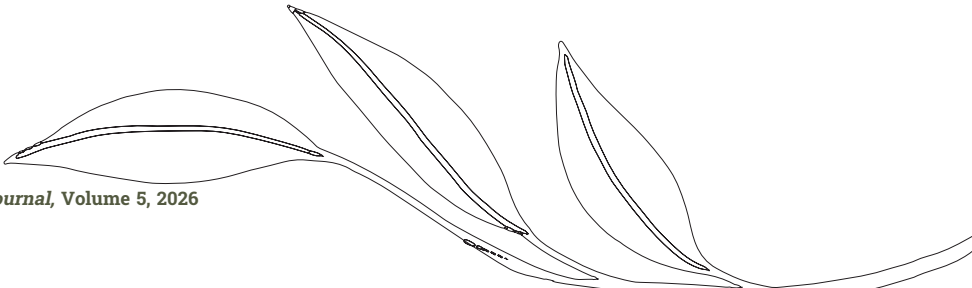
Brief, semi-structured interviews explored participants’ motivations for accessing preventive healthcare, views on the pop-up model, and facilitators and barriers to accessing health checks. A yarning group approach immediately after the health checks was not considered appropriate or feasible by the governance group due to confidentiality concerns and the additional time commitment, which risked disengagement from the initiative. Therefore, brief semi-structured interviews were used instead. Questions were developed in plain language with input from the governance group. CS and BB, who had existing relationships with the men, facilitated the interviews in a flexible way, with paraphrasing and further explanation used to support understanding. Interviews were conducted one-on-one in flexible, participant-led settings, including near the clinic, outdoors under a tree, or in a nearby vehicle with air conditioning, with responses and observations recorded in written notes. The questions asked are listed in [Table 2](#).

Time period	Question
Year 1 (2023)	Do the cultural differences between the type of facilitation by health service deliverers as opposed to the Nauiyu men’s group affect your attendance? If so, how?
Year 2 (2024)	We have previously spoken about the difference between types of service facilitation by health services compared to the Nauiyu men’s group. How would that affect your attendance now?

Table 1: Discussion questions from social and emotional wellbeing yarning groups associated with extracted data pertaining to experiences and perspectives in accessing preventive healthcare

Data analysis

MH, CS, BB and KC undertook an inductive, descriptive qualitative analysis of the interview and yarning group data in Microsoft Excel, informed by Attride-Stirling’s thematic network analysis approach ([Attride-Stirling 2001](#)). The interview and yarning group transcripts were coded separately by MH, under the supervision of CS, BB and KC. Preliminary basic themes (simple data-driven statements) were developed within each dataset to preserve the data context, purpose and method. These dataset-specific basic themes were then compared across the two data sources. Given the substantial conceptual overlap between the datasets, basic themes were consolidated into a single integrated thematic framework. Because the datasets were generated through different methods, questions and time points, the analysis did not seek to triangulate findings across a single uniform dataset. Instead, the datasets were integrated as complementary sources of evidence. This integrated framework was then analysed using a thematic network analysis approach, whereby basic themes were clustered into organising themes (broader interpretive patterns across the data) and further synthesised into global themes (overarching categories that captured the main findings) ([Attride-Stirling 2001](#)). Emerging findings were presented by MH and CS to the governance group with





Order	Question
1.	Have you ever attended the Nauiyu men’s group?
a)	If so, how many sessions?
b)	If not, why not?
2.	What brought you here today?
3.	So today, [Aboriginal health worker] is doing adult health checks for the men of the community. Do you know what the purpose of an annual adult health check is?
4.	Have you ever had an adult health check?
a)	If so, when was your last health check? Do you get them regularly (how often)?
b)	If not, why not?
5.	What needs to occur for you to have an annual adult health check?

Table 2: Questions asked in health check interviews

Mamulbak for feedback and review, thereby validating the analysis and ensuring alignment with community perspectives.

Results

Participants

In total, 18 men contributed data to this study. Of these, 13 participated in yarning groups and 10 participated in health check interviews, with five men represented in both data sources. The [Figure](#) provides a chronological overview of recruitment and data sources.

Twenty-one men were enrolled in the overarching ETTA research program, with ages ranging 18 to 66 years. No prospective participants declined to enrol in the program. Detailed demographic information was not collected as the study prioritised collective perspectives and sought to minimise intrusiveness to foster trust.

Twelve of the 34 men who attended the health check initiative were enrolled in the ETTA program. Ten of these men subsequently participated in a brief interview lasting 5 to 15 minutes. Participants were asked how long it had been since their previous health check. Their responses are summarised in [Table 3](#).

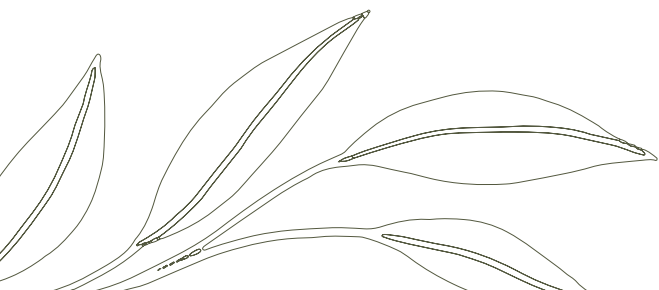
Data relevant to this study were extracted from 11 yarning group session transcripts (eight in 2023 and three in 2024) within the broader ETTA yarning dataset, which involved 21 men from the ETTA program. Within these transcripts, relevant contributions on preventive healthcare were identified from 13 men. The average duration for the yarning groups was 20 minutes, range 9 to 38 minutes. [Table 4](#) shows the format for all yarning sessions in the ETTA program. Early sessions were typically shorter with concise responses, whereas later sessions lengthened as trust developed. The transient nature of very remote communities affected continuity, with some men unable to participate again in later groups. To compensate, one additional participant was recruited. While the governance group recommended group yarning sessions to foster a comfortable and trusting environment for discussing sensitive issues, practical considerations sometimes required yarning groups to be conducted individually or in pairs, with the governance group supporting this approach.

Themes

Three global themes were identified through the analysis: 1) Motivations for accessing preventive healthcare; 2) Preferred model of service delivery; and 3) Strong relationships with key stakeholders. [Table 5](#) illustrates the full thematic structure, including organising and basic themes. Participants’ reflections on the facilitators and barriers to accessing health checks, as well as their suggestions for improving access, are interwoven across all three global themes. Global and organising themes are discussed below, supported by illustrative quotations.

Motivations for accessing preventive healthcare

Participants reported varying motivations for accessing health checks, often centred on monitoring overall wellbeing.



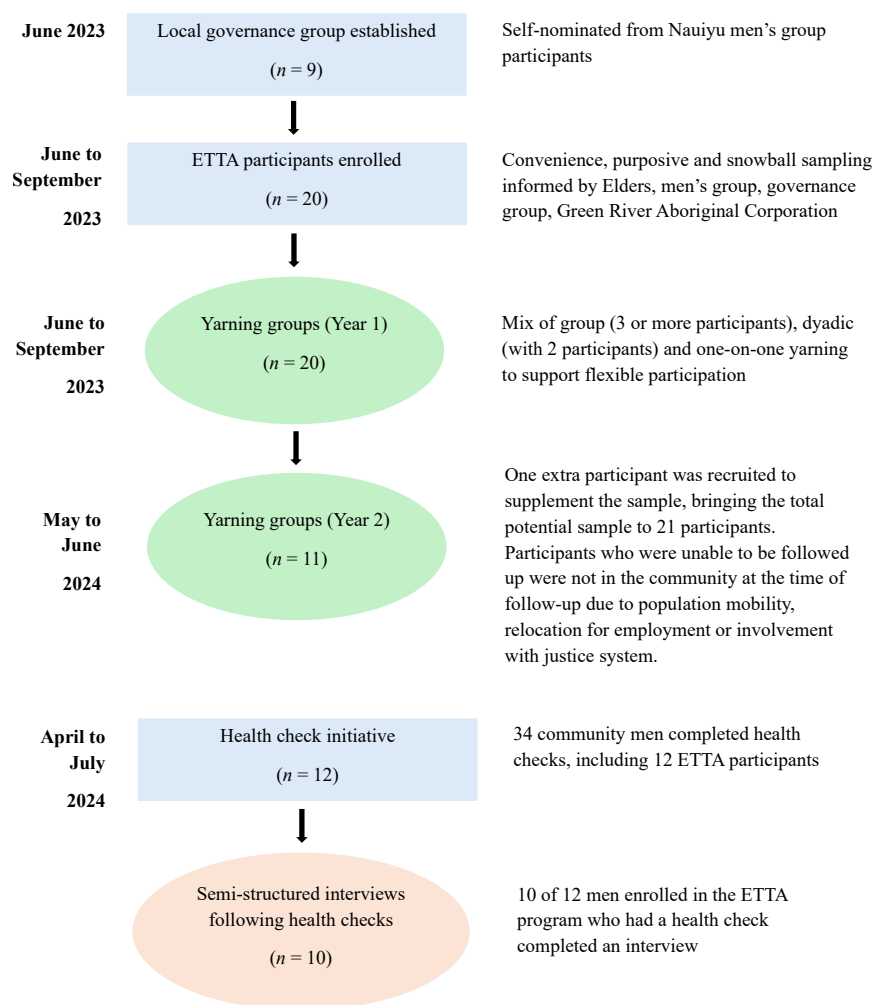


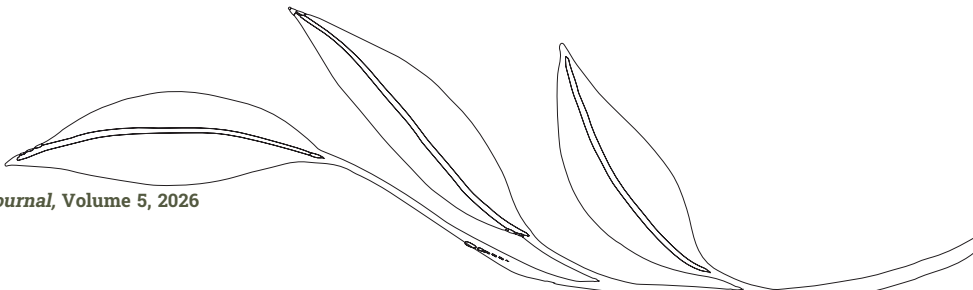
Figure: Chronological visual representation of participant recruitment and data sources in this study. ETTA, ‘Enough Talk, Time for Action’.

Time since last health check	Frequency of response
Within past 1 year	4
Within past 5 years	2
More than 10 years ago	1
Never had a health check	3
Total responses	10

Table 3: Time since last health check among participants who completed a health check interview

Interest in preventive healthcare

Many participants described motivations rooted in holistic care and the intention of preventing problems. Several wanted a ‘basic health check’ (P18) or to ‘check on my health’ (P6), while others sought more comprehensive tests including ‘bloods, urine, sugar levels and everything’ (P9) or ‘getting all of my health checked’ (P11). Some framed it as wanting to ‘see





Year	Participants involved	Number of yarning groups; type	Average duration	Total duration	Yarning group locations
2023	20/20	11; 6 one-on-one, 2 dyadic, and 3 groups of three or more	17 mins	182 mins 27 secs	Victoria Daly regional council meeting room, community recreation hall, on-Country
2024	11/21	3; 1 dyadic, and 2 groups of three or more	34 mins	101 mins 44 secs	Victoria Daly regional council meeting room, Daly River Buffaloes Football Club

Table 4: Format of all yarning groups in the overarching ‘Enough Talk, Time for Action’ program

where my health is at’ (P1) or ‘to be safe’ (P17), with one noting he attends a ‘yearly check-up to make sure [his] body is all good.’ Preventive intent was also clear: one said he wanted to ‘detect sickness’ (P16).

Specific concerns also shaped participation. One man wanted to ‘find out if [his] body is working,’ checking for ‘no sexual diseases’ (P2). The men’s group setting, supported by the NT Government sexual health and blood borne viruses team, created space to discuss such issues using culturally relevant materials and humour.

Another participant linked motivation to his alcohol use and smoking, seeking a check-up to ‘see if I am okay’ (P10). Others were prompted by illness or health history; one described ‘checking [health] after previous deficiencies,’ adding he ‘generally does [his] check-up after being unwell’ (P1).

Some men felt that health checks were not a reason for them to attend the local primary care clinic. Most men reported that they attend for acute illness or injury, stating, ‘The only time I go to the clinic is if I have a problem or injuries,’ (P6) ‘I only go to the clinic if I’m sick, not for general check’ (P17) and ‘I only go see my doctor when I am sick, 2 to 3 times per year’ (P16).

Maintaining good health as a family and cultural obligation

Several participants framed getting health checks as the right thing to do for themselves and their

communities. Phrases such as ‘right thing,’ (P7, P10) and ‘right thing to do for our health’ (P9) reflect a sense of personal responsibility to engage with preventive healthcare.

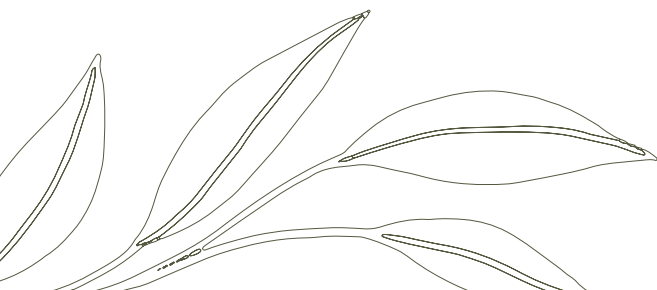
Preferred model of service delivery

Participants reflected on how the design and delivery of health check services shaped their willingness and ability to engage.

Men-only clinics

Participants preferred men-only preventive health clinics, viewing them as culturally safe alternatives to mainstream services. The presence of women was a barrier due to kinship obligations and cultural protocols. One explained, ‘You got ladies up there [at the clinic] like what I was saying earlier on, you’ll have ladies and maybe my sister is up the clinic. That’s how I feel,’ adding, ‘That’s where the shame factor comes in’ (P6). Another noted, ‘Sometimes, you know, with ceremony stuff some of the blokes can’t talk to their sisters, cousins, and that. They have that bit of a culture thing. So, I think it’s best for just men’ (P7). He also said, ‘It would be good if we have one [a health check service] down here with just men to have a check-up and talk about things.’ These reflections highlight gaps in mainstream service delivery and support the need for culturally governed, community-controlled models.

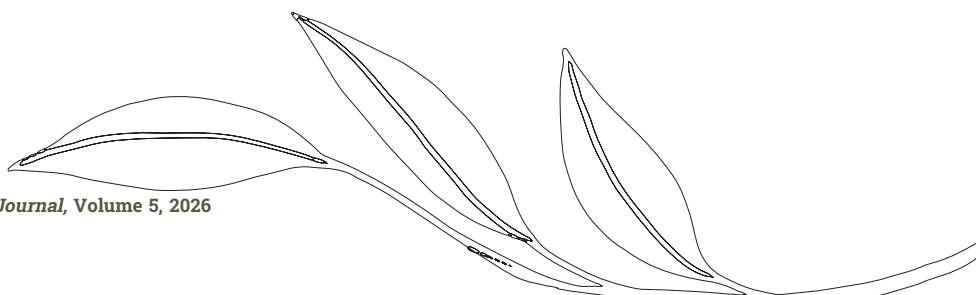
Some men expressed discomfort extended to female staff, especially around sensitive issues:





Global themes	Organising themes	Basic themes
Motivation for accessing preventive healthcare	Interest in preventive healthcare	Participants want to check on their health generally
		Participants want to check something specific about their health
		Participants want to check their health after being unwell
Preferred model of health check service delivery	Maintaining good health as a family and cultural obligation	Some participants describe only accessing the local clinic for care of acute illness or injury, with preventive health checks a lower priority or of less interest
		Participants view accessing health checks as the 'right thing' to do to enable them to fulfil their family, community and cultural roles
		Participants view men-only clinics as more appropriate for meeting men's cultural needs, enabling them to engage in healthcare aligned with cultural protocols between men and women within their community
	Preventive health clinics on a regular basis	Participants proposed frequencies for regular preventive health clinics
	Engaging in health checks with the support of family and peers	Participants feel safer and more confident accessing health services when supported by kinship networks and strong community connections
		Some participants feel shame, fear or discomfort when attending preventive health services alone
	Community-based delivery	Some participants value having health checks conducted through pop-up clinics embedded in community spaces
		Some participants don't feel comfortable with accessing the model of service delivery at the local clinic
		Participants would value having health checks out on Country
	Aligning with existing community-led health initiatives	Participants value aligning health check with existing men's initiatives (e.g. community-led men's group) and promoting participation through culturally safe environments where men can gather, share food and connect
	Private and confidential	Participants would feel more comfortable accessing health checks conducted in private and out of sight from the wider community
		Participants value confidentiality
Strong relationships with key stakeholders	Brief waiting times	Participants identify long waiting times as a significant barrier to accessing preventive health checks
	A non-judgemental, safe environment	Some participants feel shame accessing preventive health services
		Some participants feel guilty accessing preventive health services
		Some participants feel shy accessing preventive health services
	Clear communication in raising community awareness of the service	Participants would like preventive health services to be proactively promoted to the wider community
	Relational continuity with service provider	Participants value continuity of care and having an existing relationship with persons facilitating the service
		Participants would like service providers to take time to build rapport and understanding with men of the community
	Support to take part from trusted community members and service providers	Participants value encouragement from trusted, respected members of the community, and service providers who have existing relationships with the men
	Relationships support a collaborative and co-designed approach	Participants would like service providers to listen to what community members want through co-designing a health check service with them
		Participants expressed appreciation for the co-design process within the men's group that informed the development of the men-only pop-up health check service
		Participants would like service providers to build stronger relationships that foster collaboration with each other and with community members

Table 5: Combined thematic analysis of health check interview data and 'Enough Talk, Time for Action' yarning group data





It's good to have a male to talk to some of the boys, you know? Bit shy to talk about it, and not really nobody strong enough. Thinking they're a little bit weak to talk about whatever they've got going on (P8).

Several called for men-only clinics, citing women-only days as a model:

Yeah, or just like have a men's check-up day at the clinic where there's no lady around... it'd be better for our men. They do have a women's day [at the clinic] and no men walk in there. They don't have a men's [day]. I reckon that will be a good one. I think something like that should be set up here (P3).

Calls for 'specific men's clinics' (P17), 'men's specific [clinics]' (P2) and 'private, just males and no females' (P11) were common. One man valued the chance for 'straight talk' (P10) with care providers who are men; another said he would 'feel more safe' (P2) in a men-only setting.

Preventive health clinics on a regular basis

Participants wanted men-only health check services to be regular and visible: one suggested 'more awareness of check-ups every six months,' with signs and promotion (P18); another called for 'regular check-up sessions' (P2); and one participant said he would be 'happy to attend every year if it's just a private men's clinic' (P9).

Engaging in health checks with the support of family and peers

Participants highlighted kinship, family and peer support as central to engaging with health services. Many preferred attending in groups with trusted peers, such as the Nauiyu men's group:

It's like this little group here, that's good to take in as a group. They'll follow each other. If you take one by one, they can feel shame on their own especially (P3).

Others agreed: 'They would get pretty scared, but if you have two or three of us [they would feel less scared]' (P7). One noted, 'That cultural aspect; cousin, brother, kinship aspect,' adding that the 'little men's gathering for the check-ups just seemed like we had that support around each other' (P1).

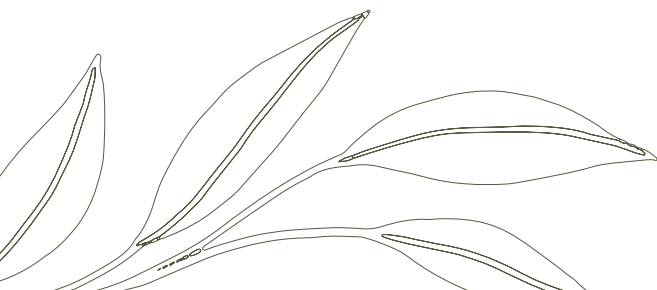
Some described being encouraged by peers. 'With a carload of boys, I said what's going on boys and it's so good' (P6). Others recalled relatives promoting checks by driving past or spreading the word (P16, P18).

Community-based delivery

Participants described men-only pop-up clinics as more culturally safe and accessible than the mainstream model. By bringing services into the community, they enabled more equitable access and reached men who had not had a check-up in years.

One said, 'I rather like what we have in here, which is good... Instead of going up there [to the clinic]' (P6). Others agreed: '[It] makes it easier that it's come to me,' adding, 'Seemed pretty relaxed. Yeah, no tension. Not so much anxiety. I think a lot of people get [that] when they go to say a clinic' (P1). One valued group connection: 'Even if we just use this room then we can have 10 or five blokes at a time and we can talk about whatever we need and feel confident' (P7).

By contrast, participants often felt uncomfortable in the local clinic. One reflected, 'The health centre to me is not strong enough, I'm sorry to say. Not for the men's group' (P2). Others said checks should be '[done] away from clinic' (P18), 'Don't feel like going to clinic' (P2), and 'Don't want to attend local clinic' (P9). A former outreach worker described the space as uncomfortable: 'They feel claustrophobic, should I say? Being in there; four walls around them' (P2).





Asked directly about comfort attending the clinic, one explained:

Well, you don't... because you see a lot of these young men here, a lot of them don't go for their normal check-up. Checking their heart and that, they hardly go to the clinic (P14).

Aligning with existing community-led health initiatives

Health checks were valued when they were aligned with the existing community-led initiatives rather than delivered as a standalone clinical activity. Participants particularly valued sharing food together, recommending 'more food and drinks for men' (P2, P16), while one participant reflected on the value of bringing health checks into the men's group space: 'That thing coming along here and having it [health checks] in the men's room. It's good, you know? Yes. You keep up with the health check' (P14).

Private and confidential

Participants stressed privacy as essential for health checks, expressing discomfort at being seen or surveyed by others at the local clinic with whom they didn't have an existing, trusting relationship. One explained, 'That [clinic] just seems to be a place where a lot of people can see who's going and who's coming from there' (P1). Another suggested check-ups be held 'in a place like this [community meeting room]... a private place so there no shame job and saying there's something wrong with that bloke,' noting being seen at the clinic could 'put a man down' (P3).

Others described the clinic as overcrowded: 'Just too much people' (P15), 'Don't like going to the clinic. Too many people' (P11) and 'crowded' (P18). Calls for a 'more private' setting (P2) and a 'private environment' (P18) were expressed, with the latter participant noting 'confidentiality in the community [is a] big risk'. One

participant praised the local clinic's commitment to confidentiality: 'You go get checked up and you find out the results, you go in yourself and everything [is] confidential' (P14).

Brief waiting times

Participants identified long waits as a key barrier. One wanted a 'quick trip' (P7). Others described 'lining up at clinic' (P17) and said they 'don't like going to the clinic – long waits to be seen' (P11). The sense that 'doctors [are] very busy' (P18) made these 'long waits' even more discouraging.

A non-judgemental, safe environment

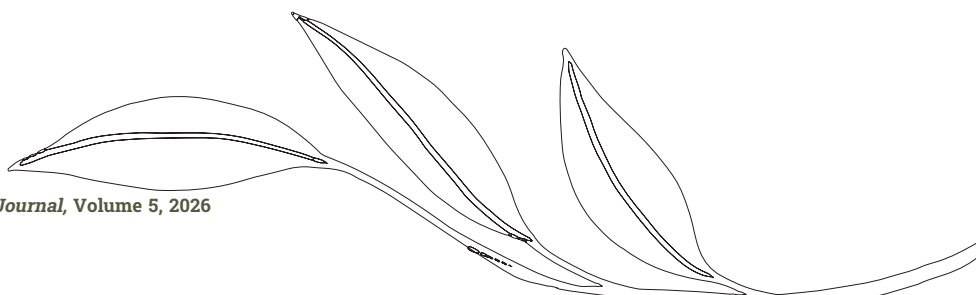
Some participants described shame, guilt, or shyness around preventive health, stressing the need for supportive, non-judgemental spaces. One explained:

Most of the men don't want to go to the clinic, they see it as a shame job. That still exists in our community. They all shame and I keep telling, 'this is for your own self,' you know? You may look good on the outside, but what about on the inside? You got to get checked out (P3).

Others expressed internal feelings: '[I] feel guilty of [my] own illness' (P2) and '[I feel] a bit shy to go to the clinic, yeah' (P15). These reflections highlight the importance of safe, private and respectful environments to support Aboriginal and Torres Strait Islander men's engagement with preventive care in remote settings.

Clear communication in raising community awareness of the service

Participants emphasised the importance of clear, visible communication so men knew when services were available. One suggested that services should 'put sign up at the clinic and spread the word,' noting that 'the biggest factor' preventing attendance was 'not knowing it is on' (P16). Another similarly called for 'extra reminders' (P17).



Strong relationships with key stakeholders

Participants stressed that trust in familiar providers and community leaders was central to engaging with preventive care.

Relational continuity with service providers

Participants highlighted the importance of familiarity with providers, feeling more comfortable with someone they knew and trusted. One man explained, 'I think a lot of blokes have probably that one person who they see that they feel comfortable with... I'd rather see him than anyone else,' adding that if that person wasn't available 'Then I leave. Probably say alright, well, I'll come back tomorrow' (P8). All four other yarning group members agreed.

Familiar faces helped bridge access, with one man describing his relationship with a health worker at the clinic: 'I normally speak to him... it's sort of a call and then take me over there' (P7). Trust was understood to develop through consistent presence and relationship-building (P13). Participants praised clinicians who tried to connect meaningfully with the community: 'The bloke you brought in here was spot-on with the bloods and men's health check,' attributing this to the fact that 'he understood the men of the community better' (P2). Another said: '[It was] good when we had [clinician name] there that time, it was good' (P6). Such relationships enabled men to feel safe, respected and understood.

A participant who is also a community-based service provider echoed this: 'It's a privilege and it's really good to be right in amongst it,' describing his work as 'cultural immersion' (P1). Unlike providers who visit briefly, he explained, 'you're living it and you're breathing it every day and knowing that you had that access that others don't.' Asked if this improved

engagement, he replied, 'Yeah... our numbers are pretty strong consistently.'

Support to take part from trusted community members and service providers

Participants emphasised the role of trusted messengers and clear communication in promoting preventive health services. Many said encouragement from a respected community member directly influenced attendance:

He is good, he is good. Yeah, very good and I like [him], I get along well with him... I was sitting up here waiting for a lift to this meeting and I seen this car pull up and toot the horn. Then he yells out 'come on old fella', so I just jumped straight in, I was happy (P6).

Others agreed: 'Yeah, [he] is a good fella. Everyone knows him you know, all the boys' (P8). He was described as 'very welcoming' and fostering 'brotherhood' (P9). His role in promotion was clear in comments such as '[he] drove to house' (P7), '[he] told us' (P10), and 'word from [him]' (P2).

Relationships support a collaborative and co-designed approach

Participants expressed a strong desire for men's health services to be co-designed with local men, to reflect their needs and preferences. One said of the men-only pop-up clinics: 'I think something like that should be set up here. I have been asking for years for that. Hasn't come so I don't want to hold my breath' (P3). Men valued the co-design process in the Nauiyu men's group:

[In the weekly men's group] we're speaking about things that we go through every day... This group and this platform that we have here, or this forum, is just a real broad, flexible, and free-talking forum. I guess that we've helped create [that environment] with this men's group (P1).



They also stressed collaboration between providers and community: 'The issue here is communications, working as a team and getting along with each other and supporting each other... Work as a team and it'll work just fine' (P2).

Discussion

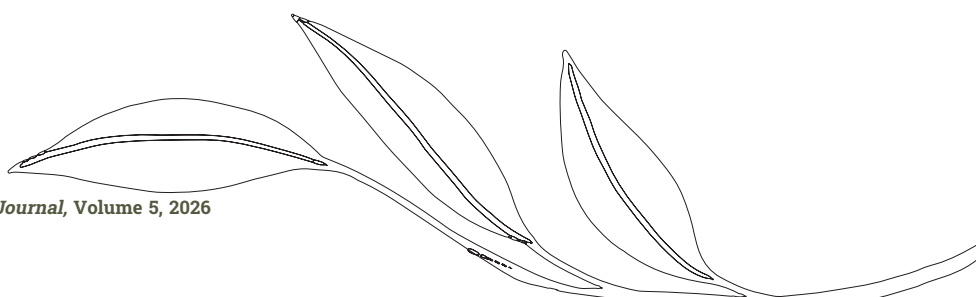
This study explored what enables and hinders Aboriginal and Torres Strait Islander men in a very remote context from accessing preventive health checks. Health checks for men were shaped, led and promoted by community members as part of an APAR approach. A co-designed approach with local men was central to improving engagement, and this investigation found that men viewed the Nauiyu pop-up health check initiative to be culturally safe, acceptable and a preferred model.

Participants emphasised that preventive health services are most effective when Aboriginal and Torres Strait Islander men are involved in designing, leading and promoting them, demonstrating the value of community-driven and place-based approaches. National strategies such as the National Aboriginal and Torres Strait Islander Health Plan 2021–31 ([Australian Government Department of Health, Disability and Ageing 2021](#)) and the National Agreement on Closing the Gap ([Coalition of Peaks 2020](#)) already emphasise community control, but in practice, community-controlled services make up a small proportion of the primary healthcare workforce in very remote areas. This study highlights that, alongside strengthening the community-controlled sector, government-run primary healthcare services must also embed genuine co-design with Aboriginal and Torres Strait Islander men and partner with local organisations to deliver culturally safe care. Collaborative models like the one trialled in Nauiyu,

where an NT Government clinic worked with the men's group and local organisations, demonstrate how shared leadership can increase engagement and provide a practical pathway to improve access to preventive health checks. This finding is consistent with extensive evidence that community-driven and community-controlled models improve engagement and health outcomes ([Pearson et al. 2020](#); [Gomersall et al. 2017](#)).

Co-delivering health checks in familiar community spaces was viewed as more accessible and culturally safe by Aboriginal and Torres Strait Islander men. This key finding aligns with a recently published scoping review, which found that adapting Aboriginal and Torres Strait Islander health checks to be delivered in settings such as arts and sporting events improves accessibility ([Miller and Walke 2024](#)). Very remote primary health services should invest in regular, community-based health check initiatives that are co-designed and co-led with local men. Primary healthcare commissioning frameworks should prioritise long-term, flexible funding that supports health services to work in genuine partnership with Aboriginal and Torres Strait Islander men in the design, delivery and evaluation of care.

Participants preferred men-only health clinics, which were viewed to support cultural safety and provide space for more open discussion of sensitive men's health issues (e.g. sexual health). The regular opportunity for men to meet, yarn and support one another as a group appeared to function as a preventive health activity in its own right and should be considered a core component of Aboriginal and Torres Strait Islander men's preventive health programs. This finding is consistent with a growing body of literature indicating men-only services as critical for Aboriginal and Torres Strait Islander men's





primary healthcare engagement (Canuto et al. 2018b; Prehn and Ezzy 2020; McCoy 2008; Wenitong et al. 2014). Gender-sensitive services are recognised as key for decolonising approaches to support the health and wellbeing of Aboriginal and Torres Strait Islander men (Prehn and Ezzy 2020). When these services are staffed by men Aboriginal and Torres Strait Islander clinicians, their presence is reported to foster trust, comfort and more frequent attendance (McCoy 2008). Men-only preventive health clinics should be established regularly to help men address their physical health and SEWB in culturally respectful ways.

Limitations

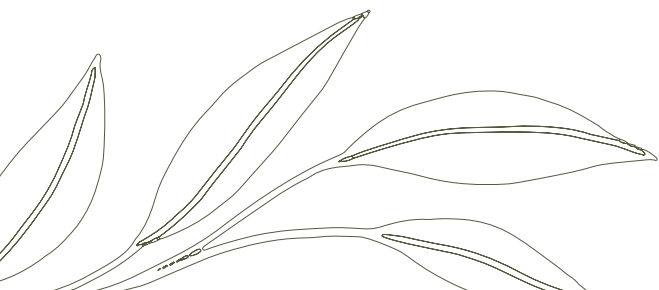
This study was conducted in a single community, which may limit the generalisability of the findings to other settings with different cultural and service delivery contexts. Additional resources would have supported broader and more equitable participation, particularly during periods of community unrest, when relationships between sections of the community were under strain. Despite physical distance from the community, the authors maintained consistent engagement with the governance group, with weekly in-person visits and *ad hoc* videoconference calls with the group coordinator. While the study centred the voices of Aboriginal and Torres Strait Islander men, it did not include the perspectives of policymakers, local service delivery personnel, community organisations or men's families, whose insights could have enriched understanding of the broader system of access enablers and barriers. Finally, because the yarning group and interview data were generated through different methods, questions and time points, the integrated findings should be interpreted as a synthesis of complementary data sources rather than as a single uniform dataset.

Conclusion

This study explored what enables and hinders Aboriginal and Torres Strait Islander men in a very remote community from accessing preventive health checks. The findings highlight the critical role of partnering with Aboriginal and Torres Strait Islander men in very remote communities to co-design and deliver culturally safe preventive healthcare, offering a model that can be adapted to similar contexts. These findings demonstrate the need for health services to embed community-led, men-focused models of care as standard practice in very remote settings.

Author contributions

M. Heelan: conceptualisation; methodology; investigation; data curation; formal analysis; validation; writing – original draft preparation; project administration. C. Stokes: conceptualisation; methodology; investigation; data curation; formal analysis; validation; writing – original draft preparation; supervision; project administration. B. Brickley: conceptualisation; methodology; investigation; data curation; formal analysis; validation; writing – original draft preparation; writing – review and editing; supervision. J. Bonson: investigation; validation. G. Ah Mat: data curation. C. Gaweda: writing – review and editing. K.J. Canuto: writing – review and editing. G. Gee: funding acquisition; writing – review and editing. M. Wenitong: funding acquisition; writing – review and editing. G. Wittert: funding acquisition; writing – review and editing. J.A. Smith: funding acquisition; writing – review and editing. S. Harfield: funding acquisition; writing – review and editing. J. Prehn: funding acquisition; writing – review and editing. K. Canuto: conceptualisation; funding acquisition; methodology; writing – review and editing; supervision.





Data availability

The authors confirm that the data supporting the findings of this study are available within the article.

Declaration of Interests

A/Prof Graham Gee and Dr Stephen Harfield are Associate Editors of First Nations Health and Wellbeing - The Lowitja Journal. All other authors have no competing interests.

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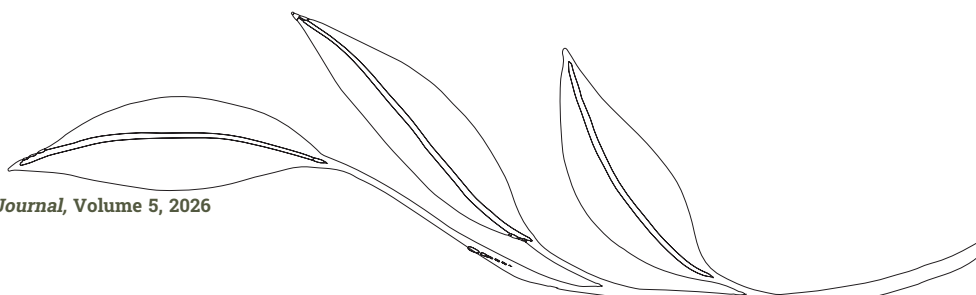
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References

- Attride-Stirling, J., 2001. Thematic networks: an analytic tool for qualitative research. *Qual Res* 1 (3), 385–405. <https://doi.org/10.1177/146879410100100307>.
- Australian Bureau of Statistics, 2025a. Nauiyu Nambiyu (Daly River) 2021 census all persons QuickStats. Accessed on 1 May, 2025 at: <https://www.abs.gov.au/census/find-census-data/quickstats/2021/UCL722024>.
- Australian Bureau of Statistics, 2025b. Nauiyu Nambiyu 2021 Census Aboriginal and/or Torres Strait Islander people QuickStats. Accessed on 1 May, 2025 at: <https://abs.gov.au/census/find-census-data/quickstats/2021/ILOC70400103>.
- Australian Government Department of Health, Disability and Ageing, 2024. Modified Monash Model. Accessed on 1 May, 2025 at: <https://www.health.gov.au/topics/rural-health-workforce/classifications/mmm>.
- Australian Government Department of Health, Disability and Ageing, 2025. Medicare Benefits Schedule: Item 715. Accessed on 1 May, 2025 at: <https://www9.health.gov.au/mbs/fullDisplay.cfm?type=item&q=715>.
- Australian Government Department of Health, Disability and Ageing, 2021. National Aboriginal and Torres Strait Islander Health Plan 2021-2031. Accessed on 1 May, 2025 at: https://www.health.gov.au/sites/default/files/2025-01/national-aboriginal-and-torres-strait-islander-health-plan-2021-2031_0.pdf.
- Australian Government Department of Industry, Science and Resources, 2024. Australia's national science and research priorities. Accessed on 1 May, 2025 at: <https://www.industry.gov.au/sites/default/files/2024-08/australias-national-science-and-research-priorities-2024.pdf>.



Australian Institute of Aboriginal and Torres Strait Islander Studies, 2024. Languages alive. Accessed on 1 May, 2025 at: <https://aiatsis.gov.au/explore/languages-alive>.

Australian Institute of Health and Welfare, 2025. Health checks and follow-ups for Aboriginal and Torres Strait Islander people. Accessed on 1 May, 2025 at: <https://www.aihw.gov.au/reports/indigenous-australians/indigenous-health-checks-follow-ups/contents/summary>.

Australian Institute of Health and Welfare, 2024. Aboriginal and Torres Strait Islander health performance framework - summary report. Accessed on 1 May, 2025 at: <https://www.indigenoushpf.gov.au/Report-overview/Overview/Summary-report>.

Australian Institute of Health and Welfare, 2022. Australian Burden of Disease Study 2018: Interactive data on disease burden among Aboriginal and Torres Strait Islander people. Accessed on 1 May, 2025 at: <https://www.aihw.gov.au/reports/burden-of-disease/abds-2018-interactive-disease-indigenous/contents/remoteness-areas>.

Canuto, K., Brown, A., Wittert, G., Harfield, S., 2018a. Understanding the utilization of primary health care services by Indigenous men: a systematic review. *BMC Public Health* 18, 1198. <https://doi.org/10.1186/s12889-018-6093-2>.

Canuto, K., Harfield, S., Wittert, G., Brown, A., 2017. Listen, understand, collaborate: developing innovative strategies to improve health service utilisation by Aboriginal and Torres Strait Islander men. *Aust N Z J Public Health* 43, 307–309. <https://doi.org/10.1111/1753-6405.12922>.

Canuto, K., Wittert, G., Harfield, S., Brown, A., 2018b. “I feel more comfortable speaking to a male”: Aboriginal and Torres Strait Islander men’s discourse on utilizing primary health care services. *Int J Equity Health* 17 (1), 185. <https://doi.org/10.1186/s12939-018-0902-1>.

Clarkson, C., Jacobs, Z., Marwick, B., Fullagar, R., Wallis, L.A., Smith, M.A., Roberts, R.G., Hayes, E., Lowe, K., Carah, X., Florin, S.A., McNeil, J., Cox, D., Arnold, L.J., Hua, Q., Huntley, J., Brand, H.E.A., Manne, T., Fairbairn, A., Shulmeister, J., Lyle, L., Salinas, M., Page, M., Connell, K.,

Park, G., Norman, K., Murphy, T., Pardoe, C., 2017. Human occupation of northern Australia by 65,000 years ago. *Nature* 547, 306–310. <https://doi.org/10.1038/nature22968>.

Dudgeon, P., Bray, A., Darlaston-Jones, D., Walker, R., 2020. Aboriginal participatory action research: An Indigenous research methodology strengthening decolonisation and social and emotional wellbeing. Lowitja Institute e-book. Accessed on 1 May, 2025 at: <https://lowitja.org.au/resource/aboriginal-participatory-action-research-an-indigenous-research-methodology-strengthening-decolonisation-and-social-and-emotional-wellbeing>.

Durey, A., Thompson, S.C., 2012. Reducing the health disparities of Indigenous Australians: time to change focus. *BMC Health Serv Res* 12, 151. <https://doi.org/10.1186/1472-6963-12-151>.

Gomersall, J.S., Gibson, O., Dwyer, J., O'Donnell, K., Stephenson, M., Carter, D., Canuto, K., Munn, Z., Aromataris, E., Brown, A., 2017. What Indigenous Australian clients value about primary health care: a systematic review of qualitative evidence. *Aust N Z J Public Health* 41 (4), 417–423. <https://doi.org/10.1111/1753-6405.12687>.

Huria, T., Palmer, S.C., Pitama, S., Beckert, L., Lacey, C., Ewen, S., Tuhiwai Smith, L., 2019. Consolidated criteria for strengthening reporting of health research involving indigenous peoples: The CONSIDER statement. *BMC Med Res Methodol* 19, 173. <https://doi.org/10.1186/s12874-019-0815-8>.

Jennings, W., Spurling, G.K., Askew, D.A., 2014. Yarning about health checks: barriers and enablers in an urban Aboriginal medical service. *Aust J Prim Health* 20, 151–157. <https://doi.org/10.1071/PY12138>.

Malterud, K., Siersma, V.D., Guassora, A.D., 2016. Sample size in qualitative interview studies: Guided by information power. *Qual Health Res* 26 (13), 1753–1760. <https://doi.org/10.1177/1049732315617444>.

McCoy, B.F., 2008. *Holding men: Kanyirninpa and the health of Aboriginal men*. Aboriginal Studies Press, Canberra.

Miller, J., Walke, E., 2024. Community events to increase uptake of Indigenous-specific health assessments: a scoping



- review. *Rural Remote Health* 24 (3), 8637. <https://doi.org/10.22605/RRH8637>.
- Coalition of Peaks, 2020. National Agreement on Closing the Gap. Accessed on 1 May, 2025 at: <https://www.coalitionofpeaks.org.au/national-agreement-on-closing-the-gap>.
- Northern Territory Government, 2025. BUSHTEL: Nauiyu. Accessed on 1 May, 2025 at: <https://bushtel.nt.gov.au/profile/397>.
- Pearson, O., Schwartzkopff, K., Dawson, A., Hagger, C., Karagi, A., Davy, C., Brown, A., Braunack-Mayer, A., 2020. Aboriginal community-controlled health organisations address health equity through action on the social determinants of health of Aboriginal and Torres Strait Islander peoples in Australia. *BMC Public Health* 20, 1859. <https://doi.org/10.1186/s12889-020-09943-4>.
- Prehn, J., Ezzy, D., 2020. Decolonising the health and well-being of Aboriginal men in Australia. *J Sociol* 56 (2), 151–166. <https://doi.org/10.1177/1440783319856618>.
- Reid, N., Page, M., McDonald, T., Hawkins, E., Liu, W., Webster, H., White, C., Shelton, D., Katsikitis, M., Wood, A., Draper, B., Moritz, K., Shanley, D.C., 2022. Integrating cultural considerations and developmental screening into an Australian First Nations child health check. *Aust J Prim Health* 28 (3), 207–214. <https://doi.org/10.1071/py20300>.
- Robinson, M., Smith, J.A., 2023. The lazy language of “lifestyles”. *Health Promot. J Aust* 34, 3–5. <https://doi.org/10.1002/hpja.677>.
- Schutze, H., Pulver, L.J., Harris, M., 2016. The uptake of Aboriginal and Torres Strait Islander health assessments fails to improve in some areas. *Aust Fam Physician* 45, 415–420.
- Tong, A., Sainsbury, P., Craig, J., 2007. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 19 (6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>.
- Usher, K., Jackson, D., Kabir, H., Jones, R., Miller, J., Peake, R., Smallwood, R., 2023. Preventative health assessments and Indigenous people of Australia: a scoping review. *Front Public Health* 11. <https://doi.org/10.3389/fpubh.2023.1168568>.
- Wenitong, M., Adams, M., Holden, C.A., 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>.

