Aboriginal and Torres Strait Islander voices on the National Lung Cancer Screening Program: a qualitative study from Worimi and Awabakal country

Tanika L Ridgeway (Worimi)[1,2], Kayden Roberts-Barker (Wiradjuri)[1,2], Kade Booth[1,2], Michelle Kennedy (Wiradjuri)[1,2]

The known: Lung cancer disproportionality affects Aboriginal and Torres Strait Islander peoples due to colonisation and introduction of commercial tobacco.

The new: The National Lung Cancer Screening Program provides opportunity to improve health disparities; however, it must be developed and implemented by Aboriginal and Torres Strait Islander peoples and communities. Tailored approaches considerate of localised contexts are critical to its success.

The implications: We present key necessities to ensure access and uptake of the National Lung Cancer Screening Program. If designed and executed properly, Aboriginal and Torres Strait Islander peoples stand to benefit the most, with the potential to significantly reduce tobacco-related disease and death.

Abstract

Objective: To gather communities' perspectives on the upcoming National Lung Cancer Screening Program (NLCSP) to guide appropriate and equitable access and uptake.

Design: Qualitative study using Yarning methods.

Setting, participants: Yarning circles were conducted with Aboriginal and Torres Strait Islander people on Awabakal and Worimi country in December 2023.

Results: Twenty-nine Aboriginal and Torres Strait Islander people participated in Yarning circles held at three locations across Awabakal and Worimi country. Community participants felt that the need for equitable and culturally safe NLCSP pathways is critical, with the NLCSP implementation plan and associated guidelines requiring multiple modes of health promotion, flexible eligibility that is equitable, alternative referral pathways to overcome barriers to access, and screening pathways and processes that are culturally responsive and community led.

Conclusions: The NLCSP provides a timely opportunity to improve health outcomes for Aboriginal and Torres Strait Islander peoples. To achieve this, it is essential that the NLCSP is tailored to the needs of each community in accessing preventive health care and upholds rights to self-determination.

The Australian Government-funded National Lung Cancer Screening Program (NLCSP) is being implemented from July 2025, aiming to improve health outcomes through early detection of lung cancer. The program offers low dose computed tomography (LDCT) scanning to asymptomatic people aged 50–70 years with at least a 30 pack-year history, who are either current smokers or former smokers who have quit within the previous 10 years.[1,2]

Lung cancer has been the leading cause of cancer mortality for decades,[3] with smoking being the most significant known risk factor.[4,5] Daily rates of commercial tobacco smoking among Aboriginal and Torres Strait Islander peoples compared with non-Indigenous peoples remain disproportionate (34.1% *v* 8.3%), which is associated with impacts of colonisation and ongoing racism.[6] Acknowledging the disproportionate commercial tobacco-related mortality and burden of disease, Aboriginal and Torres Strait Islander peoples have much to gain from the NLCSP.

The Australian Government Department of Health and Aged Care, Cancer Australia and the National Aboriginal Community Controlled Health Organisation have worked in partnership to inform the co-design of the NLCSP to ensure that it is equitable, accessible and culturally safe for Aboriginal and Torres Strait Islander people and communities.[7] As Aboriginal community members (TLR, KRB, MK), a researcher and medical student (TLR) and a health researcher (MK) living and working on unceded Worimi and Awabakal country, we aimed to gather our communities' perspectives on the proposed NLCSP to guide appropriate and equitable implementation, access and uptake.

Methods

Positionality statement

This research was led by Aboriginal and Torres Strait Islander people and priorities; as such, we recognise relationality[8] as being integral to the way the research has been conceived, developed, conducted, interpreted and reported here. Our team includes members of the local Worimi and Awabakal Aboriginal community (Tanika Ridgeway, Kayden Roberts-Barker, Michelle Kennedy) with cultural ties to Wiradjuri (Kayden Roberts-Barker, Michelle Kennedy) and Worimi (Tanika Ridgeway) country. This work was supported by a non-Indigenous team member who has worked with the team in the local community for more than 4 years (Kade Booth). Our Indigenous standpoint,[9] community relationships, and expertise in qualitative research and smoking and vaping cessation have been applied to this work. This study was designed to privilege Aboriginal and Torres Strait Islander expertise and scientific rigour evidenced since time immemorial.

Design and data collection

This qualitative study was developed by Aboriginal authors (TLR, MK) to capture the voices of the local community in national dialogue and policy. It employed Yarning method[10] with Aboriginal and Torres Strait Islander people living and working on Worimi and Awabakal country. It also used the Indigenous standpoint[9] of lead researchers (TLR, MK) and Indigenist research methodologies.[11] The data collection was carried out by lead researchers (TLR, MK) during December 2023. Yarning circle data were collected via three face-to-face Yarning circles (held one per week over 3 weeks) in three different locations that had been identified by community members during development stages.

Several community-identified strategies were implemented to engage a range of Aboriginal and Torres Strait Islander

[1]University of Newcastle, Newcastle, NSW. [2]Hunter Medical Research Institute, Newcastle, NSW. michelle.kennedy11@newcastle.edu.au • doi: 10.5694/mja2.52692

community members, 16 years of age or older, in the study. We aimed to engage community members who were current smokers or had family who smoke and would be likely to be eligible for the NLCSP. Promotion of Yarning circles occurred one month before the first circle. Community was informed via email and social media posts shared by the research team and community networks including local Aboriginal land councils as well as health and community services. The University of Newcastle's Wollotuka Institute emailed flyers to all current Aboriginal and Torres Strait Islander students, and the Wukul Yabang Aboriginal Health Research Community Panel and the project's community governance committee shared promotion across their vast networks. Interested community members could contact the team (TLR, MK) directly to answer any questions before becoming involved.

In accordance with Indigenist methodologies, relationality between researchers and participants was central to the research process, including, but not limited to, the data collection. Both lead researchers (TLR, MK) are active community members in Worimi and Awabakal communities with strong kinship ties across the communities. As such, the researchers had pre-existing relationships with most participants. This was a strength to the data collection process, particularly with trust from the community involved in the research process. The Yarning circles followed the methods of Social Yarning, Research Topic Yarning and Collaborative Yarning.[10] Social Yarning and Research Topic Yarning were used to build rapport and connections with the researchers and among the group, as well as to provide context regarding why the research was being done and what we knew about the pending NLCSP. During this time, researchers and participants shared a meal, and participants were provided with participant information and consent forms and had time to consider involvement and ask questions. Only the Collaborative Yarning was audio recorded, using a password-protected device. The Yarning guide only contained two domains of enquiry: how the proposed NLCSP will meet the needs of this community, and what should be considered to ensure this community can participate in the NLCSP. All participants were reimbursed with a $100 gift card for their time.

Analysis

Transcribed Yarns were analysed through Collaborative Yarning[12] between Aboriginal (TLR, MK, KRB) and non-Aboriginal (KB) researchers. Printed transcripts were used to collectively read each of the Yarns line by line, to think through and discuss meaning. During this process, KB coded the data following the steps outlined in Brooks and colleagues' approach to template analysis,[13] using NVivo software (Lumivero), where overarching themes and concepts were used to group relevant data based on discussion and meaning collectively identified by the researchers. Once coding was finalised and organised thematically, preliminary findings were shared with the Aboriginal Research Governance Committee to finalise themes and ensure stories were being conveyed in a meaningful and appropriate way.

Ethics and governance

This project upholds Aboriginal and Torres Strait Islander governance and ethics from conception to implementation and dissemination. The project was conceived by TLR and MK, who initially presented to the Wukul Yabang Aboriginal Health Research Community Panel at the University of Newcastle to finalise the research question and methods. Following the Panel's direction, a formal governance process was established for the project to uphold Indigenous data governance and data sovereignty principles and practices. This meant that the project was overseen by the Aboriginal Research Governance Committee, which included representation from Awabakal Medical Service (a community-controlled health service), Worimi Local Aboriginal Land Council, the Hunter New England Local Health District, community and youth. The lead researchers (TLR, MK) held meetings with the Committee before the Yarning circles and multiple times after data collection to govern the analysis, interpretation and dissemination of the findings. The Committee was remunerated financially for all meetings that they attended for their knowledges and time throughout this process. All required ethics approvals were obtained, including from the Aboriginal Health and Medical Research Council of NSW (2176/23) and the University of Newcastle (H-2023-0428). Appropriate local community ethics requirements were also upheld through all stages of this work as informed through relationality. All details in this article have been reported in line with the Consolidated Criteria for Strengthening Reporting of Health Research Involving Indigenous People (CONSIDER) statement (Supporting Information)[14] and the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines.[15]

Results

Twenty-nine Aboriginal and Torres Strait Islander people participated in Yarning circles held at three locations across Awabakal and Worimi country. Participants included Elders, youth, community members, and health professionals including Aboriginal health workers and Aboriginal health practitioners. No doctors or nurses participated in this study. Participant demographics are not available due to the identifiable nature of this community sample. All participants were 16 years of age or older.

We found that Aboriginal and Torres Strait Islander peoples in the Worimi and Awabakal communities want to have strong and healthy lives across generations and see the NLCSP as a positive opportunity to support this. However, participants felt that the need for equitable and culturally safe NLCSP pathways is critical, with the NLCSP implementation plan and associated guidelines requiring multiple modes of health promotion, flexible eligibility that is equitable, alternative referral pathways to overcome barriers to access, and screening pathways and processes that are culturally responsive and community led. Participant quotes relating to each of the themes and subthemes are provided in the Box.

Theme 1: Multiple modes of health promotion and activity are required

Community participants called for multilevel health promotion and education to build awareness and trust in the NLCSP, including national, regional and local communication campaigns.

> Trust is the biggest thing. So, [Aboriginal medical service] or whatever, however this information is rolled out to the Aboriginal community, it's really important because if they don't trust where the message is coming from, they're going to ignore it. — Yarning circle 3

Themes and illustrative quotes

Theme	Illustrative quotes
Theme 1: Multiple modes of health promotion and activity are required	• "Trust is the biggest thing. So, AMS or whatever, however this information is rolled out to the Aboriginal community, it's really important because if they don't trust where the message is coming from, they're going to ignore it." — Yarning circle 3 • "We want to empower our Mob to have that health literacy, which is what we've been excluded from in that narrative for a very long time." — Yarning circle 3 • "The pathway is there and it's a lot easier to understand. So, if there was awareness around that I feel like that would make them to take more ownership of their own health." — Yarning circle 3
Subtheme 1.1: Cancer prevention campaigns are needed to change existing narratives	• "And it's promoting why you would screen, not to find out that you've got stage 4, and you're so bad, but you would screen because then you can catch it early, and then you can have the best health for your kids." — Yarning circle 1 • "So small groups, and it's the words that we use, and the importance of it, would be the thing. Because it's the most important of them making me realise. They know that I'm a really hands-on grandma, so it was like that was one of the questions they said, we know you love your grandchildren, but you want to live for them like longer years. And that sort of opened my eyes straightaway. It's like, oh, hell, yes, and that's why I did it." — Yarning circle 1
Subtheme 1.2: Promotion should include local messaging with real people and experiences	• "Share it through someone's story. Because then it's more real. It's relatable. That person could be me, and target all the ages." — Yarning circle 3 • "Maybe use some of our languages as well would help. But if people wanted to share their story would be good, because I think that would be really, really helpful." — Yarning circle 1 • "And use our health workers that are working in the communities to set up things like Yarning circles, or Yarning things, so people can go together, and it makes everyone feel comfortable." — Yarning circle 1 • "Culturally, that's how we share information too is by talking directly, seeing people doing, emulating that. That's just how information lifestyles move around community. But to actually have data available on the outcomes of these early screenings, such and such patient Y has gone in for early screening. They've found cell changes, and have they been then able to get treatment before it's spread?" — Yarning circle 3 • "... as communities I think we need to explore ways where we can come together and share and learn and research our way, not just white ways, of how we can produce better health for our people and better healing." — Yarning circle 3
Theme 2: Current eligibility does not address inequity	• "I just know every Aboriginal relative that I have or have had have passed by the age of 65." — Yarning circle 3 • "And I've been in hospital year before last eight times in one year, lung problems. And even though I was heavy smoker in the early days I gave it away a good long time ago ... 1986." — Yarning circle 3 • "Maybe they need different risk factor categories and then they test it differently. If you've just been a smoker and no family history of it or whatever it's going to be. Or less than 10 years of smoking or whatever it's going to be, then they get tested at 50. But if they have been smoking since now 13 or whatever it is, they got to get screened a lot earlier ... If you look at three categories. You've got your high risk, your medium, but then that allows you to tailor the messaging around for each targeted group. If it was a bit of a campaign around you've been a smoker for 25 years plus, you have a level of what to expect." — Yarning circle 2 • "I quit for 13 years, but picked it back up again 12 months ago, 10 months ago. But you have ten a day and I feel like that's plenty. So, it seems like they're only really going for the hard-core smokers, and I feel like there's risks being posed to people who don't smoke that and don't fit that eligibility criteria and it's just too extreme." — Yarning circle 3
Subtheme 2.1: Criteria should be expanded, and consider local and individual contexts	• "In terms of barriers to this being really effective for Mob I feel like we need to look at life expectancy rates for Aboriginal people in comparison with non-Aboriginal people. At age 50 we're really heading into the end stages of people's life expectancies, so I wonder if this screening for Mob needs to begin at 40 ... or even 35." — Yarning circle 3 • "The age bracket. If it's going to be 50 to 74, that's too late. If it's going to be a simple screen, it should be done earlier, a lot earlier." — Yarning Circle 2 • "There is Mob out there that do get lung cancer that never smoked." — Yarning circle 3 • "... it's not just cigarettes, it's other substances as well that lead to higher rates and higher risks of cancers ... particularly for Worimi Mob specifically the environmental factors. So, you've got the aluminium smelter at Tomago there. You got the PFAS the air force base ... BHP* and coal dust, all that kind of stuff. Silica. All those, they're all contributing factors to development of disease as well." — Yarning circle 3

Continues

Continued

Theme	Illustrative quotes
Theme 3: Current referral pathways create barriers to accessing the NLCSP	• "... it's a barrier to get to your [GP]. I don't know if anyone's tried in the last few weeks, it's months away, and the last thing on my mind is to think, oh, yes, I might get a screening while I'm here." — Yarning circle 1 • "Some of those barriers of getting the letters, getting the reminders, booking the appointment, waiting for the [GP], waiting 6 months." — Yarning circle 1 • "For example, my mum has moved to a community where there's an AMS, and she still doesn't access it, because, one, it's not her community, and, two, it's just not something that we've had. So, I do think we need to think really broadly about many different options and different communities." — Yarning circle 1 • "I think trust is a big one. If we look at access to health care there's already barriers there already. So, you've got what government policy has done previously in the past. You're going to get people who will go 'I'm not going to that hospital'. So, my mother had treatment at the Mater and then after that cancer treatment a lot of our family would not go to the Mater because that's where she went to get her cancer treatment. You couldn't matter what you told them." — Yarning circle 3
Subtheme 3.1: Alternative referral pathways should be considered	• "What will that process look like? Will they have an Aboriginal worker that supports them through that? Is it someone that they can go in that it's going to be that familiar friendly face that we know we look for in our community. That's the sort of things I think about because I know if I had someone there like that I would feel far more comfortable and I'm a lot more likely to go. Rather than put it off and not go." — Yarning circle 3
Theme 4: The NLCSP screening process and pathway must be culturally appropriate	• "There's obviously going to be a lot of anxiety around black fellas going into hospitals as well." — Yarning circle 2 • "So that's what I'm talking about, not going to the hospital. To me, that would be scary. If we had a truck like the breast screening truck, I'd go to that." — Yarning circle 1 • "I think having it mobile and going to somewhere that is familiar, that's the best. Up at AMS, there are enough sites on-site to park near the back car park, behind the circle there, make a day of it." — Yarning circle 2 • "And use our health workers that are working in the communities to set up things like Yarning circles, or Yarning things, so people can go together, and it makes everyone feel comfortable." — Yarning circle 1 • "Something they could do, having a Yarn, where they just go off into a room. A health worker or something goes with them." — Yarning circle 2 • "Access to spaces where you can get that testing done as well. If you're at Karuah or if you don't have a car then how are you going to get to John Hunter to get an MRI or to Raymond Terrace to get a CAT scan." — Yarning circle 3
Subtheme 4.1: "I was around my people": culturally appropriate environments are essential	• "Because I was around my people, communicating, and they made me feel comfortable. They said, you're going to be all right, made me feel easy, I'll be all right, I'll go. And I went and got it done. I think it's the way how we're going to do it as well, it's to make people feel comfortable. And if we're with our Mob, it makes it even easier." — Yarning circle 1
Subtheme 4.2: The path beyond screening must be clear and transparent, and include support	• "Does it go to your [GP], does it go to wherever your local hospital district is? Who's going to be responsible for looking after me? That's something that needs to be addressed." — Yarning circle 1 • "It's not really just creating a promotion to get people screened, it's actually creating awareness of what this is, how this works, what the journey is, so that people can be informed and empowered to make the choice for themselves." — Yarning circle 1 • "But I think the other issue is, too, you can get the screening, but then what happens after you find out that it comes back, you do have it, what happens then?" — Yarning circle 1

AMS = Aboriginal medical service; CAT = computed-assisted tomography; GP = general practitioner; NLCSP = National Lung Cancer Screening Program; MRI = magnetic resonance imaging; PFAS = perfluoroalkyl and polyfluoroalkyl substances, a group of over 4000 chemicals. * In this context, "BHP" was used to refer to Newcastle Steelworks. ◆

Subtheme 1.1: Cancer prevention campaigns are needed to change existing narratives

Community participants felt that it was important to create awareness around early detection of lung changes and cancer prevention more broadly to change existing narratives, offering positive messaging to empower Mob. Community participants raised that past experiences of lung cancer burden for Aboriginal and Torres Strait Islander peoples could potentially deter them from screening. It was believed that education would encourage people to screen and raise understanding that it is not always going to be a negative outcome.

> And it's promoting why you would screen, not to find out that you've got stage 4, and you're so bad, but you would screen because then you can catch it early, and then you can have the best health for your kids. — Yarning circle 1

Subtheme 1.2: Promotion should include local messaging with real people and experiences

Community was deemed best placed to create awareness and share information through personal stories, Aboriginal health workers and community events. This included positive messaging to

encourage people to get screened, and endorsement by members or "champions" of the community. It also included having local navigators in community who have had lived experiences with lung cancer, and having local promotion through Yarning circles.

> Share it through someone's story. Because then it's more real. It's relatable. That person could be me, and target all the ages. — Yarning circle 3

The importance of face-to-face engagement and communication, trusting relationships, and supporting each other was emphasised. In addition, hosting community forums and allowing community members to ask questions and build an understanding of the program across the care pathway were deemed critical to uptake.

> … as communities I think we need to explore ways where we can come together and share and learn and research our way, not just white ways, of how we can produce better health for our people and better healing. — Yarning circle 3

Theme 2: Current eligibility does not address inequity

Community participants expressed that the current proposed eligibility for the NLCSP was not suitable and emphasised the inequities experienced by Aboriginal and Torres Strait Islander people, and voiced concerns about the one-size-fits-all criteria.

> The age bracket. If it's going to be 50 to 74, that's too late. If it's going to be a simple screen, it should be done earlier, a lot earlier. — Yarning circle 2

Subtheme 2.1: Criteria should be expanded, and consider local and individual contexts

The current age requirements were deemed inappropriate, as they fail to align with life expectancy and burden of disease experienced by Aboriginal and Torres Strait Islander peoples. In addition, community participants called for greater inclusion of risk factors such as work settings or family history.

> … it's not just cigarettes, it's other substances as well that lead to higher rates and higher risks of cancers … particularly for Worimi Mob specifically the environmental factors. — Yarning circle 3

Exclusion of people who quit smoking more than 10 years ago was deemed inappropriate and not reflective of the potential harms from long term smoking in consideration of external exposures, family history and less measurable forms of tobacco such as pouches, and omission of vaping.

Theme 3: Current referral pathways create barriers to accessing the NLCSP

Community participants raised concerns over the need to access the LDCT scan through a general practitioner (GP), due to high demand and wait times, and demonstrated preference for multiple modes of referral.

> … it's a barrier to get to your GP. I don't know if anyone's tried in the last few weeks, it's months away, and the last thing on my mind is to think, oh, yes, I might get a screening while I'm here. — Yarning circle 1

These barriers are compounded by lack of trust in the health care system and the burden of navigating the referral process.

Subtheme 3.1: Alternative referral pathways should be considered

Community participants recommended that referral to access the NLCSP should not rely on GPs alone. Alternative pathways such as self-referrals and mobile community event-based screening, with integrated smoking cessation support, should also be options for referral for screening. Considerations for opportunistic screening options such as providing scans at locations like community events were also recommended to overcome barriers to access.

The important role of Aboriginal health practitioners was considered critical to the successful implementation of the NLCSP and it was recommended that referrals by Aboriginal health practitioners also be included.

> What will that process look like? Will they have an Aboriginal worker that supports them through that? Is it someone that they can go in that it's going to be that familiar friendly face that we know we look for in our community. That's the sort of things I think about because I know if I had someone there like that I would feel far more comfortable and I'm a lot more likely to go. Rather than put it off and not go. — Yarning circle 3

Theme 4: The NLCSP screening process and pathway must be culturally appropriate

Community participants emphasised the importance of NLCSP and LDCT accessibility in non-clinical and culturally safe environments to reduce fear and anxiety of the screening process.

> So that's what I'm talking about, not going to the hospital. To me, that would be scary. If we had a truck like the breast screening truck, I'd go to that. — Yarning circle 1

Subtheme 4.1: "I was around my people": culturally appropriate environments are essential

A setting which enables community support and group attendance was also recommended. Community participants suggested that opportunistic screening at community events or targeted screening days would be more appropriate.

> Because I was around my people, communicating, and they made me feel comfortable. They said, you're going to be all right, made me feel easy, I'll be all right, I'll go. And I went and got it done. I think it's the way how we're going to do it as well, it's to make people feel comfortable. And if we're with our Mob, it makes it even easier. — Yarning circle 1

The involvement of health navigators, including Aboriginal health workers and practitioners, Aboriginal cancer care staff and community, in facilitating access to the program were considered important.

> And use our health workers that are working in the communities to set up things like Yarning circles, or

> Yarning things, so people can go together, and it makes everyone feel comfortable. — Yarning circle 1

Subtheme 4.2: The path beyond screening must be clear and transparent, and include support

Community participants shared stories of negative follow-up experiences after cancer screening, including delays in receiving results and inadequate support during cancer diagnosis. They emphasised the need for transparency about the screening process and accessing timely treatment and follow-up care.

> But I think the other issue is, too, you can get the screening, but then what happens after you find out that it comes back, you do have it, what happens then? — Yarning circle 1

Discussion

To our knowledge, this is the first study about the NLCSP to be led by, and privilege, Aboriginal and Torres Strait Islander community perspectives. However, we recognise that the development of the NLCSP was informed through consultation with 100 Aboriginal and Torres Strait Islander people nationally.[16] Our findings privileged voices from urban and outer regional communities who call for equitable and culturally safe access to health promotion and screening services. In gathering our community perspectives, our study re-affirmed the need for multilevel and complementary initiatives and approaches to ensure culturally safe access to the NLCSP. This included promotion, activities, referral pathways and screening processes which are driven by, and responsive to, communities and their needs. Importantly, our study identified key barriers which may inhibit equitable access to and uptake of the NLCSP and issues with a one-size-fits-all approach, which fails to consider the social, cultural and historical contexts of Aboriginal and Torres Strait Islander peoples and communities.

Prevention is critical in addressing the disproportionate cancer burden and mortality faced by Aboriginal and Torres Strait Islander peoples. Aboriginal and Torres Strait Islander experts in cancer prevention have shed light on the low uptake of existing cancer screening programs by Aboriginal and Torres Strait Islander peoples as a result of continuing colonisation, exclusion, and racism in health care.[1,17] Before rollout of the NLCSP, leaders in this field detailed potential barriers to and enablers of the program using lessons from existing screening programs.[1,17-19]

Our findings re-affirm calls made by Aboriginal and Torres Strait Islander experts, leaders and communities, and emphasise the need for Aboriginal and Torres Strait Islander leadership in designing, implementing and promoting screening programs if we are serious about improving health outcomes. This includes calls to invest in funding for Aboriginal and Torres Strait Islander-led multilevel promotion, which should include positive messaging tailored to local communities, involve community champions, and incorporate local stories.[1] Community participants in our study recognised the stigma associated with lung cancer from past exposures, which may hinder the likelihood of screening in fear of returning a diagnosis. As such, community participants identified the need for increased national cancer prevention promotion and strategies to empower Aboriginal and Torres Strait Islander peoples and communities with knowledge and change the existing narratives around cancer. Cancer prevention promotion and awareness strategies that are tailored to and led by communities are critical for improving uptake of these programs.

All of the Yarning circles raised concerns about accessing the NLCSP via GPs, supporting previous concerns about additional burden on an already under-resourced workforce.[1] The current recommended referral pathway does not appear to consider long wait times to access a GP, current GP shortages[20] and previous evidence of GP referral and follow-up impacting cancer care pathways.[1,21,22] Encouragingly, the expansion of Medicare item numbers and referral pathways acknowledging the critical roles that Aboriginal and Torres Strait Islander health workers and practitioners play in engagement, referral, support and follow-up could address some of the potential barriers to accessing the NLCSP. However, more is needed to ensure equitable access to the NLCSP, including the need for culturally safe and appropriate screening environments.

There are opportunities to address some of these barriers to ensure equitable access for Aboriginal and Torres Strait Islander peoples, as highlighted by our community participants. Multichannel access[16] and opportunistic entry into the screening program, such as via screening trucks at community events, have the potential to increase uptake and promotion through appropriate means within a culturally safe environment and alleviate pressures associated with access through a GP. Screening trucks have been funded for rural and remote communities to access the NLCSP, but clarity on what constitutes rural and remote for this purpose is needed. Nearly half (41.1%) of Aboriginal and Torres Strait Islander peoples who live in major cities[23] may not be eligible to participate via screening trucks despite the barriers identified by participants in our study, again showing the need for locally driven solutions.

While the current eligibility criteria to access the NLCSP are equal, they are not equitable. Our study echoes previous reports that have flagged concerns about fixed eligibility criteria[24] and recognised that the one-size-fits-all approach could fail to acknowledge contextual factors for Aboriginal and Torres Strait Islander peoples.[1] Further, the modelling used to determine the eligibility criteria has not been specifically validated with Aboriginal and Torres Strait Islander peoples.[25] Community participants emphasised the importance of eligibility that reflects environmental risk factors, such as communities with higher exposure to coal dust and other industrial harms, showing the need for tailored, localised, community-led approaches. Community participants in our study questioned the equalisation of the eligibility age to 50 years for all, despite the Cancer Australia report initially recommending that Aboriginal and Torres Strait Islander peoples should have access at 5 years younger than the general population.[16] Acknowledging the barriers of accessing timely health care as noted in our study, in addition to the current gap of more than 8 years in life expectancy[26] and the impact of smoking and lung cancer on Aboriginal and Torres Strait Islander peoples, eligibility is not equitable. If the criteria are not changed to be responsive to, and appropriate for, Aboriginal and Torres Strait Islander peoples with localised considerations, we will continue to see lung cancer mortality rates increase.[1]

Aboriginal and Torres Strait Islander people are not only twice as likely to develop lung cancer as non-Indigenous populations due to continuing colonisation, but also half as likely to survive.[16] Our study re-affirms what Aboriginal and Torres Strait Islander leaders and experts have said since the announcement of the NLCSP. It is critical that the NLCSP upholds Aboriginal and Torres Strait Islander peoples' lived experiences, recommendations and leadership. If Indigenous perspectives are not listened to, the government is risking

another failed rollout, further widening of the gap and continued failure to meet equitable health outcome targets caused by colonisation and racism.

Conclusion

As Aboriginal community members and researchers we aimed to uphold our community voice to inform the NLCSP to care for future generations. Privileging Aboriginal and Torres Strait Islander voices and acknowledging the ongoing experiences of colonisation are fundamental to improving health outcomes. We are now presented with a timely opportunity to implement a NLCSP informed by Aboriginal and Torres Strait Islander peoples. If designed and executed properly, Aboriginal and Torres Strait Islander peoples stand to benefit the most, with the potential to significantly reduce tobacco-related disease and death. To achieve this, it is essential that the NLCSP is tailored to the needs of each community in accessing preventive health care and upholds rights to self-determination.

Acknowledgements: This study was in part supported by funding from the Medical Research Future Fund (MRF2008603). The funding source was not involved in any part of the research. We acknowledge the wisdom and leadership of the Aboriginal Research Governance Committee, which guided all aspects of this research.

Open access: Open access publishing facilitated by The University of Newcastle, as part of the Wiley - The University of Newcastle agreement via the Council of Australian University Librarians.

Competing interests: Michelle Kennedy is a Guest Editor for the 2025 NAIDOC Week *MJA* Special Issue and was not involved in any editorial decision making about this article.

Data sharing: Data are not available due to the identifying nature of the study sample.

Author contributions: Ridgeway TL: Conceptualization; data curation; formal analysis; investigation; methodology; project administration; writing; review and editing. Roberts-Barker K: Formal analysis; review and editing. Booth K: Formal analysis; project administration; writing; review and editing. Kennedy M: Conceptualization; data curation; formal analysis; funding acquisition; investigation; methodology; supervision; writing; review and editing.

Received 7 December 2024; accepted 12 May 2025

1 Brown A, Garvey G, Rankin NM, et al. Lung cancer screening for Aboriginal and Torres Strait Islander people: an opportunity to address health inequities. *Med J Aust* 2023; 219: 398-401. https://www.mja.com.au/journal/2023/219/9/lung-cancer-screening-aboriginal-and-torres-strait-islander-peoples-opportunity

2 Department of Health and Aged Care. How the National Lung Cancer Screening Program will work. Canberra: Department of Health and Aged Care, 2025. https://www.health.gov.au/our-work/nlcsp/how-it-works (viewed Apr 2025).

3 Cancer Australia. Lung cancer in Australia statistics. Sydney: Cancer Australia, 2025. https://www.canceraustralia.gov.au/cancer-types/lung-cancer/lung-cancer-australia-statistics (viewed Apr 2025).

4 World Health Organization, Regional Office for Europe. European tobacco use: trends report 2019. Copenhagen: WHO, 2019. https://iris.who.int/handle/10665/346817 (viewed Apr 2025).

5 Doll R, Peto R, Boreham J, Sutherland I. Mortality in relation to smoking: 50 years' observations on male British doctors. *BMJ Open* 2004; 328: 1519.

6 Heris C, Caudell RZ, Barrett EM, et al. The social determinants of Aboriginal and Torres Strait Islander adults who do not smoke in regional Australia. *Aust J Rural Health* 2024; 32: 275-285.

7 Department of Health and Aged Care. Lung cancer screening information for First Nations people. Canberra: Department of Health and Aged Care, 2025. https://www.health.gov.au/our-work/nlcsp/first-nations (viewed Apr 2025).

8 Moreton-Robinson A. Relationality: a key presupposition of an Indigenous social research paradigm. In: Andersen C, O'Brien JM, editors. Sources and methods in Indigenous studies. Abingdon: Routledge, 2017; pp. 69-77.

9 Moreton-Robinson A. Towards an Australian Indigenous women's standpoint theory. *Aust Fem Stud* 2013; 28: 331-347.

10 Bessarab D, Ng'andu B. Yarning about Yarning as a legitimate method in Indigenous research. *Int J Crit Indig Stud* 2010; 3: 37-50.

11 Rigney L-I. Internationalization of an Indigenous anticolonial cultural critique of research methodologies: a guide to Indigenist research methodology and its principles. *Wicazo Sa Review* 1999; 14: 109-121.

12 Kennedy M, Maddox R, Booth K, et al. 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* 2022; 21: 134.

13 Brooks J, McCluskey S, Turley E, King N. The utility of template analysis in qualitative psychology research. *Qual Res Psychol* 2015; 12: 202-222.

14 Huria T, Palmer SC, Pitama S, et al. Consolidated criteria for strengthening reporting of health research involving indigenous peoples: the CONSIDER statement. *BMC Med Res Methodol* 2019; 19: 173.

15 Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007; 19: 349-357.

16 Cancer Australia. Report on the lung cancer screening enquiry. Sydney: Cancer Australia, 2020. https://www.canceraustralia.gov.au/publications-and-resources/cancer-australia-publications/report-lung-cancer-screening-enquiry (viewed Nov 2024).

17 Whop LJ, Smith MA, Butler TL, et al. Achieving cervical cancer elimination among Indigenous women. *Prev Med* 2021; 144: 106314.

18 Butler TL, Lee N, Anderson K, et al. Under-screened Aboriginal and Torres Strait Islander women's perspectives on cervical screening. *PLoS One* 2022; 17: e0271658.

19 Pilkington L, Haigh MM, Durey A, et al. Perspectives of Aboriginal women on participation in mammographic screening: a step towards improving services. *BMC Public Health* 2017; 17: 697.

20 Department of Health and Aged Care. Supply and demand study: general practitioners in Australia. Canberra: Department of Health and Aged Care, 2024. https://hwd.health.gov.au/resources/primary/gp-supply-and-demand-study-compendium-august-2024.pdf (viewed Nov 2024).

21 Shahid S, Teng T-HK, Bessarab D, et al. Factors contributing to delayed diagnosis of cancer among Aboriginal people in Australia: a qualitative study. *BMJ Open* 2016; 6: e010909.

22 Meiklejohn JA, Garvey G, Bailie R, et al. Follow-up cancer care: perspectives of Aboriginal and Torres Strait Islander cancer survivors. *Support Care Cancer* 2017; 25: 1597-1605.

23 Australian Bureau of Statistics. Census of Population and Housing – counts of Aboriginal and Torres Strait Islander Australians. Canberra: ABS, 2022. https://www.abs.gov.au/statistics/people/aboriginal-and-torres-strait-islander-peoples/census-population-and-housing-counts-aboriginal-and-torres-strait-islander-australians/2021 (viewed Nov 2024).

24 Ryan JB. Ethical implications of changing the eligibility criteria for the proposed National Lung Cancer Screening Program [letter]. *Med J Aust* 2023; 219: 187. https://www.mja.com.au/journal/2023/219/4/ethical-implications-changing-eligibility-criteria-proposed-national-lung-cancer

25 Medical Services Advisory Committee. Public summary document – March to April 2022. Application No. 1699 – National Lung Cancer Screening Program (applicant: Cancer Australia).

Canberra: Department of Health and Aged Care, 2022. http://www.msac.gov.au/internet/msac/publishing.nsf/Content/1699-public (viewed Nov 2024).

26 Australian Institute of Health and Welfare, National Indigenous Australians Agency. 2.15 Tobacco use. In: Aboriginal and Torres Strait Islander Health Performance Framework – summary report. Canberra: AIHW, 2024. https://www.indigenoushpf.gov.au/measures/2-15-tobacco-use (viewed Nov 2024). ■

Supporting Information

Additional Supporting Information is included with the online version of this article.