

# How telehealth facilitates the provision of culturally appropriate healthcare for Indigenous Australians

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#### **Abstract**

**Introduction:** The aim of this study was to explore how telehealth facilitates or impedes the provision of culturally appropriate healthcare to Indigenous Australians from the perspective of staff at an Aboriginal Community Controlled Health Service (ACCHS).

**Methods:** An exploratory qualitative study was performed. Semi-structured interviews were conducted with nine ACCHS staff. Interview transcripts were analysed using thematic analysis.

**Results:** One central theme and three sub-themes were identified. The central theme of *Care provided in a supportive environment* describes how telehealth enabled specialist consultations to be conducted in the safe environment of an ACCHS instead of a mainstream health service. The first sub-theme described how telehealth improved affordability and convenience and brought a reduction in the stress of healthcare. The second sub-theme explained the importance of the presence of an Indigenous health worker to facilitate culturally appropriate healthcare. The third sub-theme described how telehealth supported a holistic view of health.

**Discussion:** Our findings show culturally appropriate healthcare may be enhanced by the use of telehealth because it allows care to be provided in the supportive environment of an ACCHS. It allows the community member to have the advocacy and assistance of an Indigenous health worker and reduces the burden of travel and dislocation from community and family.

## **Keywords**

Telemedicine, Indigenous health, rural health, telehealth

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# Introduction

In Australia, an Aboriginal Community Controlled Health Service (ACCHS) is a primary healthcare service operated by local Indigenous communities to provide holistic and culturally appropriate care. ACCHSs have reduced barriers in access to healthcare, and are improving health progressively Indigenous people. While the focus of ACCHSs has been primary healthcare, they are increasingly being used to provide specialist care.<sup>2</sup> One of the main uses of telehealth in the community-controlled sector has been to increase the range of specialist services to Indigenous people attending an ACCHS.<sup>3</sup> Telehealth has the potential to improve screening rates, social and emotional wellbeing and clinical outcomes as well as reduce the need for travel.

The acceptance of a healthcare service or a modality of delivery such as telehealth will in part be dependent on whether it is viewed as culturally appropriate.<sup>4</sup> Culturally appropriate healthcare is defined as care that recognises the social, political and economic factors that affect health and access to healthcare, and care that considers dignity, privacy, and safety,

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Caffery et al. 677

reducing the chance of discrimination.<sup>5</sup> A number of concepts and frameworks provide insight into how culturally appropriate healthcare might be achieved. These frameworks tend to focus on two strategies: the first is cultural safety, which is defined as an environment that recognises identity and shared respect, meaning, knowledge and experience ensures client needs are met; the second strategy is the cultural competence of clinicians. Cultural competence is a set of behaviours, attitudes and policies that enable a health system, service or professional to integrate culture into the delivery of health services. However, there is no holistic framework describing culturally appropriate healthcare.<sup>8,9</sup> Understanding the mechanisms through which culturally appropriate healthcare is delivered may help to fill this gap.

The aim of this study was to explore how telehealth facilitates the provision of culturally appropriate healthcare from the perspective of healthcare workers at a remote ACCHS. This analysis was set within a broader project examining the application and use of telehealth in a remote ACCHS.

## **Methods**

We performed an exploratory qualitative study, reporting the findings according to consolidated criteria for reporting qualitative research. Our aim was to gain insight into the experiences and perspectives of Indigenous health workers regarding the use of telehealth in the context of culturally appropriate healthcare.

Ethics approval for this study was obtained from The University of Queensland Institutional Human Research Ethics committee (approval 2015000275).

# Setting

This research was set in a remote town in western Queensland with a population of less than 2000 residents. During 2015, three of the researchers (LC, NB, AS) made four site visits to the town to set up telehealth facilities at the local ACCHS. The initial visits focused on installing infrastructure, developing systems and providing telehealth training to staff. The staff at the local ACCHS included nurses and Indigenous health workers. Telehealth clinics were established for a number of specialties using videoconferencing with services at tertiary hospitals.

# Sample

All ACCHS staff involved in the direct provision of healthcare were invited to participate in semistructured interviews. All staff were provided with both a written and verbal explanation of the project. The interviewers were known to the participants as they had, on a number of occasions, visited the facility to assist in the implementation of telehealth services.

### Data collection

Interviews were conducted in person by three researchers (LC, NB, AS) at the ACCHS in 2015. Participants provided written or verbal consent before interviews commenced. Participants were asked to describe their experiences with telehealth, their understanding of culturally appropriate healthcare, and their perception of how telehealth may facilitate or impede such care. An open approach was used, where participants were asked to describe what was important and meaningful from their own viewpoint. Techniques such as follow-up questions, clarification and probing were used to gain depth to recounted experiences. <sup>11</sup> Interviews lasted between 20 and 60 minutes and were audio recorded.

# Data analysis

Interviews were transcribed verbatim, de-identified, and imported into NVivo 11 software to manage and code the data. Thematic analysis was used by two researchers (LC, DL) who independently coded the transcripts and discussed the developing coding structure in an iterative fashion. The purpose of the analysis was to gain insight from the perspective of participants about the effects of telehealth on culturally appropriate healthcare. Labels were assigned to sections of transcripts relating to telehealth, culturally appropriate care, as well as other developing themes. The final coding structure was agreed upon by the two researchers by comparing and contrasting the themes and ensuring all codes were accounted for.

# **Results**

Interviews were conducted with nine clinical ACCHS staff, including a senior manager, practice manager and seven staff with roles including health promotion, liaison and support, and clinical care. All participants had received training in telehealth, and most had directly supported community members to participate in specialist telehealth consultations. Seven of the nine identified as Indigenous and three were men.

One central theme and three sub-themes were identified (Figure 1). The central theme Care provided in a supportive environment describes how telehealth increased accessibility and availability to healthcare services and enabled consultations with specialists and allied health to be conducted in the safe, familiar environment of an ACCHS, in lieu of having to attend a mainstream health service. The first sub-theme

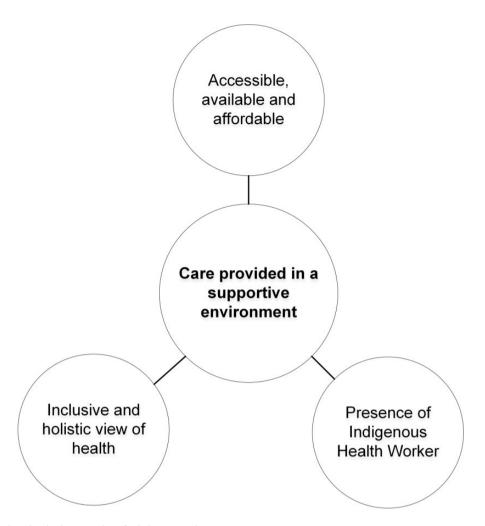


Figure 1. Central and sub-themes identified during analysis.

described how telehealth improved affordability, improved the convenience and reduced the stress of healthcare resulting from the use of telehealth. The second sub-theme explained the importance of the presence of an Indigenous health worker during consultations to facilitate culturally appropriate healthcare. The third sub-theme described how telehealth supported an inclusive and holistic view of health in the community.

# Care provided in a supportive environment

Telehealth facilitated healthcare delivery in the supportive environment of an ACCHS. According to the participants, for healthcare to be culturally appropriate, it was not just about the nature of the personal interactions between healthcare providers and the Indigenous person, but also about the environment where the interactions occur. Participants described how members of their community are welcomed to the ACCHS and treated as a *guest*. This was described as one of the key differences between an ACCHS and

mainstream health services. For this reason, simply being able to provide healthcare in an environment where a person felt welcome was described as being a key aspect of culturally appropriate care.

Affordability, convenience and stress. Participants saw tele-health as a means to improve the affordability and convenience of healthcare. Participants reported that telehealth reduced the time, distance and frequency needed for travel to appointments, as community members could receive specialist services within the ACCHS. Cost savings for the community member resulted from reduced travel costs such as accommodation and transport, which was reported as a significant barrier for some community members attending inperson appointments:

One of the biggest reasons is the cost of travel; it's a very challenging issue here for most of the community members. A trip to Toowoomba or Brisbane, you're Caffery et al. 679

away for three days, it's extremely difficult for the community. (participant 9)

The loss of wages incurred personally or by family members due to travel for healthcare was also seen as a considerable financial burden, and one that could be reduced by telehealth. As one participant said:

'Some of the women are doing three and four trips down during their pregnancy and that just to me it is added stress. You know the financial to travel away. (participant 7).

Participants also reported that telehealth reduced the burden and stress of travel including the length of time away from their family and the community. Some community members were anxious about travelling for appointments as a result of previous negative experiences for example, one community member fractured a hip whilst travelling for an appointment, requiring unplanned hospitalisation and another community member had challenges accessing pre-booked accommodation on arrival:

Most of them are going down on the bus. They get down there at eight – half past eight at night. I actually had one client go down ...and because she's a stroke victim by the time she got down there – and as the day goes on she gets worse ...She got down there and they thought she was drunk and was going to kick her out of the motel. It's just wrong. (participant 5)

Telehealth accommodates the presence of Indigenous health workers. One of the important ways most participants saw telehealth as facilitating the provision of culturally appropriate healthcare was the ability to have an Indigenous health worker present during telehealth consultations. This contrasted with in-person consultations where it was often not possible for an Indigenous health worker to attend, especially if the community member needed to travel to a metropolitan area to attend the consultation. Indigenous health workers advocate for the community member's needs and provide support during a healthcare consultation. Advocacy was described by participants as particularly important for community members who were shy, overwhelmed, or who experienced challenges communicating with others. Participants also reported that the Indigenous health worker's presence at a telehealth consultation brought a deeper understanding and knowledge of the community member's personal circumstances, health needs and behaviour to the specialist. This knowledge and understanding facilitated the Indigenous health worker's ability to support and advocate for the person as well as inform healthcare providers. Many participants described how the presence of an Indigenous health worker during telehealth consultations improved communication as they interpreted or explained information from the healthcare provider to the community member:

Giving them [the specialist] the client's history is really important, it can help them so that the specialist is up to date with their needs. (participant 2)

When they [the community member] talk, they don't know how to – sometimes when doctors talk to them, they can't understand what's being asked. It's good to have someone, a worker, with you. If they don't understand you can explain to them. You have to have that worker that has that rapport with the person. (participant 3)

Specifically, the presence of an Indigenous health worker helped empower community members to make decisions about their care:

...it is so much information for someone who has never had health literacy. So, my role is to simplify it as much as possible and go, 'okay, who would you like to be talking to?' Make sure they feel empowered that they get to make the choice. (participant 7)

In turn, the Indigenous health worker could clarify information provided by the community member to the specialist or explain the person's concerns and questions to the healthcare provider during telehealth consultations.

In contrast, some participants reported that the presence of an Indigenous health worker was not always desirable as some community members might have concerns about privacy:

Yeah, because there may be some clients that don't want to be in the same room with a health worker, or something, especially in a small town like this. (participant 1)

The presence of an Indigenous health worker during telehealth consultations was also seen as important for building the capacity of Indigenous health workers themselves. Improving health-related knowledge and skills, in turn improved their ability to provide health-care to future community members. A participant described:

We talked to ...a little bit about the training and telehealth does that [upskill the Indigenous health worker] in its own right because you all of a sudden are involved in the consultation. You get to talk to the specialist and listen to what's happening. We actually find that the skill set of staff involved increases over time, so it doesn't matter who you are. (participant 5)

Inclusive and holistic view of health in the community. Participants highlighted how telehealth supported a more holistic view of health. Healthcare provision utilising telehealth was seen as enabling the attendance of family members at a person's consultations for support and collective decision-making. It also improved awareness of an individual's health conditions or health status among their broader family:

With Aboriginal people, we have a very extended kinship...Especially if something's wrong with one family member, the whole family will come together. You could end up with a big group on your telehealth link ups. (participant 3)

Participants described how telehealth allowed the community member to access specialist and allied health services while staying connected to community. This facilitated continuity of care and reduced burden and disruption to family and broader community that would otherwise result if the person was required to travel for healthcare:

Particularly, a lot of our community members live in extended family situations as well, where they might be looking after their cousin's children, or whatever. There's always those responsibilities from a carer's perspective, and if they have to go away it really upsets the family units, it disjoints them. That's a potential risk with the social fabric really. (participant 9)

Several participants described how telehealth had been used for broader community applications, such as video conferences between Elders and community members in prison. These video conferences supported the emotional and social well-being of the community members and assisted their ongoing inclusion in the community.

# **Discussion**

Our study highlights that telehealth may improve the cultural appropriateness of health services for Indigenous Australians. Our findings concur with other studies that recognise that telehealth can facilitate care which is more responsive and appropriate to the needs of different population groups. <sup>12</sup>

In our study, providing healthcare in an ACCHS was emphasised by participants as beneficial for cultural appropriateness. Services that are culturally appropriate will likely improve access and the uptake of

healthcare. 13,14 Our findings are concordant with a recent systematic review that suggested that telehealth models of care involving partnerships between ACCHSs and public hospitals may improve patient outcomes and access to specialist services for Indigenous people. 3

An important part of an ACCHS is the role of the Indigenous health worker, which was emphasised by participants as providing mediation between primary and secondary healthcare, improvements in communication and advocacy for the community members' needs. Additionally, Indigenous health workers can build trust with healthcare providers, reduce cultural barriers, and impart understanding to healthcare providers of the social determinants of health for their community members. 15 This study also emphasised the need to understand a holistic view of health that may be broader than models used by mainstream services. Provision of care reflecting an Indigenous view of health, such as enabling inclusion of family at appointments and staying connected to community has been shown to be important.<sup>2,13,16</sup> Provision of healthcare in a service that is trusted and inclusive, without the need for travel and with the support of family can improve engagement with the health system. 17–19

To date, outreach delivery of specialist services has addressed some of the barriers to healthcare access such as distance, cost and communication and resulted in improvements in healthcare access in remote communities. Similar to telehealth, outreach services delivered in an ACCHS may provide a culturally appropriate alternative to travel to mainstream health services. However, due to economies of scale it is not possible to provide all specialist services required by a community using outreach. Telehealth has the potential to address some of the challenges of outreach care. Future models of care to provide health services to Indigenous people living in rural and remote areas are likely to involve a mix of outreach by specialist providers, patient travel and telehealth services.

The burden of travel in terms of cost, time and difficulty for the patient has long been realised.<sup>21</sup> This study has identified that dislocation from community is a further burden of travel experienced by Indigenous people. Telehealth may assist people to stay connected with their community. Further benefits such as shared knowledge between tertiary and primary care providers and upskilling of healthcare providers as a result of presence during telehealth consultations have also been reported.<sup>22,23</sup>

Our findings suggest a number of strategies to improve the cultural appropriateness of and access to healthcare services for Indigenous Australians. Firstly, specialist healthcare providers should partner with ACCHSs to provide needed services into the

Caffery et al. 681

community, whether by telehealth or in-person service delivery or as a hybrid of both service delivery models. Upskilling Indigenous health workers to support telehealth service delivery may also enable further opportunities. Finally, while telehealth tends to be used primarily in rural and remote areas, consideration should be given to delivery of specialist healthcare services to metropolitan ACCHSs, in lieu of community members attending mainstream health services. This could enhance culturally appropriate care for Indigenous people living in metropolitan areas.

#### Limitations

The main limitation to this study was the number of participants. While the number of participants was small, all staff at the health service participated in the study, which enabled a variety of experiences and perspectives to be gained. A further limitation is that interviews were limited to one community, which may limit the generalisability of the findings. Consideration was given to recruiting participants from other remote health services; however, the service involved was in a unique situation in terms of integration of telehealth services at the time of project initiation, which limited the utility of involving other communities. The findings presented here are strongly reflected in the broader litstrengthens erature. which the reliability the findings.

# **Conclusion**

Culturally appropriate healthcare may be enhanced by the use of telehealth because it allows care to be provided in the supportive environment of an ACCHS. It allows the community member to have the advocacy and assistance of an Indigenous health worker and reduces the burden of travel and dislocation from community and family.

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#### References

- 1. Panaretto KS, Wenitong M, Button S, et al. Aboriginal community controlled health services: Leading the way in primary care. *Med J Aust* 2014; 200: 649–652.
- 2. Hayman NE, White NE and Spurling GK. Improving Indigenous patients' access to mainstream health services: The Inala experience. *Med J Aust* 2009; 190: 604–606.
- Caffery LJ, Bradford NK, Wickramasinghe SI, et al. Outcomes of using telehealth for the provision of healthcare to Aboriginal and Torres Strait Islander people: A systematic review. Aust N Z J Public Health 2017; 41: 48–53.
- Ware V-A. Improving the accessibility of health services in urban and regional settings for Indigenous people, http://www.aihw.gov.au/uploadedFiles/ClosingTheGap/ Content/Publications/2013/ctgc-rs27.pdf (2013, accessed: July 2018).
- Williamson M and Harrison L. Providing culturally appropriate care: a literature review. *Int J Nurs Stud* 2010; 47: 761–769.
- Williams R. Cultural safety what does it mean for our work practice? Aust N Z J Public Health 1999; 23: 213–214.
- National Health and Medical Research Council Cultural Competency in Health. A guide for policy, partnerships and participation, https://www.nhmrc.gov.au/guidelinespublications/hp19-hp26 (2006, accessed 10 July 2018).
- 8. Health Workforce Australia. Developing Aboriginal and Torres Strait Islander cultural capabilities in health graduates: A review of the literature, https://www.health.gov.au/internet/main/publishing.nsf/Content/72C7E23E1B D5E9CFCA257F640082CD48/\$File/Appendix%20B\_ Developing%20Aboriginal%20and%20Torres%20Strait%20Islander%20cultural%20capabilities%20in%20health%20graduates.pdf (2014, accessed 10 July 2018).
- Department of Aboriginal and Torres Strait Islander Partnerships. Cultural Capability Matters: Queensland Government Aboriginal and Torres Strait Islander Cultural Capability Training Strategy, https://www. datsip.qld.gov.au/resources/datsima/involved/cultural-capa bility-training-strategy.pdf (2016, accessed 10 July 2018).
- Tong A, Sainsbury P and Craig J. Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *Int J Qual Health Care* 2007; 19: 349–357.
- 11. Liamputtong P (ed.). Research methods in health: foundations for evidence-based practice. 2nd ed. South Melbourne, Vic: Oxford University Press Australia, 2013.
- 12. Alverson DC, Holtz B, D'Iorio J, et al. One size doesn't fit all: Bringing telehealth services to special populations. *Telemed J E Health* 2008; 14: 957–963.
- 13. Davy C, Cass A, Brady J, et al. Facilitating engagement through strong relationships between primary healthcare

- and Aboriginal and Torres Strait Islander peoples. *Aust N Z J Public Health* 2016; 40: 535-541.
- 14. Australian Institute of Health and Welfare. The health and welfare of Australia's Aboriginal and Torres Strait Islander peoples. Cat. no. IHW 147, https://www.aihw. gov.au/reports/indigenous-health-welfare/indigenous-health-welfare-2015/contents/table-of-contents (2015, accessed 10 July 2018).
- 15. Mercer C, Byrth J, Jordan Z, et al. The experiences of Aboriginal health workers and non Aboriginal health professionals working collaboratively in the delivery of health care to Aboriginal Australians: A systematic review of qualitative evidence. JBI Libr Syst Rev 2012; 10: 1–12.
- 16. Howard M, Ingram S, Liu H, et al. To your door: Factors that influence Aboriginal and Torres Strait Islander peoples seeking care, http://www.kvc.org.au/ wp-content/uploads/2014/12/Paper-Mono-1-CD-201306 24-v42-Submitted.pdf (2014, accessed 10 July 2018).
- 17. Baba JT, Brolan CE and Hill PS. Aboriginal medical services cure more than illness: A qualitative study of how Indigenous services address the health impacts of discrimination in Brisbane communities. *Int J Equity Health* 2014; 13: 56.

- 18. Govil D, Lin I, Dodd T, et al. Identifying culturally appropriate strategies for coronary heart disease secondary prevention in a regional Aboriginal Medical Service. *Aust J Prim Health* 2014; 20: 266–272.
- Walker BF, Stomski NJ, Price A et al. Perspectives of Indigenous people in the Pilbara about the delivery of healthcare services. *Aust Health Rev* 2014; 38: 93–98.
- 20. Gruen RL, Weeramanthri TS and Bailie RS. Outreach and improved access to specialist services for indigenous people in remote Australia: The requirements for sustainability. *J Epidemiol Community Health* 2002; 56: 517–521.
- Bradford NK, Caffery LJ and Smith AC. Telehealth services in rural and remote Australia: A systematic review of models of care and factors influencing success and sustainability. Rural and Remote Health 2016; 16.
- 22. Bywood P, Raven M and Butler C. Telehealth in primary health care settings within Australia and internationally, http://hdl.handle.net/2328/36229 (2013, accessed 10 July 2018).
- Moffatt JJ and Eley DS. The reported benefits of telehealth for rural Australians. Aust Health Rev 2010; 34: 276–281.