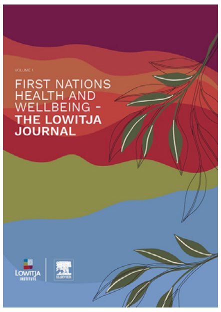

Original Research

Empirical assessment of cultural safety within Australian hospitals highlights the impact of access to Aboriginal hospital liaison officers on the experiences of Aboriginal patients

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Abstract

Purpose Ensuring access to hospital services that are culturally safe is imperative for improving Aboriginal and Torres Strait Islander health outcomes. Addressing failings within existing services relies on the ability to prioritise areas for improvement in a methodologically robust manner that reflects the experiences of Indigenous service users. The construct and content validity of the Cultural Safety Survey, a mixed-methods questionnaire-based tool that captures the lived experiences of First Nations peoples attending hospital, was previously established. This study aimed to identify hospital and participant characteristics associated with positive or negative experiences of care.

Methods Study sites included 49 hospitals in New South Wales, either through direct engagement with the hospital or opportunistic participant recruitment. A total of 413 participants took part in the study; 307

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completed the whole survey and 298 of them had complete hospital and demographic data for analysis. Multivariable ordinal logistic regression was used to identify contributors to composite and domain-specific cultural safety scores. Assessed variables included respondent age, gender, distance travelled, attendance capacity (patient or visitor), hospital size, remoteness and socioeconomic status of location. Additional analysis assessing reported interaction with an Aboriginal hospital liaison officer (AHLO) on cultural safety scores was also performed.

Main findings Of 413 participants, 298 provided complete demographic and hospital data, and confirmed informed consent. Responses related to 49 separate hospitals in New South Wales. Participant age and level of interaction with an AHLO showed a consistently positive association with cultural safety score. A unit increase in age was associated with 51.3% increased odds of a higher overall cultural safety score (P = .0012). Similarly, each unit increase in AHLO interaction was associated with 89.3% greater likelihood of a higher cultural safety score (P = .0031). Other variables – including higher socioeconomic advantage, female gender, and a shorter distance travelled – were positively associated with specific cultural safety domains. Respondent comments captured in the free text component of the questionnaire were consistent with quantitative findings.

Principal conclusions The findings highlight the importance of access to an AHLO when visiting hospital. More generally, the ability to quantify the performance of hospital services based on the experiences of Indigenous end-users, and to identify factors that contribute to the nature of those interactions, provides a potential guide for impactful service reform.

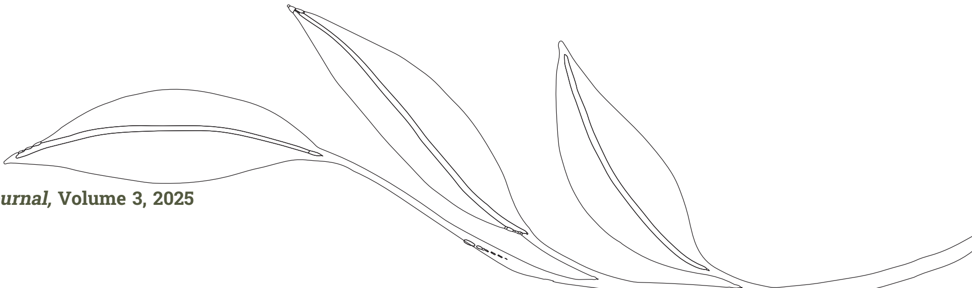
Keywords: Cultural safety; Patient experience; Racism; Hospital performance; Aboriginal health; Health policy

Highlights

- National health policies cite the need to improve or embed cultural safety in health services.
- Currently, there is no clear strategy to achieve this and no consensus on approaches to measurement, monitoring or evaluation.
- We demonstrate the feasibility of assessing the cultural safety of hospital services empirically, based on the experiences of Indigenous patients.
- Our findings highlight the potential for impactful service reform through empirical assessment of cultural safety.

Introduction

Entitlement to appropriate and effective healthcare is enshrined in binding international human rights instruments (UN General Assembly 2007). Every country has a legal obligation to develop and implement legislation and policies that guarantee universal access to quality health services and to address root causes of health disparities, including poverty, stigma and discrimination (Marmot et al. 2008). In Australia, this obligation is reflected in the Australian Charter of Healthcare Rights (Australian Commission on Safety and Quality in Health Care



2020), which applies to all individuals who are seeking care, regardless of the nature of the services required or the setting in which they are delivered.

Access to quality health services is not equally enjoyed by all Australians. Members of Aboriginal and Torres Strait Islander communities are commonly denied services that are free from racism and delivered in a culturally safe and appropriate manner (Gatwiri et al. 2021). Such failure to deliver on the principles of health equity has profound consequences. Cumulative and intergenerational trauma arising from experiences of racism contribute to a reluctance to engage with services, resulting in later presentation and poorer treatment outcomes (Temple et al. 2020; Ziersch et al. 2011). Where individuals do seek care, prejudicial views regarding their health needs, paternalistic approaches to care delivery, and a lack of consideration of appropriate treatment modalities contribute to worse outcomes (Paradies et al. 2015).

It has been estimated by the Australian Institute for Health and Welfare (AIHW) that over a third of the disparity in health outcomes between Indigenous and non-Indigenous Australians can be attributed to the lack of cultural safety in health services, as well as cultural and historical factors such as racism and intergenerational trauma (AIHW 2024b). Addressing racism and culturally unsafe healthcare delivery is therefore critical if health equity is to be achieved.

Racism and cultural safety within health services can only be accurately assessed by those who experience it (Curtis et al. 2019). The consistent failure to preference Indigenous voices in the design and assessment of health service delivery (Fisher et al. 2021) has allowed over-estimation of cultural safety by health service providers and the introduction of measures aimed at improving care that have proven problematic and counterproductive (Wilson et al. 2022; Laccos-Barrett et al. 2022). Several studies have been undertaken to gain insight into the experiences of Aboriginal and Torres Strait Islanders and their families within healthcare settings (Worrall-Carter et al. 2016; Shahid et al. 2009; Taylor et al. 2021; Askew et al. 2021; Jones et al. 2020). While essential to better understanding the inadequacies of current care systems, these studies have mainly been qualitative in nature and employed approaches that do not provide metrics that can be readily used for service benchmarking or assessing the impact of reforms.

The Cultural Safety Survey (CSS) is a mixed methods tool that was developed to quantify cultural safety in hospitals, specifically from the perspective of Indigenous patients (Elvidge et al. 2020). The CSS includes five domains that reflect the key characteristics of cultural safety: 1) Positive communication between patients and hospital staff, 2) Negative communication between patients and hospital staff, 3) Trust between patients and hospital staff, 4) The hospital environment, and 5) Support for families and culture. Each domain comprises five survey questions, with participants responding through a four-point Likert scale ('always', 'usually', 'sometimes' and 'never'). The CSS includes open text questions to allow participants to provide additional details of their experiences.

This study examined the application of a multivariate analysis of the CSS data to identify factors that influence experiences of healthcare interactions in hospital settings, through a process involving 413 Indigenous patients who had attended one of 49 hospitals in New South Wales (NSW). It further examined the suitability of this approach to provide a basis for the identification of service reform priorities.

Methods

Study ethics and governance

The study was conducted with approval from the Aboriginal Health and Medical Research Council of New South Wales (HREC Reference no.1184/16) and the Hunter New England Local Health District (HREC Reference 2019/ETH00931). Local health district Aboriginal health units and individual hospital site Close the Gap collaborative committees (including Aboriginal community members, hospital and Aboriginal medical service staff) provided input and oversight of the study.

Survey development, validation and consistency

The development and validation of the CSS have previously been described (Elvidge et al. 2020). In brief, the survey was validated by content validity and exploratory factor analysis for construct validity, and question internal reliability was confirmed using the Cronbach's alpha score (0.934), as previously described (Elvidge et al. 2020). The complete survey, including the domains and four-point Likert scale questions, are provided in the Supplementary material. Completion of the survey took approximately 10 minutes and participants were given the option of participating online, over the telephone, face-to-face or individually using a paper copy of the survey.

Study sites

All hospitals within NSW were eligible to participate. Two hospital sites were directly approached and agreed to participate in the study (referred to as participating hospitals). Recruitment at these sites was facilitated either by Aboriginal staff (primarily Aboriginal hospital liaison officers and health workers) or through a local health district 48-hour discharge service via phone or mail. In addition, recruitment was carried out through informal networks and advertising via social media. Participants who were recruited through this method provided information on location of their care experience. Where the services involved were not one of the two participating hospitals, no direct engagement with the hospital executive was undertaken.

Study participants

Individuals who identified as Aboriginal and/or Torres Strait Islander and who had attended a hospital in NSW in the prior 12 months were eligible to participate. Participant recruitment was undertaken through the involvement of Aboriginal hospital liaison officers (AHLOs) and staff in Aboriginal health roles, through the 48-hour follow-up program, a local health district initiative in which Aboriginal individuals with a chronic disease receive a telephone follow-up from an Aboriginal clinician once discharged from hospital, and through targeted advertisements on social media. Of the 413 individuals who provided responses, consent was confirmed for 361. A further 47 participants did not provide complete demographic information, and 16 did not provide necessary information relating to the hospital site that they attended. Analysis was performed on responses provided by the remaining 298 participants.

Statistical analysis

Statistical analyses were conducted using SAS Version 9.42 (SAS Institute Inc., Cary, NC, USA). Scores for each domain were calculated by transforming the four-point Likert scale responses of each question to a proportion of the highest possible score and taking the mean of the proportion within each domain. For reverse-worded questions (where a positive rating corresponded to a negative experience; Q6, 7, 8, 9, 17 and 19), questions were reverse-coded to align with positive worded questions. For example, the lowest score was coded as the highest score; the second lowest score coded as the second highest score. The mean of all domains was used for a combined score. Proportions were then ordinated into >0.75, >0.5 to ≤0.75, >0.25 to ≤0.5, and ≤0.25. Where a respondent answered <50% of questions within a domain, their composite score and combined composite score were excluded due to insufficient coverage.

To determine the effect of demographic and hospital characteristics on composite survey response scores, multivariable ordinal logistic regression was performed across all included respondents. Dependent variables included age (18–24, 25–44, 45–64, 65–74 or >75 years), patient or visitor, gender, and distance travelled to hospital (0–100, 101–250, 251–500 or >500 km), hospital bed capacity (0–100, 101–300, 301–600 and >600 beds), socioeconomic classification of the hospital as determined by the 2021 Socio-Economic Indexes for Areas (SEIFA) (600–900, 901–1,000 and >1,000), and the remoteness category of the hospital as determined by the Australian Standard Geographical Classification. To determine the additional effect of AHLO interactions on composite survey response scores, multivariable ordinal logistic regression was performed across respondents who answered 'yes' to the screening question: 'During your time in this hospital, were you ever asked if you would like to talk to the Aboriginal hospital liaison officer?' The same demographic and hospital variables were included in this model in addition to the response to this AHLO screening question. Adjusted odds ratios, the Wald 95% confidence interval (CI), and *P* values are reported.

Results

Hospital characteristics

Participants reported experiences relating to 49 separate NSW hospitals (Supplementary Figure S1). These hospitals were mostly located within a major city (72.8%), had a >600 bed capacity (39.6%), were in areas with low relative disadvantage (44.3%), and had at least one AHLO (96.3%) (Table 1).

	Hospitals (n = 49)
Bed capacity	
0–100	4 (8.16)
101–300	14 (28.57)
301–600	21 (42.86)
>600	10 (20.41)
Remoteness level	
Major city	25 (51.02)
Inner regional	18 (36.73)
Outer regional	6 (12.24)
SEIFA group	
<900	10 (20.41)
900–1,000	26 (53.06)
>1,000	13 (26.53)
AHLO	
Yes	40 (81.63)
No	9 (18.37)

Data are presented as n (%). SEIFA, Socio-Economic Indexes for Areas; AHLO, Aboriginal hospital liaison officer.

Table 1: Characteristics of participating hospitals

Participant characteristics

Complete demographic and hospital characteristic data were available for 298 of the 307 participants who provided responses and confirmed consent (97%) (Table 2) (Supplementary Figure S2). Of these, 15 of 298 (6%) did not complete all questions, of which 14 related to incomplete responses to domain 4 (hospital environment) and one related to an incomplete response to domain 2 (negative communication). Participants were most commonly female (64.1%), travelled <100 km to attend hospital (48%) and had attended the hospital as a patient, as opposed to a relative or carer (76.8%). The most highly represented age group was 45–64 years (42.6%). Two participants did not identify as male or female (0.7%) and 11 participants (3.6%) attended a hospital where an AHLO service was not available. Due to their low representation, analysis was repeated with these variables excluded.

	Participants (n = 298)
Age group (years)	
18–24	40 (13.4)
25–44	97 (32.3)
45–64	127 (42.6)
65–74	31 (10.4)
75+	3 (1.0)
Gender	
Male	104 (34.9)
Female	191 (64.1)
Other	3 (1.0)
Distance travelled (km)	
0–100	143 (48.0)
101–250	85 (28.5)
251–500	55 (18.5)
500+	15 (5.0)
Patient or visitor	
Patient	229 (76.8)
Patient/Visitor	69 (23.1)
Hospital bed capacity (beds)	
0–100	37 (12.4)
101–300	105 (35.2)
301–600	38 (12.8)
>600	118 (39.6)
Hospital remoteness level	
Major city	217 (72.8)
Inner regional	66 (22.1)
Outer regional	15 (5.0)
Hospital SEIFA group (score)	
<900	47 (15.8)
900–1,000	119 (39.9)
>1,000	132 (44.3)

Data are shown as n (%). SEIFA, Socio-Economic Indexes for Areas.

Table 2: Participants' information

Age was positively associated with a more culturally safe hospital experience

A positive association was identified between age and questionnaire response scores across all five domains and in the combined domain score (Figure 1A). For every unit increase in age, the odds of a higher domain 1 rating (positive communication) increased by 32.3% ($P = .024$). Similarly, the odds of a higher domain 2 rating (negative communication) increased by 91.4% ($P < .0001$), a higher domain 3 rating (trust between patients and hospital staff) increased by 41.7% ($P = .0058$), a higher domain 4 rating (better hospital environment) increased by 39.2% ($P = .0086$) and a higher domain 5 rating (support for Aboriginal families and culture) increased by 44.7% ($P = .0052$) with each unit increase in age. Overall experience (combined domains) increased by 51.3% ($P = .0012$) with each unit increase in age.

Socioeconomic characteristics of hospital location were associated with patient experiences

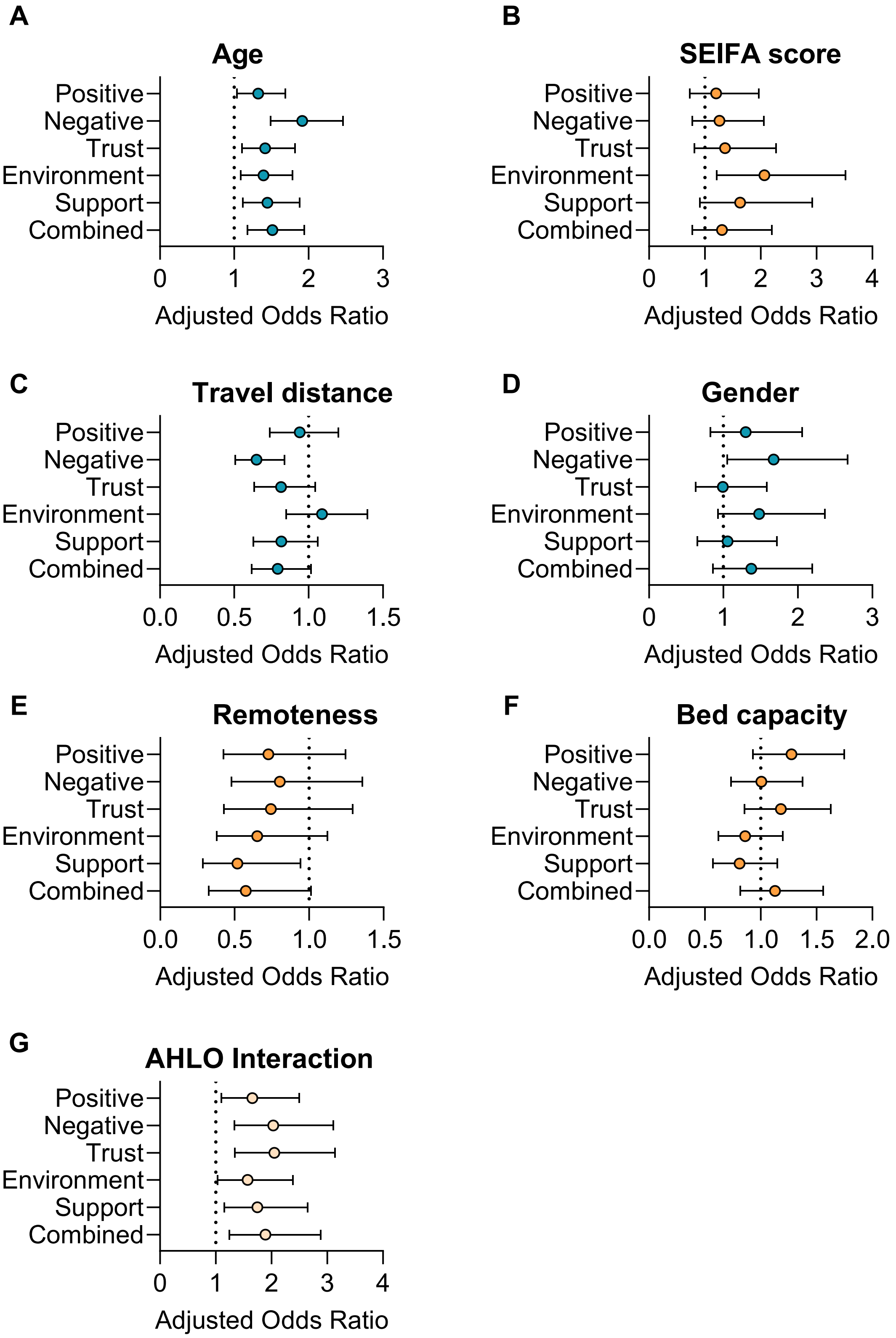
The hospital SEIFA score, which reflects the socioeconomic characteristics of a location, was positively associated with domain 4 (hospital environment) (adjust odds ratio [aOR] 2.065, 95% CI 1.211 – 3.522; $P = .0078$, Figure 1B). Specifically, a region in a higher socioeconomic bracket was associated with a 2.065 times greater odds of a higher environment rating.

A greater distance travelled was associated with more negative hospital experiences

Distance travelled was negatively associated with domain 2 (negative communication), such that the further that a participant had travelled, the more negative communication they were likely to have experienced (aOR 0.65, 95% CI 0.505, – 0.838; $P = .0009$, Figure 1C). This finding was supported by qualitative insight, with participants commenting that travel over long distances can present challenges where suitable accommodation is unavailable on site. For example, one respondent commented: 'We come in big groups so I think accommodation should be easier to access. My family had to go back home, which is 5 hours away; it would be better if they could stay close.'

Male gender was associated with more negative experiences

The 'negative' domain responses varied with gender. When participants who identified as 'other' (n = 3) were


A
Age
B
SEIFA score
C
Travel distance
D
Gender
E
Remoteness
F
Bed capacity
G
AHLO Interaction
Positive
Negative
Trust
Environment
Support
Combined
Adjusted Odds Ratio
0
1
2
3
4
0.0
0.5
1.0
1.5
2.0

included, there was high variance associated with this group, likely attributable to the small sample size. When analysis was repeated excluding participants who identified as ‘other’, male participants reported a more negative experience compared with female participants (aOR 0.597, 95% CI 0.374 – 0.951; $P = .0296$, Figure 1D). Questionnaire responses captured as free text suggested that this finding might relate, at least partly, to the inappropriateness of a predominantly female Aboriginal workforce for male patients, given gender-specific cultural norms relating to health concerns. For example, one male participant commented: ‘Had a lady Aboriginal worker – I felt a bit shame.’

More remote hospitals had lower support for Aboriginal families and culture

Hospitals were defined according to the Australian Institute of Health and Welfare remoteness codes (AIHW 2024a). Hospitals in more remote areas were found to be negatively associated with domain 5 (support for Aboriginal families and culture) (aOR 0.519, 95% CI 0.286 – 0.942; $P = .0312$, Figure 1E). However, this was not due to hospital size, with bed capacity not being independently associated with any domain score (Figure 1F). One participant who attended a remote hospital outside their local area commented on the lack of support their family received: ‘This is not my local hospital, I was visiting family. The treatment at [hospital name] was disgusting. There was just a very negative attitude the whole time and we felt very uncomfortable. I decided to leave it was so bad and ended up going back to hospital when we got home.’

Interaction with an Aboriginal health liaison officer was associated with more positive responses

Despite issues relating to the availability of gender-appropriate support, survey respondents consistently highlighted the beneficial impact of AHLOs (Supplementary material). Owing to the high importance placed on AHLO interaction, a separate investigation was undertaken of the survey data that focused on how the level of AHLO interaction (Q20 – During your time in this hospital, how often have you been able to talk to the Aboriginal hospital liaison officer?) influenced domain score. For the 98 participants who responded to this question, the level of AHLO interaction was positively associated with a higher score across all domains (Figure 1G). Specifically, for every increase in response to Q20, the odds of having a higher positive communication (domain 1) rating increased by 65.7% ($P = .016$), a higher negative communication (domain 2) rating increased by 103.4% ($P < .0001$), a higher trust between patients and hospital staff (domain 3) rating increased by 105.1% ($P = .0009$), a higher hospital environment (domain 4) rating increased by 57.0% ($P = .035$), a higher support for Aboriginal families and culture (domain 5) rating increased by 74.9% ($P = .0084$), and a higher overall experience (combined domains) increased by 89.3% ($P = .0031$). It should be noted that interaction with AHLOs was associated with higher negative communication scores (in contrast with other domains, negative communication was reverse coded, with a higher score indicating more appropriate communication).

Questions explicitly relating to racism were not included in the quantitative survey. However, a

Figure 1: Forest plots showing the adjusted odds ratios of hospital and participant characteristics on the Cultural Safety Score (CSS) domains as well as a combined domain score. Variables assessed were A) age (18–24, 25–44, 45–64, 65–74 or >75 years); B) Socio-Economic Indexes for Areas (SEIFA) score (600–900, 901–1,000 or >1,000); C) distance travelled to hospital (0–100, 101–250, 251–500 or >500 km); D) gender (male versus female); E) remoteness category; F) hospital bed capacity (0–100, 101–300, 301–600 and >600 beds); and G) interaction with an Aboriginal hospital liaison officer (AHLO).

prominent theme in responses captured by the open text section was the experience of frequent and pervasive racism, both overt and covert, perpetrated by staff and other patients (Supplementary material). Many participants cited avoidance of certain hospitals where they had previously experienced racism and there were also clear indications that these experiences contributed to a reluctance to seek care and avoidance of the hospital system in general. For example, one participant commented on their reluctance to attend a specific hospital due to past experiences of unsafe or racist experiences: 'We only ever go if we are really sick and can't travel to a different hospital. I know some Elders who just don't go at all 'cause the treatment is so bad.'

Discussion

There is considerable evidence that experiences of racism and cultural safety exert a profound influence on healthcare engagement, treatment and health outcomes, and wellbeing (Kairuz et al. 2021; Kerrigan et al. 2021; Davy et al. 2016; Larson et al. 2007). In many instances, this lack of culturally safe services has given rise to semi-autonomous services that are either Aboriginal clinician-led or sit within Aboriginal community-controlled health in mainstream hospitals. Such services are often associated with experiences of care that are vastly superior to mainstream care (Bnads et al. 2021; Mackean et al. 2020b; Grant and Draper 2018). However, given their limited scope and availability, these services cannot be considered an alternative to the reform of mainstream services and represent one part of a multimodal approach to ensuring cultural safety in every aspect of healthcare delivery (Lahn et al. 2020). Continuous quality improvement approaches have been employed to improve the cultural safety of hospital services, based on the assessment of broad metrics such as Indigenous patient identification and emergency department presentations (Einsiedel et al. 2012). Cultural safety tools and evaluation frameworks (Gollan and Stacey 2021) have also been developed for the assessment of policy (Mackean et al. 2020), education and training programs in the Australian context (Withall et al. 2021; West et al. 2021; Fleming et al. 2019) and to assess institutional (Bourke et al. 2018) and interpersonal racism (D'Costa et al. 2023) from the organisational and staff perspective. However, at best, all such approaches only capture proxy measures of cultural safety rather than direct assessment of patient or community experience of care.

Efforts to deliver improved health outcomes for Indigenous communities by addressing current deficits and inadequacies within the Australian health system are hampered by the currently limited ability to assess experiences within hospital settings in a manner that is robust, transparent and allows the identification of priorities for service reform (Ben et al. 2023). When assessing cultural safety in healthcare, there are clear parallels between the experiences of Aboriginal and Torres Strait Islanders and other Indigenous communities globally (Smylie et al. 2006). Many of these international models go a step further, with cultural safety embedded in hospital governance and national legislation. Accreditation Canada introduced cultural safety standards as part of its national health service accreditation program, including continuing quality improvement cultural assessments to identify the cultural needs and preferences of First Nations patients (Canadian Institute for Health Information 2021). Cultural safety legislation in the New Zealand health system is embedded in the Health and Disability Services Standards, which mandate the monitoring of cultural safety by healthcare through patient feedback mechanisms and quality indicators (Standards New Zealand 2021). Although they do not address cultural safety with First Nations peoples specifically, parallels can be drawn from the National Culturally and Linguistically Appropriate Services Standards in the USA, which provide a framework for healthcare organisations to deliver culturally competent care and a validated tool used to assess hospital compliance (Weech-Maldonado et al. 2012).

By comparison, the absence of similarly sophisticated measures that reflect Australia's unique sociocultural, political and healthcare landscape means that Australia lags far behind. National approaches to embedding cultural safety in the Australian health system are largely ad hoc and either based on broad indicators that do not directly measure cultural safety or do not incorporate Aboriginal and Torres Strait Islander patient or community perspectives (Mohamed et al. 2024; Bryant 2024; Fisher et al. 2021; Mackean et al. 2020a). The AIHW Cultural Safety in Health Care: Monitoring Framework includes indirect metrics, such as the proportion of Aboriginal and Torres Strait Islander health workforce and executive-level representation on hospital boards (AIHW 2024b). It also relies on references to cultural safety in organisational policy, such as a health service having a formal commitment to providing culturally safe healthcare. Non-government organisations, including Indigenous peak health organisations and the Australian Health Practitioner Regulation Agency (AHPRA), have championed the most comprehensive cultural safety legislation to date, with national reforms to the health practitioner regulation with the Health Practitioner Regulation National Law and Other Legislation Amendment Bill 2022 (AHPRA 2024). The Bill recognises cultural safety as a guiding principle and objective of the Health Practitioner Regulation National Law and provides the ability for a health practitioner's professional registration to be revoked if they are found to be discriminatory or providing culturally unsafe care in cases of professional misconduct (AHPRA 2023). However, no such mechanism is available to hold health services or hospitals accountable if an organisation is found to be providing care in a culturally unsafe manner. It has been argued that the existing national health safety and quality standards are insufficient, as they heavily rely on the assessment of proxy measures and are based on hospital reporting in relation to cultural safety initiatives, rather than direct assessments of patient experiences (Laverty et al. 2017).

Despite the growing number of health policies that call for cultural safety to be embedded into the Australian healthcare system (Commonwealth of Australia 2024; Department of Health 2021; Australian Government 2020), the lack of direct measures restricts the efficacy of policy implementation (McGough et al. 2022). The Australian Government's 2013–2023 Implementation Plan for the National Aboriginal and Torres Strait Islander Health Plan called for cultural safety to be embedded into the health system to improve health equity (Department of Health 2015). Significantly, it acknowledged that there were no critical indicators by which to measure cultural safety at that time and stated the need for their development. The CSS, based on appraisal of services from the perspective of end-users rather than service providers, was developed to address this gap and generates metrics that can be used as a basis for measuring cultural safety and benchmarking hospital performance.

This analysis of the CSS responses supports insight gained through qualitative research approaches and provides new insight into contributors to patient experiences. For example, the finding that access to an AHLO is highly beneficial, with Indigenous health staff in general being best placed to provide culturally responsive care. Similarly, studies have shown that AHLOs provide more culturally safe care with better communication (Kerrigan et al. 2024; Taylor et al. 2020) and higher levels of trust (Topp et al. 2022a) with Aboriginal patients and families. Consistent with this existing literature, it was determined that, within this study cohort, a unit increase in AHLO interaction category was associated with 1.9 times greater likelihood of a more culturally safe experience, a finding that was further supported by responses within the free text domain of the CSS.

The age of the respondent was also positively associated with an experience of greater cultural safety. Essentially, with each unit increase in age category, the likelihood of a more culturally safe hospital experience increased by 1.5 times. This finding is consistent with studies that have reported similar age-related findings in relation to self-reported racism. For example, when compared with younger respondents, older Aboriginal and Torres Strait Islander peoples reported less frequent experiences of racism, with an overall reduction in prevalence from age 65 years (Temple et al. 2019). Another study noted that when racism was experienced by older Aboriginal and Torres Strait Islander peoples in healthcare settings, the association with psychological distress is strengthened and can lead to the avoidance of healthcare services (Temple et al. 2020). This finding again highlights the importance of considering and supporting the specific needs of individuals, rather than employing measures in a one-size-fits-all manner.

This analysis also suggests that travelling further to attend hospital is associated with a greater likelihood of a negative experience. Based on free text responses, individuals found the ability to have family members stay onsite highly beneficial, highlighting the impact of support programs that include accommodation schemes on overall patient experiences. These schemes impact cultural safety, as they allow families to be physically present and support patients whilst they receive care in hospitals. Similarly, the association between remote hospitals and participants reporting lower support for Aboriginal families and culture domain score could reflect the lack of infrastructure and limited choice of healthcare services in remote locations, as well as differences in overall social disadvantage and rates of racism.

How these findings might best serve policy and service reform requires careful consideration. For example, the association that has been identified between access to an AHLO and a more culturally safe hospital experience supports the expansion of such schemes. However, in addition to providing greater access to AHLOs, ensuring that these roles reflect the diverse needs of end-users is critical (Canuto et al. 2018). For example, a male CSS respondent commented that only a female AHLO was available to them, which they found to be problematic, given the services they were accessing. Consideration must also be given to the balance between addressing a lack of cultural safety through measures that place an additional burden on communities, rather than through meaningful reform of mainstream services. Aboriginal health liaison officers provide a buffer between individuals and institutional and interpersonal racism, and, in so doing, are themselves potentially exposed to racism and cumulative trauma (Topp et al. 2022b; Bond et al. 2019; Lai et al. 2018). Issues such as these highlight the complex challenges associated with attempts to improve cultural safety in healthcare interactions and underline the importance of mixed methods approaches, and the risks associated with reliance on metrics in isolation.

Institutional and interpersonal racism within healthcare and culturally unsafe practices within the Australian health system have proven highly resistant to standard policy interventions (Elias et al. 2021; Socha 2021; Bourke et al. 2018). Based on the qualitative analysis of the experiences of Aboriginal and Torres Strait Islander patients, carers and family members, there is little evidence that top-down measures have resulted in meaningful changes at the point of delivery. The absence of mechanisms that enable the relative success of policy changes on the principal outcome of interest – the experience of individuals engaging with services – also prevents the ready identification and expansion of measures that are most impactful, and the discontinuation of those that show little or no benefit (Gregory et al. 2016). Internationally, community-sourced data-driven approaches to monitor the performance of health services specifically in relation to the needs and priorities of First Nations communities have proven successful (Smylie et al. 2006). In many cases, these data are linked to hospital performance indicators and are an intrinsic part of continuous quality improvement and hospital accreditation (Canadian Institute for Health Information 2021; Standards New Zealand 2021; Lawrence and James 2019). It is notable that where embedded Indigenous governance and cultural safety measures are used to guide health system reform, such as in New Zealand and Canada, progress in addressing disparities in health outcomes has been achieved (Wilson et al. 2021; Caron 2020).

For a new approach to be successful, a fundamental shift in how the government and health services respond to the complex challenge of 'eliminating racism' and embedding cultural safety in Australian hospitals is required. The focus needs to move from targeted workforce initiatives and stand-alone services to comprehensive mainstream service reform towards a coordinated, multi-strategic national initiative where Aboriginal and Torres Strait Islander communities rather than government bodies assess the cultural safety of hospitals.

This study had limitations that should be noted. As with all approaches that seek to gain insight into the lived experiences of community members, it is important to consider the extent to which the responses of study participants are representative. Experiences of care are likely to considerably differ due to factors such as a person's age, gender, care preferences, and prior experiences of healthcare interactions (Jones et al. 2020; Worrall-Carter et al. 2016). More broadly, they also reflect cultural background, location and the design of local healthcare services. This study involved tertiary hospitals in metropolitan, rural and remote settings in NSW, with participants predominantly from Gomeroi, Awabakal, Wiradjuri, Biripi and Darkinjung nations. As such, the extent to which the insight gained reflects the lived experiences of other members of these communities, and other First Nations peoples within Australia or internationally, remains to be established.

Analysis was based on data collected from a relatively small participant cohort in NSW, limiting both its generalisability and statistical power. The use of these data reflects the primary goal, which was to explore the potential of the CSS to provide useful insight if deployed at scale, rather than to identify specific contributors to patient experiences in this first instance. As previously described, the application of the CSS utilised an opportunistic approach to participant recruitment, lacked the ability to verify patient status, and did not capture the mode of participation or the number of individuals who declined to participate. Hospital and community demographic data were derived from publicly available datasets and lacked independent verification. The involvement of AHLOs, non-AHLO staff (including non-Indigenous individuals) and other staff in the processes of recruitment and data collection may have influenced who participated in the study and the responses they provided. Moreover, AHLOs were not available in all settings, potentially reflecting differences in local efforts to support cultural safety. While future deployment of the survey at scale will enable an exploration of the influence of researcher characteristics on participant responses, such analysis was beyond the scope of this study. A further limitation of the CSS was the absence of questions relating to experiences of racism in hospital, which was a notable reoccurring theme in the open text question responses, and something that was highlighted in community feedback.

Conclusion

This study aimed to explore whether multivariate analysis of data captured using the CSS, including participant demographics and hospital characteristics, can identify factors that contribute to experiences of cultural safety in hospital care and aid in the identification of reform priorities. The findings support the wider deployment of CSS to benchmark service performance and determine the impact of remedial measures.

Author contributions

E. Elvidge: Conceptualisation, qualitative analysis, manuscript drafting, review and approval of manuscript. S. L. Taylor: Conceptualisation, quantitative data analysis, manuscript drafting, review and approval of manuscript. K. Harvey: Manuscript drafting, review and approval of manuscript. Y. Thompson: Conceptualisation, review and approval of manuscript. J. Armao: Quantitative data analysis, review and approval of manuscript. G. B. Rogers: Conceptualisation, data interpretation lead, manuscript drafting, review and approval of manuscript. A. Creighton: Conceptualisation, review and approval of manuscript. Y. Paradies: Conceptualisation, data interpretation lead, review and approval of manuscript.

Data sharing

Data from this project are not currently publicly available. All requests for data should be directed to the corresponding author.

Declaration of interests

The authors declare no competing interests.

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Author biography

Elissa Elvidge is a non-Indigenous post-doctoral research fellow whose work focuses on improving clinical and public health outcomes through community-led research partnerships. As a woman of colour of Mauritian and Anglo-Australian descent, she has lived experience of racism and privilege, which informs her interest and scholarship in cultural safety and racism research. For over a decade, Elissa has worked to build strong and respectful relationships with Aboriginal communities in New South Wales and health organisations across Australia.

Steven Taylor is a non-Indigenous research scientist whose work includes statistical, bioinformatic and laboratory methods. He is an early career researcher and head of the Respiratory Health Group at the South Australian Health and Medical Research Institute. He is of Anglo-Australian descent and has lived in regional and metropolitan areas across New South Wales, Queensland and South Australia. His work aims to partner with Indigenous-led projects to address health inequities.

Kiara Harvey is a Gamilaroi women who is originally from Narrabri, New South Wales and currently residing in Newcastle, New South Wales. Kiara is a research assistant with the South Australian Health and Medical Research Institute where she works on a range of community-based respiratory health projects. Kiara is also a second year Bachelor of Nursing student at the University of Newcastle and part of the Indigenous nursing cadet program with the Hunter New England Local Health District.

Yeena Thompson is a Gamilaraay yinarr (woman) from Moree and has lived and worked in many Aboriginal communities across New South Wales. Currently, Yeena is the Aboriginal Health Research Partner with the Office of Indigenous Strategy and Leadership at the University of Newcastle. As part of her role, she chairs the Wukul Yabang Hunter Region Aboriginal Health Research Community Panel, which is an Aboriginal-led community-based authority on health research in the region.

Jessica Armao is a non-Indigenous quantitative researcher who is primarily focused on scale development, especially for the purposes of evaluation of the effectiveness of cultural capability and cultural safety education for healthcare students and professionals. Jessica is of mixed Lebanese and Anglo-Australian heritage and is currently undertaking postgraduate studies in the Arts. She is currently a research assistant with the South Australian Health and Medical Research Institute.

Geraint Rogers is a non-Indigenous research scientist whose work explores microbiological influences on diverse health outcomes. He is the Director, Microbiome & Host Health at the South Australian Health and Medical Research Institute and a Matthew Flinders Professorial Fellow at Flinders University, Adelaide. Since moving to Australia from the United Kingdom in 2013, Geraint has been actively engaged in work that aims to address health inequities, particularly those experienced by Aboriginal and Torres Strait Islander communities.

Aunty Amy Creighton is a Gomeroi Murri woman with strong connections to community. She has more than 40 years of experience in Aboriginal health and welfare services in the Hunter New England Local Health District (HNELHD). She has worked within the HNELHD across multiple roles including as an Aboriginal liaison officer, youth worker, community worker and field officer. Aunty Amy at the time of publication was employed as a senior researcher at the South Australian Health and Medical Research Institute.

Professor Yin Paradies is an Aboriginal animist anarchist activist who is committed to understanding and interrupting the devastating impacts of modern societies. He seeks mutuality of becoming and embodied kinship with all life through transformed ways of knowing, being and doing. Yin is a Wakaya man and Chair in Race Relations at Deakin University, where he conducts research on topics such as racism, anti-racism, cultural competence, Indigenous knowledges and decolonisation.

Supplementary material

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