






BMJ Open Birang Daruganora: what do Aboriginal and Torres Strait Islander communities need in a new hospital? A qualitative study

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ABSTRACT

Objectives To elicit the Aboriginal community's cultural and healthcare needs and views about six prominent and emerging models of care, to inform the development of a new hospital.

Design Cross-sectional qualitative study co-designed and co-implemented by Aboriginal team members.

Setting Western Sydney, New South Wales, Australia.

Participants Aboriginal and Torres Strait Islander healthcare providers (n=2) and community members (n=18) aged between 21 and 60+ years participated in yarning circles (20 participants; 14 female, 6 male).

Results Handwritten notes from yarning circles were inductively analysed to synthesise the cultural and healthcare needs of providers and community members in relation to a new hospital and six models of care. Three primary themes emerged in relation to future hospitals. These were 'culturally responsive spaces', 'culturally responsive systems' and 'culturally responsive models of care'. Strengths (eg, comfort, reduced waiting time, holistic care), barriers (eg, logistics, accessibility, literacy) and enablers (eg, patient navigator role, communication pathways, streamlined processes) were identified for each of the six models of care.

Conclusions Aboriginal and Torres Strait Islander community members and providers are invested in the co-creation of an innovative, well-integrated hospital that meets the needs of the community. Common themes of respect and recognition, relationships and partnering, and capacity building emerged as important consumer and provider considerations when developing and evaluating care services. Participants supported a range of models citing concerns about accessibility and choice when discussing evidence-based models of care.

INTRODUCTION

Aboriginal and Torres Strait Islander (hereafter, Aboriginal) peoples represent 3.8% of the total Australian population¹; however, they experience significant health disparities and difficulties accessing healthcare services such as those provided in hospitals.^{2,3} Hospital care delivery is evolving with the development

STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ This study is the first to identify cultural and health-specific needs and expectations for hospital services delivered on the sacred lands of the Darug Nation.
- ⇒ The use of yarning circles allowed participants to share their perspectives in a safe and judgement-free space.
- ⇒ The consultations were conducted face-to-face to reduce the barrier that telecommunications connectivity can create; however, this may have limited opportunities for community members to participate.
- ⇒ Consumers participated in five yarning circles and were joined in one of the five yarning circles by providers, creating a richer understanding of the healthcare service delivery interface.
- ⇒ Consultations included individuals 21 years and older. This may have limited the diversity in experiences, cultural needs and accessibility needs reported here.

and implementation of new technologies and models of care such as telehealth which aimed to minimise disease transmission while maintaining care delivery during the COVID-19 pandemic.⁴ Nonetheless, Aboriginal peoples admitted to hospital continue to be less likely than non-Aboriginal people to feel informed, feel respected and treated with dignity and have their family included in decisions in and about their care.⁵ To improve health outcomes, experiences and accessibility for Aboriginal peoples, it is imperative to ascertain the Aboriginal community's views about cultural needs and expectations for future hospitals and prominent and emerging models of care. Culturally appropriate ways such as yarning circles (see [box 1](#)) create a culturally safe space for conversations about the way health services could be delivered across a variety of settings, populations and conditions.⁶⁻⁸

**Box 1 Glossary of terms**

- ⇒ Yarning circle: a safe space for active listening, reflection and sharing ideas and stories.
- ⇒ Smoking ceremony: involves the gathering of guests around a smokey fire of plants and materials unique to the region, performed for multiple reasons such as healing, spiritual renewal, birth and sorry business.
- ⇒ Sorry business: mourning process when someone passes away.

Over the past decade, several models of care have emerged internationally that change the delivery of healthcare from traditional hospital settings to different settings such as patients' homes, through different means such as via phone or video connections, and from different providers including nurses and allied health professionals.⁶ The research team conducted a grey and academic literature review of the evidence and identified six prominent models⁹:

- ▶ Ambulatory care: non-admitted services, diagnosis and treatment on the same day.
- ▶ Digital hospitals: new technologies to improve care.
- ▶ Hospital in the Home (HITH): care delivered in the patient's home.
- ▶ Integrated care: care delivered by interdisciplinary teams including acute and primary care providers.
- ▶ Virtual care: consultation or care delivered outside of the hospital/clinic—over the telephone or via video.
- ▶ Specialist hospital: selective care, targeted to specific health conditions.

The already significant and continuing health disparities experienced by minority groups such as Aboriginal peoples¹⁰ risk being amplified by the implementation of models of care that differ from the traditional methods of care delivery. Advances have been made in addressing disparities through the delivery of culturally appropriate healthcare, for example, in primary care through Aboriginal community-controlled health services,^{11 12} the development of emergency department alternatives for mental health crisis care¹³ and specialist clinics,^{14 15} as well as Aboriginal health workers (eg, Aboriginal Liaison Officers),¹⁶ cultural awareness training¹⁷ and translators,¹⁸ in mainstream services. To develop innovations in hospital care that address health disparities, it is therefore critical to understand the Aboriginal community's views about cultural needs and expectations prior to introducing innovative ways of delivering future hospital care.

The current study was conducted in the Western Sydney Local Health District (WSLHD), a metropolitan area with the largest number of Aboriginal people.¹⁹ The inclusion of Aboriginal peoples in the design of future hospital services requires a shift in thinking from Western cultural ideas to the inclusion and integration of health as conceptualised by Aboriginal peoples.² Therefore, this study aimed to elicit the local Aboriginal community's cultural and healthcare needs (consumer and provider), expectations, understanding, perception and experiences to

inform the development of a new hospital and elicit their views about six prominent and emerging models of care.

METHODS

The study methods are described in detail in Carrigan *et al.*²⁰ Key aspects of the methods are outlined below. Commissioned by WSLHD and Health Infrastructure, this study is an extension of an existing research project conducted by Macquarie University that aims to determine the consumer and provider healthcare needs for a new hospital to be built within the WSLHD.^{21 22} The insights will be provided as recommendations for the design and provision of healthcare in the new hospital.²³ Construction on the new hospital is estimated to start in 2023.²¹

Study design

The Aboriginal Liaison Officers of WSLHD designed and named the study. The current study is a cross-sectional qualitative study²⁴ (see online supplemental file 1) using yarning circles as a recognised method of consultation and discussion for research with Aboriginal peoples.^{7 8 25–27} The project name, Birang Daruganora, means 'belonging to Darug Country', to acknowledge the land and ancestors on which the study and the new hospital facility is to be built. The name was presented to Elders in the community and their feedback and approval were given for its use.

Patient and public involvement

Aboriginal team members provided oversight and governance for the research and ensured local Elders' groups were actively involved in consultation about the project aims, processes and progress. Initial project meetings and Elder consultations identified project considerations relating to concepts of ownership, benefit and reciprocity from the National Health and Medical Research Council guidelines for research with Aboriginal peoples.²⁸

Ownership

Based on the existing project, the study design was revised through consultations by Aboriginal team members with Elders, Aboriginal leaders within the Local Health District (LHD) and the Aboriginal community. Consultations informed changing from focus groups to yarning circles, increasing communication channels about progress, discussions about use of information and risks, and acknowledgement of involvement. Aboriginal team members, guided by Elders, led the conduct of the research and provided oversight on the interpretation of findings. This study also created the opportunity for community members to own solutions to hospital care.

Benefit

Aboriginal team members, Elders and non-Aboriginal team members monitored and evaluated the impact of the project through verbal check-ins with Aboriginal community members at each stage throughout the

project. The potential benefits, constraints of the project and outcomes of the project were clearly communicated to community. The insights were provided as recommendations, not mandates, for the design and provision of healthcare in the new hospital. Conducting the research with the community created the opportunity for growing a partnership between health districts, infrastructure and communities.

Reciprocity

The project used available opportunities to enhance the skills and knowledge of Aboriginal people, Aboriginal communities and Aboriginal organisations that participated in the project. For example, Aboriginal team members are included as authors on all study publications and presentations and offered further authorship opportunities where possible. Reimbursement was non-financial and took the form of refreshments and morning tea. Aboriginal community members' involvement has been acknowledged in all publication and communication of the study and study results.

Recruitment

The Elders within the community were contacted to explore if they and their community would agree to be contacted to take part in a yarning circle. The project team also shared the project among their networks, colleagues and workplaces to invite the Aboriginal community to participate in the project. Aboriginal team members, guided by Elders, identified and approached Aboriginal services and organisations within the community. Aboriginal media organisations (eg, Koori Mail Newspaper, Koori Radio) were also used to disseminate information about the project. Written communications (eg, emails, newspaper advertisements) underwent a readability test by our Aboriginal team members before publication to ensure the language was culturally appropriate. The District Director for Aboriginal Health Strategy provided advice and support for engagement across the LHD of both consumers and providers.

Community groups and organisations that agreed to support the study were contacted by Aboriginal team members to coordinate times that the team could attend the group or service. At the initial attendance at the service, team members were given time to talk to community members about the project, what participation involved, and potential risks and benefits of the study. If community members supported the idea of participation, team members coordinated with community members a suitable time to return for the yarning circle.

Yarning circles

Yarning circles are culturally respectful discussion groups offering a safe place to be heard and to respond.^{7 8 27} Five yarning circles were conducted, one for healthcare providers and community members and four for community members. **Figure 1** presents the yarning circle process as adapted from the Queensland Curriculum

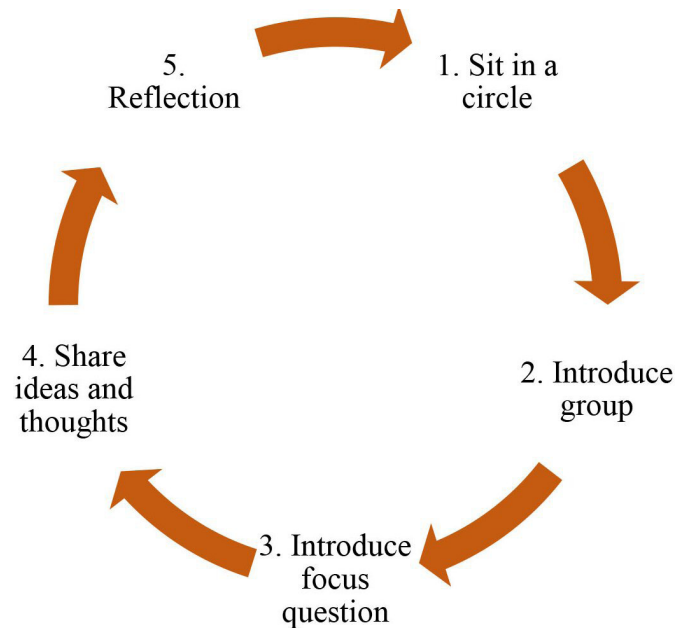


Figure 1 The yarning circle process (adapted from qcaa.qld.edu.au).

and Assessment Authority.²⁵ Yarning circles were held in community centres and each lasted up to 2 hours. Aboriginal project team members facilitated and participated in the yarning circles.

Yarning circles started with non-Aboriginal project team leader giving a brief explanation of the study and the participant information and consent form, followed by an opportunity for participants to ask questions about participation before completing the consent form. Following consent, participants were asked to provide demographic and health information via the completion of a paper form. Where participants needed support, demographic and health form questions were read to participants and the supplied answers were marked on the forms by researchers.

Non-Aboriginal team members asked the participants about their cultural wants and needs in a new hospital and about their experiences and perspectives on the six evidence-based models of care derived from the literature review described in the introduction.^{9 22} Non-Aboriginal project team members observed the yarning circle, made notes and when appropriate were asked clarifying questions. **Table 1** presents the definitions and examples for each of the six models of care. Data were collected in the form of handwritten notes on participant responses and contained no identifying information.

Analysis

The demographic data were analysed in Excel, using descriptive statistics (eg, mean, SD) to summarise and describe participants' demographic characteristics (eg, age, gender).²⁹ Qualitative data including yarning circle notes were combined into a single document and analysed using high-level inductive analysis to synthesise the expectations and needs of the health providers and community.

Table 1 Key strengths, barriers and enablers for the six evidence-based models of care

Model	Description	Example	Strengths	Barriers	Enablers
Ambulatory care and diagnostic hospitals	Non-admitted services, where patient care does not involve an overnight stay and usually involves diagnosis and treatment on the same day.	Same-day joint replacement	<ul style="list-style-type: none"> More comfortable as an outpatient 	<ul style="list-style-type: none"> Timeliness of care delivery Access (parking and cost) Transport home if family unavailable The need for repeat visits 	<ul style="list-style-type: none"> Caring, culturally competent providers Community transport Patient navigator Systems that are easy for staff to use Streamlined care processes
Hospital in the Home	Patient care and consultation which is typically delivered in the hospital at-home setting are delivered to patients in their own home.	Early discharge from hospital at-home care for chronic obstructive airway disease managed by a community service	<ul style="list-style-type: none"> Convenient Feel safer at home Comfort Care for family Privacy 	<ul style="list-style-type: none"> Housing situation (set-up, cleanliness) Lack of trust 	<ul style="list-style-type: none"> Safety and security procedures Clear communication Required equipment is set up safely with 24/7 support available Culturally sensitive skills Communication pathways between providers and patients Aboriginal cultural training
Integrated care	The multidimensional needs of the patient are delivered in a coordinated manner by an interdisciplinary team or network of healthcare professionals.	Orthogeriatric fracture service	<ul style="list-style-type: none"> Effective communication between providers Reduced wait times Addresses multiple needs Targeted and holistic care Confidence in care and taken seriously 	<ul style="list-style-type: none"> Sense of lack of control over care Paternalistic care Inaccuracies in patient information Cannot see/access a doctor Extensive wait times Communication gaps and exclusion Some find it hard to trust and open up 	<ul style="list-style-type: none"> Support person to navigate Access to information Aboriginal liaison Communication systems Patient/family involved in decisions General practitioners as part of the team Succession planning for when providers retire
Virtual care	Patient care and consultation are delivered through telephone or video communication.	Telehealth management in patients with heart failure	<ul style="list-style-type: none"> Can be cared for remotely The comfort of own space Easy, fast and convenient 	<ul style="list-style-type: none"> Connectivity issues No computer Technology anxiety Low digital literacy No physical examination (signs and symptoms might be missed) Patients with cognitive issues Elders living alone 	<ul style="list-style-type: none"> Support person Pathways to enable equity Access to computer/internet/smartphone
Specialist hospitals and population-specific care units	Specialist hospitals provide selective care services for targeted patient groups. Population-specific care units are pathways within general hospitals dedicated to the treatment of specific conditions.	Comprehensive cancer centres	<ul style="list-style-type: none"> Health-related signs and symptoms might be more likely to be recognised One-stop shop for holistic care Targeted to needs Expert clinician knowledge Higher level of care 	<ul style="list-style-type: none"> Lack of communication Difficulty accessing transport to/from Narrow care focus No other option Service not a good fit 	<ul style="list-style-type: none"> Information (accessible) Accurate diagnosis Access to resources to support care Support person for patient and family
Digital hospitals	Hospitals that make extensive use of new technologies to provide streamlined care, improve patient safety and care quality, and improve overall care cost-effectiveness.	A machine learning algorithm for prediction of the early warning signs of cardiac arrest	<ul style="list-style-type: none"> Helps monitor condition-related signs and symptoms Convenience 	<ul style="list-style-type: none"> Patient not understanding the model Technology failures Technological safety—hacking and data privacy Not suitable for all conditions and healthcare needs Inflexible system 	<ul style="list-style-type: none"> Technology support Orientation information to familiarise patients with the technology being used in their care Shared tools for communication and health monitoring Back-up systems

The initial analysis was conducted independently by two non-Aboriginal members of the research team (EEA, AC) and consensus was reached through discussion. Through an iterative approach, themes and subthemes that arose from independent coding were discussed, synthesised and incorporated into a framework. Feedback was sought on the initial themes and subthemes from the Aboriginal members of the team, and the final themes and subthemes were shared with community members and feedback sought to establish the trustworthiness and authenticity of the synthesis.

RESULTS

Two providers (two female) and 18 community members (12 female, 6 male) participated in five yarning circles. The number of participants in each yarning circle ranged from three to five and varied across location, age and gender. The yarning circles were conducted similarly with each group.

Yarning circle participants were mostly female ($n=14$, 70%) and aged between 21 and 60+ years (21–30 years, $n=4$; 31–45 years, $n=2$; 45–60 years, $n=6$, 60+ years, $n=8$). 16 participants identified as Aboriginal, 2 as Australian (ie, a person of Aboriginal descent who identifies as Australian and is accepted as such by the community in which they live), and 2 selected both Aboriginal and Australian. Experience with a range of health conditions including cardiac, pulmonary, orthopaedic, gastroenterology, trauma, metabolic, gynaecology and obstetrics, and mental health was reported. Four participants reported being carers for individuals with cognitive, mental health, pulmonary and orthopaedic needs.

Three themes emerged from the analysis of the yarning circle's data: 'culturally responsive spaces', 'culturally responsive systems' and 'culturally responsive models of care'. Aboriginal community members identified that culture is embedded at the centre of everything and that it is through relationships and partnering between hospital services and Aboriginal communities that Aboriginal capacity and community engagement with care services are built (see figure 2).

Culturally responsive spaces

Participants expressed the importance of the hospital's physical environment and the impact that the design of spaces has on their well-being. The need for a welcoming and healing environment (eg, colours, shape, flow, building materials, art, garden) that is co-designed with the local Aboriginal community was most often reported by participants. Participants suggested the provision of circular spaces to walk and reflect, including a garden with bush medicine plants, for families to gather and smoking ceremonies to be conducted. Inclusion in the design process and the use of colour, shape and materials to create the perception of flow and demonstrate respect for Aboriginal culture and provide a welcoming and healing environment. Other suggestions for creating

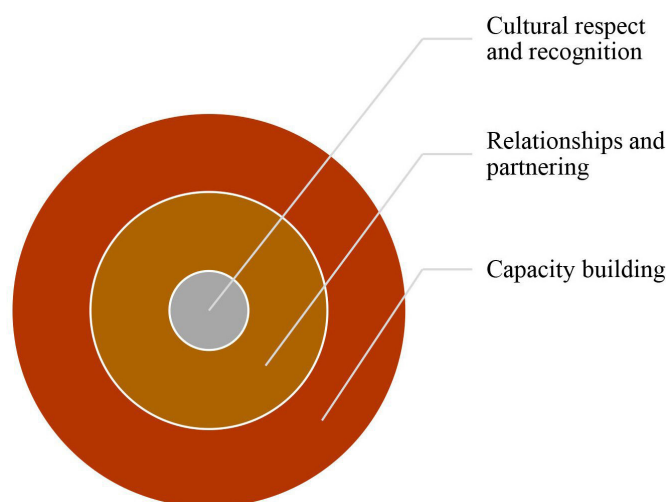


Figure 2 A framework for understanding the interaction between cultural respect and recognition, relationships and partnering, and capacity building.

culturally responsive spaces included the naming of units or spaces with Aboriginal names in the dialect of the local region, displays of local artwork, and representation of the national Aboriginal and Torres Strait Islander flags on-site.

For Aboriginal peoples, the time before and following death is subject to customary practices that are sacred.³⁰ For example, some participants expressed a desire to be near an open window to release their loved one's spirit and have the ability to conduct smoking ceremonies, rather than be in an enclosed clinical room. In addition, the provision of a physical space that allows them to practise their cultural and spiritual traditions and customs without the presence of other religions or churches would enable culturally and clinically responsive care for Aboriginal patients and their families. For example, '... a place for families to grieve that's spiritual, not religious... religious places are uncomfortable ...' (Participant 5). Aboriginal families gather to support their loved ones when they are in hospitals or engaging with care services, often travelling long distances from their country (term used to describe the lands and waters to which they are connected). Therefore, clinical spaces that allow for the family to be present during care delivery, as well as culturally appropriate and accessible accommodation, off-site or outreach service options and accessibility services (eg, shuttle transport services), would support services to meet the needs of the community.

Culturally responsive systems

Aboriginal peoples are not homogeneous, but composed of diverse groups, and must be recognised as comprising distinct cultures with customary practices varying between and within tribal groups.³¹ Yarning circle participants expressed that, wherever possible, care services should be co-designed with their local community to encourage appropriate, accessible, culturally responsive care. Participants specifically reported the need for the

provision of systems to support accessibility (eg, transportation, cost, timing, face-to-face options). Transport logistics were often discussed as a barrier for patients who rely on public transport or family members to get them to and from medical appointments, including the high cost and limited availability of parking at hospitals. Participants identified possible solutions that could include a community shuttle service for patients to support them in attending medical appointments at the hospital. Many expressed that current appointment and other clinic systems required access to communication technology that they did not have or could not afford to purchase, including smartphones and the internet. Participants suggested the use of appointment systems that do not rely on the patient having access to communication technology, such as enabling access for those who cannot afford technology, moving towards drop-in clinics or providing free internet access, were also identified as ways to overcome the technological barriers.

For engagement with care services, participants expressed the need for the Aboriginal and non-Aboriginal members of the health service management team to be visible to and partner with Elders, community groups and organisations, as well as greater representation of Aboriginal peoples in the healthcare workforce. For example, embedding a community Elder into hospital management structures where their role is not to be 'management' but rather function as an Elder. As part of the management team, Elders would connect the community with health services and support culturally appropriate services being established (eg, models of care that meet community needs) and accessed by the community. Hospital care linked with other service providers such as aged care, the National Disability Insurance Scheme³² and off-site clinics would reduce the administrative burden on patients and their families. In addition, pathways for Aboriginal peoples to enter care professions such as funded internships and staff retention programmes would improve the proportion of Aboriginal clinicians in hospitals. Participants suggested training and recognition of prior learning such as existing qualifications and skills should be implemented, to allow Aboriginal health providers to work and be appropriately remunerated to the full scope of their abilities. Participants also suggested the creation of Aboriginal patient navigator roles to support patients' navigation of their healthcare journey, greater than currently in place staff-to-patient ratios, greater numbers of Aboriginal healthcare providers, and, where the provider workforce is predominantly female, more males.

Participants shared their experiences of treatment in a 'Western-style' hospital environment. Participants reported experiences of care being altered without consultation and not being heard when reporting that something went wrong, or is going wrong, with their health or treatment. For example, '... [he was] in a bed next to a non-Aboriginal person being consented and when the doctor came to [his] bedside the doctor said, "you heard that, didn't you?" ...' (Participant 8), meaning

the patient was not consented properly. It was perceived by participants that these issues did not occur among non-Aboriginal people. Participants discussed the idea of an Aboriginal health unit, open 24 hours, 7 days a week that specialises in care that is culturally specific and staffed by Aboriginal clinical and professional staff as well as Aboriginal-specific care teams. Participants emphasised the importance of the choice of whether to receive their care there or not.

Participants identified an opportunity to improve the current method for providing WSLHD staff with cultural awareness training. It was felt that online training was not sufficient for non-Aboriginal staff to develop an understanding of Aboriginal culture. They suggested that cultural awareness training should include face-to-face conversations with the local community including Elders, and that they would be supportive of such a training model.

Culturally responsive models of care

The overarching preference was for care to be holistic, and consider individual and cultural needs. [Table 1](#) summarises the perceived strengths, barriers and enablers reported by participants about the models of care. As two of the models require a level of consumer digital literacy (eg, digital hospital and virtual care), community members were asked about their level of comfort using a smartphone, a smartwatch and a computer. Most of the community members were somewhat or extremely uncomfortable using smartphones, smartwatches and computers ([figure 3](#)).

Ambulatory care

Ambulatory care was perceived as more comfortable than inpatient care due to a shorter length of stay in hospital. Participants identified barriers to accessing ambulatory care including problems with access such as insufficient parking, high cost of parking, lack of a personal vehicle, poor public transport options, difficulty in organising transport to and from the hospital if the family are unavailable, the need for repeat visits and the coordination of care delivery and delays (extensive waiting to see providers) both in wait times for an appointment and on the day of the appointment.

Hospital in the Home

HITH was perceived as more convenient and comfortable than inpatient care delivery models with participants feeling safer (greater privacy) at home than in the hospital with the benefit of being cared for by family members while continuing to provide care for others. However, a lack of trust in the visiting healthcare providers and the patient's housing situation were perceived as barriers to accessing HITH. For example, discomfort with the idea of letting a provider into their home when it was not clean and tidy, living in a shared home, signs of poverty or insufficient space for care delivery were all perceived as barriers.

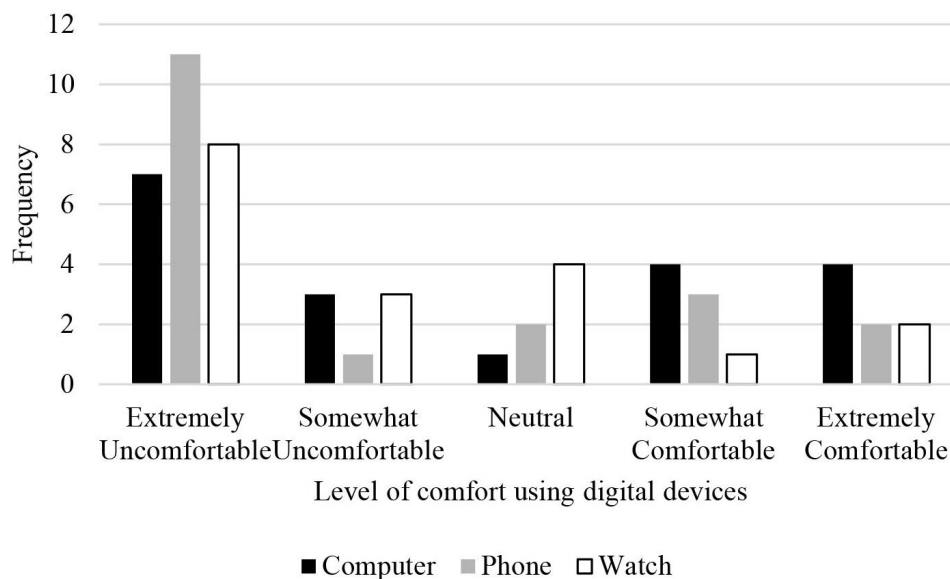


Figure 3 Yarning circle participants' level of comfort using digital devices.

Integrated care

Integrated care was perceived positively as providing holistic care that addressed multiple needs; however, past experiences of paternalistic care and a lack of control or choice in the care itself and the way it is delivered represented significant barriers. Participants worried that inaccuracies in health record information (such as conditions, symptom type and severity, current medications, preferences) would exacerbate and create issues with accessing appropriate care. Participants reflected that because a lot of the work within this model is done among providers rather than between the provider and patient, this model requires a large degree of trust in providers on the part of the patient. Previous personal and family experiences of trauma during care delivery may make trusting healthcare professionals difficult for some community members.

Virtual care

Participants reported that the virtual care model provides the benefit of being able to receive care at home and/or on country, thereby eliminating the need to travel. However, internet connectivity issues related to not owning or having access to a computer and experiencing stress when using technology represent significant barriers to accessing this model. Stress could be increased due to consumers' limited digital literacy and ability to troubleshoot connectivity problems under time pressure. Participants also highlighted the concern that with virtual care, there is no physical examination to provide time and space to 'open up' and reduce the patient's ability to be dismissive, hide or negate issues.

Specialist hospitals and population-specific care units

Participants reported feeling safe with this model of care because care would be holistic (ie, customised to the individual needs backed up by expert knowledge) resulting in a higher level of care compared with care provided in a non-specialist hospital. However, transport was a concern

(eg, public transport limitations, parking accessibility and affordability, and constraints around a family's ability to support them to get to appointments). Participants also expressed concern about communication pathways and the availability of options (ie, choice or opportunity to access the model or not) and the alternatives if the service was not a good fit, as well as the potential for the focus of the care to be narrow rather than holistic.

Digital hospitals

Participants agreed that technology provides a means to help monitor health status and that this monitoring would be convenient, removing from the provider the manual load of collecting health information. Consistent with their concerns with the virtual care model, however, the digital hospital model raised worries about what happens when the technology fails and the potential inflexibility of the system, as well as the safety of the data from hacking, including data privacy and ownership. Participants were concerned that some community members might not feel comfortable accessing this model due to a lack of understanding of the technology that supports the model. Participants also suggested that this model might not be suitable for all conditions and healthcare needs, with some conditions such as mental health benefiting from less (or less visible) technology.

DISCUSSION

The current study aimed to elicit the Aboriginal community's, consumers' and providers' needs and expectations for hospitals of the future and to elicit their views about six prominent and emerging models of care. Three primary themes emerged: 'culturally responsive spaces', 'culturally responsive systems' and 'culturally responsive models of care'. Follow-up feedback from yarning circle participants emphasised the centrality of cultural respect and recognition in how healthcare is delivered and accessed

by community. In addition, participants reported Aboriginal community engagement with care services depends on the relationship between hospital services and the Aboriginal communities. By partnering with Aboriginal communities, hospital services can embed culture at the centre of service design and build Aboriginal capacity and engagement. Understanding that culture is central to how communities access care and that cultural knowledge and skills impact how care is delivered is paramount to addressing health disparities experienced by Aboriginal peoples.

Cultural respect and recognition

Embracing the importance of cultural respect and recognition is critical for future hospitals to meet the needs of Aboriginal peoples. Aboriginal health and well-being is based on cultural values, beliefs and traditions, interconnected with nature, the environment and the cosmos.^{33 34} Unlike Western medicine clinical spaces, physical spaces such as gardens for reflection that include bush medicine, families to gather and cultural ceremonies, as well as flexible structures and systems that allow for families to provide support such as access to accommodation (at short notice) and transport, are key to Aboriginal health, well-being, death and dying.^{30 31} Inflexible healthcare systems do not account for Aboriginal cultural prioritisation of family, social obligations, isolation, miscommunication and distrust.³⁵ Flexible models of care, such as 'Dalarinji' within an emergency department, provide patients with the ability to leave and return at any point, with care picking up from where it was interrupted.³⁵ Co-designed using Aboriginal cultural communication practices (eg, yarning), 'Dalarinji' has increased the probability of Aboriginal patients receiving complete care. Other flexible models of care, such as HITH, virtual care and integrated care, that link hospital care with the community (ie, Elders) and existing community services (eg, pharmacy, allied health, community groups) that allow consumers to remain at home and on country and receive treatment for their disease will be vital in meeting the needs of the community.^{2 16 36 37} For example, an Indigenous-HITH programme has recently been established to support the management of acute exacerbation of chronic conditions closer to home.³⁶ However, patients' situation (eg, access to technology), acceptance and culture are key to successful model of care implementation.³⁸ The co-design of flexible healthcare services that strengthen and respectfully engage Aboriginal culture in mainstream services has the potential to improve accessibility and care outcomes.³⁹

Relationships and partnering

A key aspect of addressing health disparities in future hospitals is through forming meaningful relationships and partnering with patients and their families at the time of care delivery, as well as with Elders and community groups to support patients after their hospital stay.² Existing support roles such as Aboriginal Liaison Officers

are critical in providing emotional, social and cultural support and assistance to Aboriginal patients and their families during their hospital stay,⁴⁰ and in the primary care setting.⁴¹ More extensive programmes, such as 'Koorliny Moort' in Western Australia, create partnerships between primary care and outreach care closer to home.⁴² Assistance with combining and coordinating appointments and follow-up care close to home reduced emergency department use and improved outpatient appointment attendance.⁴² Similar roles to support accessibility of the evidence-based models of care include language support and patient navigation support roles.^{18 43} Relationships and partnering between community-based services, such as Aboriginal organisations and hospital management, are a critical pathway for bridging the gap between hospitals and the community as well as a means for collaborating on strategies to improve the health and well-being of the community.^{12 37 39} Relationships and partnering reinforce care that is culturally responsive (ie, linked with values, roles and responsibilities) and linked with community.^{2 31 39}

Capacity building

Care that is led by Aboriginal peoples for Aboriginal peoples helps build trust and capacity.^{2 44 45} Aboriginal peoples' trust in health services has been adversely affected by colonisation, religion and past government policies where their cultures were systematically suppressed as Western systems and religions were imposed including dislocation, assimilation, segregation and removal of children.⁴⁶ Building trust and capacity involves co-creating pathways that foster Aboriginal peoples entering health professions after they finish school (eg, internships), staff retention programmes and pathways for growth, recognition of qualifications and expertise through remuneration, mentoring and integration into multiple healthcare units.^{41 47-49} In addition, moving beyond online cultural awareness training to include conversations with the local community will help deepen non-Aboriginal providers' understanding of Aboriginal experiences and needs during healthcare interactions, as well as the role culture plays in health.^{17 50} Aboriginal and non-Aboriginal participants alike reported concerns about the models of care, citing poor digital literacy, a lack of access to technology and communication gaps necessitating a support or patient navigator role for the models to be successful.^{38 51-53} Meaningful community engagement in the co-development of care, technology and the implementation of patient-centred models of care will support patients and families participating in their care.⁵⁴ Building individual and community capacity aims to underpin the development and use of healthcare services such as future hospitals to address health disparities experienced by Aboriginal peoples.²

Aboriginal participants felt that the HITH was a convenient model that enhanced feelings of patient comfort. These views were also reported in our research with the non-Aboriginal community.⁵⁵ However, the Aboriginal

community raised the concern of having trust issues with a perceived stranger visiting their home. This highlights the importance of employing community Aboriginal healthcare providers and building relationships with non-Aboriginal providers who have received cultural training when visiting a patient's home. For the integrated care model, both Aboriginal and non-Aboriginal⁵³ consumers and providers reported that integrated care addressed multiple needs, but there was a risk of communication gaps between the teams, negatively affecting their care and having a patient navigator was crucial. Distinctively, the Aboriginal participants raised concerns about this model offering paternalistic care, which was not reported in our non-Aboriginal community findings. This highlights the importance of patient-centred care, rather than adopting an interventional focus, to support patients and their families in maintaining a sense of control along their care pathway.

Strengths and limitations

The current study extends our understanding of the cultural needs of Aboriginal peoples for future hospitals and is the first to identify cultural and health-specific needs and expectations for hospital services delivered on the sacred lands of the Darug Nation. The yarning circles were conducted face-to-face in community centres within a single LHD and allowed participants to share their perspectives in a safe and judgement-free space. The face-to-face format eliminated technology as a barrier but may have restricted the opportunities for community members to participate. Aboriginal peoples are diverse, as such, the findings reported here may be limited to the community group consulted. Our study did not include individuals younger than 21 years of age. This may have also restricted the diversity in experiences, cultural and accessibility needs reported here. Themes and subthemes were reviewed by Aboriginal team members and community members to establish trustworthiness and authenticity of the findings. The initial analysis undertaken by two non-Aboriginal researchers may have introduced bias through different lived experiences, perspectives and world views. Finally, six prominent and emerging models of care were discussed. While there were many overlapping barriers and enablers identified across the six models, there may be considerations unique to models of care not presented here.

CONCLUSION

Aboriginal peoples comprise a portion of the Australian population that is historically poorly serviced. Building capacity in Aboriginal communities through respectful relationships and partnering with community groups will help embed culture in care delivery and support future hospitals in addressing the health disparities experienced by Aboriginal peoples. The meaningful co-design of physical spaces, systems and models of care that include support related to technology, service navigation,

transport, caring, culturally competent people, and space for family and Elders to be included in care can act to encourage the design of services that are fit for purpose. Aboriginal community members and providers are invested in collaboration to establish that culture is respected and embedded in the delivery of care, care is holistic and connected with the community, and the capacity of future Aboriginal healthcare providers is fostered.

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Competing interests None declared.

Patient and public involvement Patients and/or the public were involved in the design, or conduct, or reporting, or dissemination plans of this research. Refer to the Methods section for further details.

Patient consent for publication Not applicable.

Ethics approval The Aboriginal Health and Medical Research Council of NSW Human Research Ethics Committee (HREC) (AH&MRC) approved the study (reference 1870/21). The WSLHD HREC also approved the study (reference 2021/ETH00812). Aboriginal team members provided oversight and governance for the research and engaged local Elders' groups in discussions to establish appropriate consultation and include Elders as an active part of project processes and its progress. Non-Aboriginal team members returned to the communities to deliver a summary of findings upon project completion. The research team was comprised of Aboriginal (NH, SG) and non-Aboriginal people (EEA, AC, KM). Aboriginal peoples' perspectives were privileged throughout the design, data collection, analysis and interpretation of the findings.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request. The datasets used and/or analysed during the current study are available from the corresponding author on reasonable request.

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Standards for Reporting Qualitative Research (SRQR)*

<http://www.equator-network.org/reporting-guidelines/srqr/>

	Page/line no(s).
Title and abstract	
Title - Concise description of the nature and topic of the study Identifying the study as qualitative or indicating the approach (e.g., ethnography, grounded theory) or data collection methods (e.g., interview, focus group) is recommended	Page 3 Line 39 - 40
Abstract - Summary of key elements of the study using the abstract format of the intended publication; typically includes background, purpose, methods, results, and conclusions	Page 1 Line 1 - 23
Introduction	
Problem formulation - Description and significance of the problem/phenomenon studied; review of relevant theory and empirical work; problem statement	Page 3 - 4 Lines 41 - 81
Purpose or research question - Purpose of the study and specific objectives or questions	Page 4 - 5 Lines 82-89
Methods	
Qualitative approach and research paradigm - Qualitative approach (e.g., ethnography, grounded theory, case study, phenomenology, narrative research) and guiding theory if appropriate; identifying the research paradigm (e.g., postpositivist, constructivist/ interpretivist) is also recommended; rationale**	Page 5 Lines 99-104
Researcher characteristics and reflexivity - Researchers' characteristics that may influence the research, including personal attributes, qualifications/experience, relationship with participants, assumptions, and/or presuppositions; potential or actual interaction between researchers' characteristics and the research questions, approach, methods, results, and/or transferability	Page 6 Lines 112-115
Context - Setting/site and salient contextual factors; rationale**	Pages 4-5, Lines 82 - 97
Sampling strategy - How and why research participants, documents, or events were selected; criteria for deciding when no further sampling was necessary (e.g., sampling saturation); rationale**	Page 7 Lines 142 -159
Ethical issues pertaining to human subjects - Documentation of approval by an appropriate ethics review board and participant consent, or explanation for lack thereof; other confidentiality and data security issues	Page 5 Lines 106 -115
Data collection methods - Types of data collected; details of data collection procedures including (as appropriate) start and stop dates of data collection and analysis, iterative process, triangulation of sources/methods, and modification of procedures in response to evolving study findings; rationale**	Page 7 - 8 Lines 160 - 182

Data collection instruments and technologies - Description of instruments (e.g., interview guides, questionnaires) and devices (e.g., audio recorders) used for data collection; if/how the instrument(s) changed over the course of the study	Pages 7 - 8 Lines 160 - 182
Units of study - Number and relevant characteristics of participants, documents, or events included in the study; level of participation (could be reported in results)	Page 9 Lines 197 - 208
Data processing - Methods for processing data prior to and during analysis, including transcription, data entry, data management and security, verification of data integrity, data coding, and anonymization/de-identification of excerpts	Page 9 Lines 184 - 195
Data analysis - Process by which inferences, themes, etc., were identified and developed, including the researchers involved in data analysis; usually references a specific paradigm or approach; rationale**	Page 9 Lines 184 - 195
Techniques to enhance trustworthiness - Techniques to enhance trustworthiness and credibility of data analysis (e.g., member checking, audit trail, triangulation); rationale**	Page 9 Lines 184 - 195

Results/findings

Synthesis and interpretation - Main findings (e.g., interpretations, inferences, and themes); might include development of a theory or model, or integration with prior research or theory	Page 10- 17 Lines 209-358
Links to empirical data - Evidence (e.g., quotes, field notes, text excerpts, photographs) to substantiate analytic findings	Page 10 - 17 Lines 209-358

Discussion

Integration with prior work, implications, transferability, and contribution(s) to the field - Short summary of main findings; explanation of how findings and conclusions connect to, support, elaborate on, or challenge conclusions of earlier scholarship; discussion of scope of application/generalizability; identification of unique contribution(s) to scholarship in a discipline or field	Page 18-22 Lines 1 - 115
Limitations - Trustworthiness and limitations of findings	Page 21, Lines 88-103

Other

Conflicts of interest - Potential sources of influence or perceived influence on study conduct and conclusions; how these were managed	Page 24 Line 143
Funding - Sources of funding and other support; role of funders in data collection, interpretation, and reporting	Page 23 Lines 126-129

*The authors created the SRQR by searching the literature to identify guidelines, reporting standards, and critical appraisal criteria for qualitative research; reviewing the reference lists of retrieved sources; and contacting experts to gain feedback. The SRQR aims to improve the transparency of all aspects of qualitative research by providing clear standards for reporting qualitative research.

**The rationale should briefly discuss the justification for choosing that theory, approach, method, or technique rather than other options available, the assumptions and limitations implicit in those choices, and how those choices influence study conclusions and transferability. As appropriate, the rationale for several items might be discussed together.

Reference:

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