

2022

Protocols for an Aboriginal-led, Multi-methods Study of the Role of Aboriginal and Torres Strait Islander Health Workers, Practitioners and Liaison Officers in Quality Acute Health Care

Annabelle Wilson

College of Medicine and Public Health, Flinders University; Adelaide, Australia,
annabelle.wilson@flinders.edu.au

Tamara Mackean

College of Medicine and Public Health, Flinders University; Adelaide, Australia,
tamara.mackean@flinders.edu.au

Liz Withall

College of Medicine and Public Health, Flinders University; Adelaide, Australia, liz.withall@flinders.edu.au

Eileen M. Willis

College of Nursing and Health Sciences, Flinders University; Adelaide, Australia,
eileen.willis@flinders.edu.au

See next page for additional authors

Follow this and additional works at: <https://ro.ecu.edu.au/aihjournal>



Part of the [Health Services Research Commons](#), [Patient Safety Commons](#), and the [Quality Improvement Commons](#)

Recommended Citation

Wilson, A., Mackean, T., Withall, L., Willis, E. M., Pearson, O., Hayes, C., O'Donnell, K., Kelly, J., Taylor, K., Dwyer, J., Bourke, E., Hunter, K., Murakami-Gold, L., Ivers, R., & Baum, F. (2022). Protocols for an Aboriginal-led, Multi-methods Study of the Role of Aboriginal and Torres Strait Islander Health Workers, Practitioners and Liaison Officers in Quality Acute Health Care. *Journal of the Australian Indigenous HealthInfoNet*, 3(1).

Retrieved from <https://ro.ecu.edu.au/aihjournal/vol3/iss1/2>

This Brief Report is posted at Research Online.
<https://ro.ecu.edu.au/aihjournal/vol3/iss1/2>

Protocols for an Aboriginal-led, Multi-methods Study of the Role of Aboriginal and Torres Strait Islander Health Workers, Practitioners and Liaison Officers in Quality Acute Health Care

Corresponding Author

Correspondence concerning this article should be addressed to Annabelle Wilson. Email: annabelle.wilson@flinders.edu.au

Abstract

Objectives

Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers play an important, often critical role providing advocacy and cultural and emotional support for Aboriginal and Torres Strait Islander patients. The main goals of this research are to explore i) how Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers are integrated in the routine delivery of care for Aboriginal and Torres Strait Islander peoples in hospital, and ii) how the role of Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers facilitates quality health outcomes.

Methods

This study is being conducted in three different hospitals using a multi-method approach including: yarning and Dadirri, patient journey mapping, survey and semi-structured interviews. Ethics approval has been provided from four ethics committees covering the three project sites in Australia (Adelaide, South Australia; Sydney, New South Wales and Alice Springs, Northern Territory).

Significance

This study uses innovative methodology founded on the privileging of Aboriginal and Torres Strait Islander knowledges to collect Aboriginal and Torres Strait Islander perspectives and understand patient journeys within acute health care systems. This project is led by Aboriginal and Torres Strait Islander researchers and guided by the Project Steering Committee comprised of stakeholders.

Implications

There is limited research that explores quality acute care processes and the integration of Aboriginal and Torres Strait Islander Health Workers/Practitioners work within health care teams. This research will make a valuable contribution to understanding how hospital services can achieve quality acute health care experiences for Aboriginal and Torres Strait Islander People.

Keywords

Aboriginal, Torres Strait Islander, Aboriginal Health Worker, Aboriginal Health Practitioner, Aboriginal Liaison Officer, Indigenous, acute health care

Authors

Annabelle Wilson, Tamara Mackean, Liz Withall, Eileen M. Willis, Odette Pearson, Colleen Hayes, Kim O'Donnell, Janet Kelly, Kerry Taylor, Judith Dwyer, Elizabeth Bourke, Kate Hunter, Lorna Murakami-Gold, Rebecca Ivers, and Fran Baum

Australia is home to the oldest, continuous living cultures in the world and the survival of these cultures is testament to the ongoing strength, tenacity and resilience of Aboriginal and Torres Strait Islander peoples. Aboriginal and Torres Strait Islander peoples have made significant contributions to Australian society, particularly in the area of health and wellbeing, notably in comprehensive primary health care and the health workforce (Hayman et al., 2009; Health Workforce Australia, 2011; National Aboriginal Community Controlled Health Organisation, 2013). Well known disparities exist in health outcomes for Aboriginal and Torres Strait Islander people compared to other Australians (Australian Institute Health and Welfare, 2019; Katzenellenbogen et al., 2013). In an acute care context this includes poorer access to medical and surgical procedures, higher rates of discharge against medical advice and potentially preventable hospital admissions, and difficulty delivering health services that are culturally competent (AIHW, 2021). The significant difference in health status and outcomes reflect the ongoing impact of colonisation, oppression and racism, including inequitable access to proper, quality acute health care (Markwick et al., 2014).

Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers are essential constituents of the Australian health workforce and key to realising government and non-government efforts in closing gaps in health, wellbeing and social outcomes (Department of Health and Ageing, 2013). Aboriginal Health Workers are Aboriginal and/or Torres Strait Islander peoples who have gained a Certificate II or higher qualification in Aboriginal and/or Torres Strait Islander Primary Health Care (National Aboriginal and Torres Strait Islander Health Worker Association, 2018). Aboriginal and/or Torres Strait Islander Practitioners have a Certificate IV in Aboriginal and/or Torres Strait Islander Primary Health Care Practice, and have successfully applied for and been registered with the Aboriginal and Torres Strait Islander Health Practice Board of Australia through the Australian Health Practitioner Regulation Agency (AHPRA) (National Aboriginal and Torres Strait Islander Health Worker Association, 2018). There are many terms for the professions and roles of this diverse workforce. For the convenience of readers, we use the overarching term 'Aboriginal and Torres Strait Islander Health Workers/Practitioners'.

Aboriginal and Torres Strait Islander Health Workers/Practitioners' specific roles may vary according to their location. However, roles often include advocacy and emotional support for Aboriginal and Torres Strait Islander patients and their families, advice regarding cultural practices and protocols, clinical services, health promotion, support for social services (transport, accommodation and financial aid) and role modelling holistic health care in practice (Health Workforce Australia, 2011).

Despite the crucial role of Aboriginal and Torres Strait Islander Health Workers/Practitioners, a systematic review of the literature revealed that there is limited research that explores quality acute care processes and the integration of their work within health care teams (Mackean et al. 2020). Recently, studies have highlighted the impact of Aboriginal and Torres Strait Islander Health Workers/Practitioners in the fields of cardiology and cancer. Specifically, they were 'considered crucial' for effective communication, especially for the explanation of medical procedures (Department of Health, 2015; Deshmukh et al., 2014; Miekjohn et al., 2016). Nevertheless, literature also highlights professional challenges that many Aboriginal and Torres Strait Islander Health Workers/Practitioners face which hinders their ability to achieve the best outcomes with patients. This includes a lack of clarity on roles and expectations; varying levels of understanding and acceptance from non-Indigenous clinicians and managers of the value they provide in encouraging Aboriginal and Torres Strait Islander patients to seek care; and racism and work environments which do not provide cultural safety (Deshmukh et al., 2014; Durey et al., 2011; Katzenellenbogen et al., 2015; Lai et al., 2018; Topp et al., 2018).

The need for health system reform has been advocated for by Aboriginal and Torres Strait Islander peoples and their allies for decades. In 2006, the Australian Commission on Safety and Quality in Health Care (ACSQHC) was established as an independent statutory authority in 2011. A component of the ACSQHC are the National Safety and Quality Health Service (NSQHS) Standards (Australian Commission on Safety and Quality in Health Care, 2016) which are used to assess hospitals and other services for accreditation. There are six actions specific to meeting the needs of Aboriginal and Torres Strait Islander peoples in hospitals. Supporting the introduction of these specific standards in hospital accreditation is a User Guide developed by the Wardliparingga Aboriginal Research Unit of the South Australia Health and South Australian Health and Medical Research Institute (The Wardliparingga Aboriginal Research Unit of the South Australian Health & South Australian Health and Medical Research Institute, 2017). Health services have been assessed by these standards since the beginning of 2019.

Both the Aboriginal and Torres Strait Islander Quality Improvement Framework (ATSIQIF) and the NSQHS highlight important quality health care items relating to Aboriginal and Torres Strait Islander people which include the identification of Aboriginal and/or Torres Strait Islander status; the processes of clinical handover, referral, discharge and readmission (including instances of discharge against medical advice and not waiting for treatment); communication errors and complaints; the involvement of patients, families and communities in decisions about health care and planning; the gathering of information on patient experiences; documentation of clinical problems such as hospital acquired infections, safe use of medicines and blood products, and responding appropriately to clinical deterioration; as well as workforce development for appropriate models of care; and mechanisms to support the delivery of culturally safe health care (Australian Commission on Safety and Quality in Health Care, 2012; Renhard et al., 2014). Critical to these items are i) the role of Aboriginal and Torres Strait Islander Health Workers/Practitioners, ii) patient experiences of the quality of acute health care and iii) perspectives of health professionals providing care. This project will bring these components together and address two main goals:

1. To explore how Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers are integrated in the routine delivery of care for Aboriginal and Torres Strait Islander peoples in hospital
2. How the role of Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers facilitates quality health outcomes through appropriate assessment of patients', and their families' satisfaction with acute health care.

These goals will be addressed through the following elements:

1. Documenting, assessing and increasing detailed understanding of the role of Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers in acute health care services.
2. Documenting Aboriginal and Torres Strait Islander patient and family experiences of, and satisfaction with, acute health care services where Aboriginal and Torres Strait Islander Health Workers/Practitioners are employed.
3. Identifying the extent, and the processes by which Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers contribute to a) facilitating access to acute health care and interventions, and b) the quality of acute health care received by Aboriginal and Torres Strait Islander people.
4. Assessing non-Indigenous health professionals' experiences of and perspectives on working with Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers in acute health care services settings.
5. Developing and/or modifying tools and strategies to augment the integration of Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers into effective acute health care delivery teams.

Methods and analysis

The study is multi-site, and multi-method organised into five phases (Figure 1). The research will be established in three Australian sites: Flinders Medical Centre (Adelaide, SA), Alice Springs Hospital (Alice Springs, Northern Territory) and Royal Prince Alfred Hospital (Sydney, New South Wales). Having multiple sites facilitates the consideration of complex and nuanced differences in context between the three jurisdictions, including different demography (NSW contains the largest population of Aboriginal and Torres Strait Islander people, NT has the largest population proportion of Aboriginal people), different institutional practices and catchment areas (SA and NSW sites have large tertiary health service catchments and referral systems which extend across jurisdictions) and different experiences of health reform, as well as the inherent cultural diversity of Aboriginal and Torres Strait Islander peoples. There are also significant differences in training, support, structural location, funding and ways of working (models of care) of Aboriginal and Torres Strait Islander Health Workers/Practitioners in the proposed sites.

The number of participants that will be recruited for each phase to provide a depth and breadth of information are recorded in Table 1. Due to a smaller population in Alice Springs compared to the other sites, the percentage of participants in most phases will be approximately 20%, 40% and 40% respectively.

Figure 1

Five Phases of Research

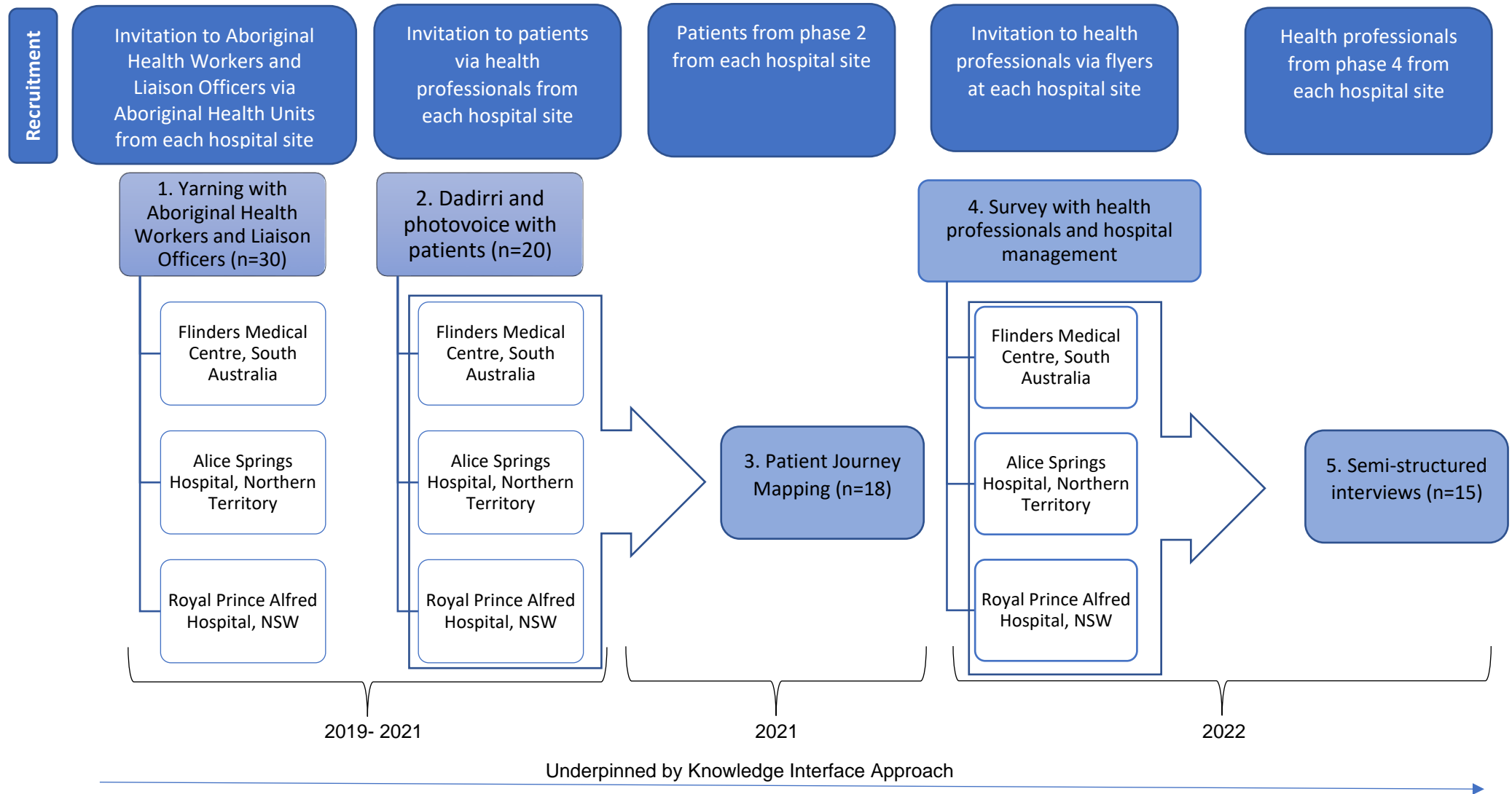


Table 1*Overview of the Phases of the Project*

Phase	Research objective	Data collection	Participants	Total number of participants in each phase
Yarning	To explore perspectives from Aboriginal and /or Torres Strait Islander Health Workers/Practitioners in relation to their role, using the Aboriginal research methodology of yarning	<ul style="list-style-type: none"> • Audio recording of yarns • Reflections from Aboriginal research assistants 	Aboriginal and /or Torres Strait Islander Health Workers/ Practitioners	n=30 (Alice Springs= 6; Adelaide= 12; Sydney= 12)
Dadirri	To explore patient experiences with Aboriginal and /or Torres Strait Islander Health Workers/ Practitioners	<ul style="list-style-type: none"> • Audio recording • Photos taken by patients • Reflections from Aboriginal research assistants 	Aboriginal and/or Torres Strait Islander patients	n=20 (Alice Springs= 4; Adelaide= 8; Sydney= 8)
Patient Journey Mapping	To explore steps involved in a patient's journey from home to hospital, across health services and back again	<ul style="list-style-type: none"> • Patient medical records 	Aboriginal and/or Torres Strait Islander patients Health professionals involved in their care.	n=18 (Alice Springs= 6; Adelaide= 6; Sydney= 6)
Survey	To explore the experiences of health professionals and managers about their experiences working with Aboriginal and /or Torres Strait Islander Health Workers/Practitioners	<ul style="list-style-type: none"> • Online survey 	health professionals and managers working with Aboriginal and /or Torres Strait Islander Health Workers/Practitioners	TBC (Alice Springs= 20%; Adelaide=40%; Sydney 40%)
Semi-structured interview	To explore the experiences of health professionals and managers about their experiences working with Aboriginal and /or Torres Strait Islander Health Workers/Practitioners	<ul style="list-style-type: none"> • Audio recording 	health professionals and managers working with Aboriginal and /or Torres Strait Islander Health Workers/Practitioners	n=15 (Alice Springs= 3; Adelaide= 6; Sydney= 6)

This project is based on a Knowledge Interface approach (Durie, 2005) whereby Aboriginal and Torres Strait Islander and non-Aboriginal and Torres Strait Islander knowledges of health and care are brought together in the research process. This includes the investigators and the participants. Importantly, Aboriginal and Torres Strait Islander worldviews and perspectives are presented as the privileged voice in this process.

1. Establishment Phase

Ethics approval has been provided from five ethics committees covering the three project sites in Australia (Adelaide, South Australia; Sydney, New South Wales and Alice Springs, Northern Territory). Further, the study has been registered with the ANZCTR Trial ID: ACTRN12620000297921. A Project Manager will manage the research across the three sites and each site will have one local Aboriginal and or/ Torres Strait Islander research assistant, supported by the Project Manager and other project investigators.

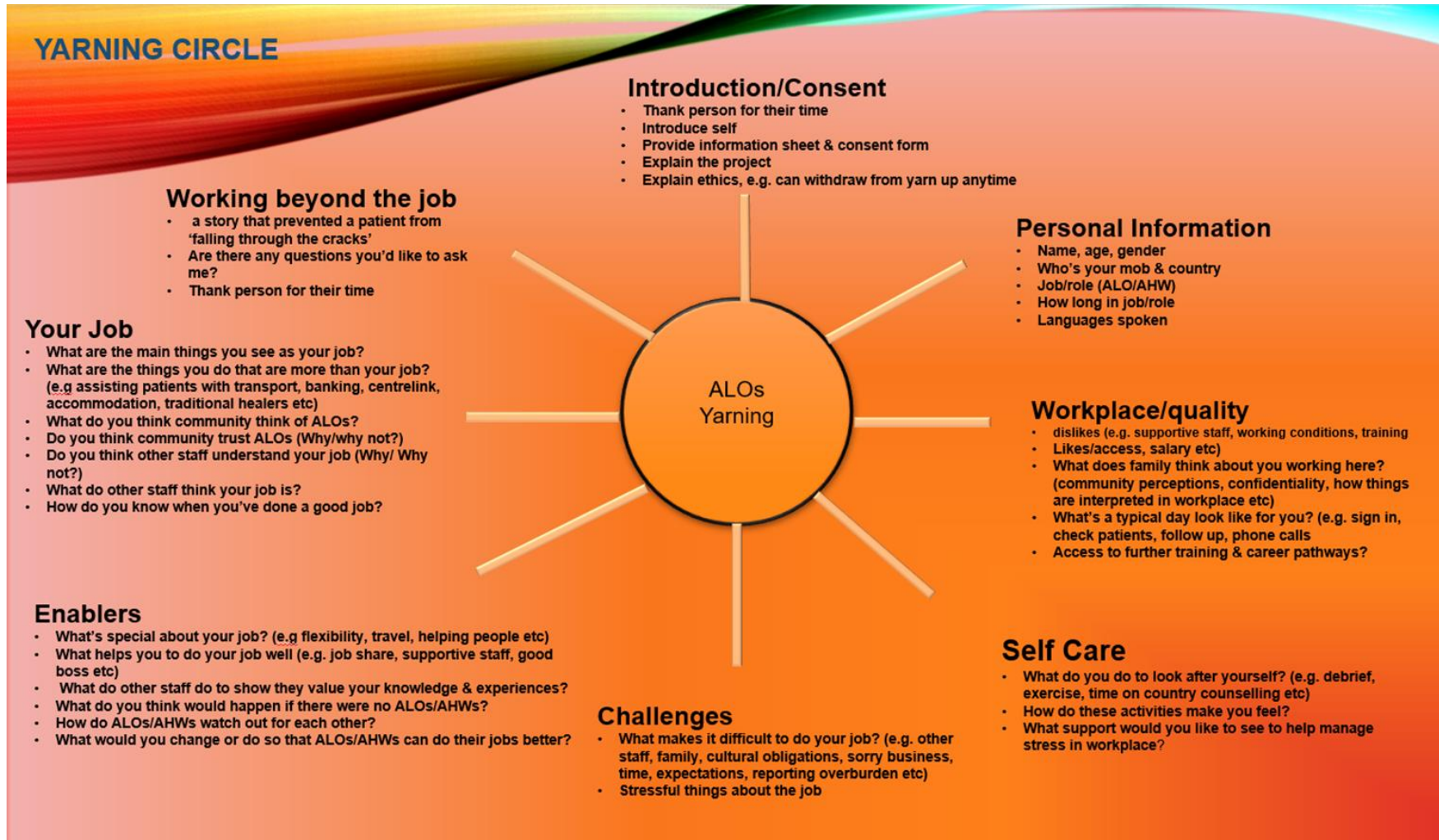
A Project Steering Committee (PSC), with majority Aboriginal membership (including key Aboriginal and Torres Strait Islander organisations) will provide direction and advice to the project team and to play a key role in the modification of data collection tools, data analysis, synthesis of findings and the translation and dissemination of findings. This type of governance structure supports researchers through providing relevant context including organisational strategies and lived experience as well as providing opportunities for the Project Steering Committee members to shape the research process and contribute to research outputs.

2. Yarning Phase

Aboriginal research assistants in each site will invite Aboriginal and/or Torres Strait Islander Health Workers/Practitioners and Liaison Officers employed at the study sites to participate in yarning sessions. Bessarab and Ng'andu (2010) describe yarning "as a process that requires the researcher to develop and build a relationship that is accountable to Indigenous people participating in the research." Yarning has been chosen as a research approach as it privileges Indigenous communication in a way that is respectful and culturally appropriate. It has been recognised as both a credible and valuable method within the Indigenous health setting (Walker et al., 2014). There are different types of yarning, however in this study, research topic yarning will be utilised. Within research topic yarning the conversation is framed with both a beginning and end, however it is also relaxed and enables an opportunity for the participant to take the researcher on a 'journey' on topics of interest to them that are relevant to the research (Bessarab & Ng'andu, 2010). Content to cover during yarning has been outlined in Figure 2 below.

Figure 2

Yarning Guide for Research Staff to Use When Yarning with Aboriginal Health Workers, Aboriginal Health /Practitioners and Liaison Officer



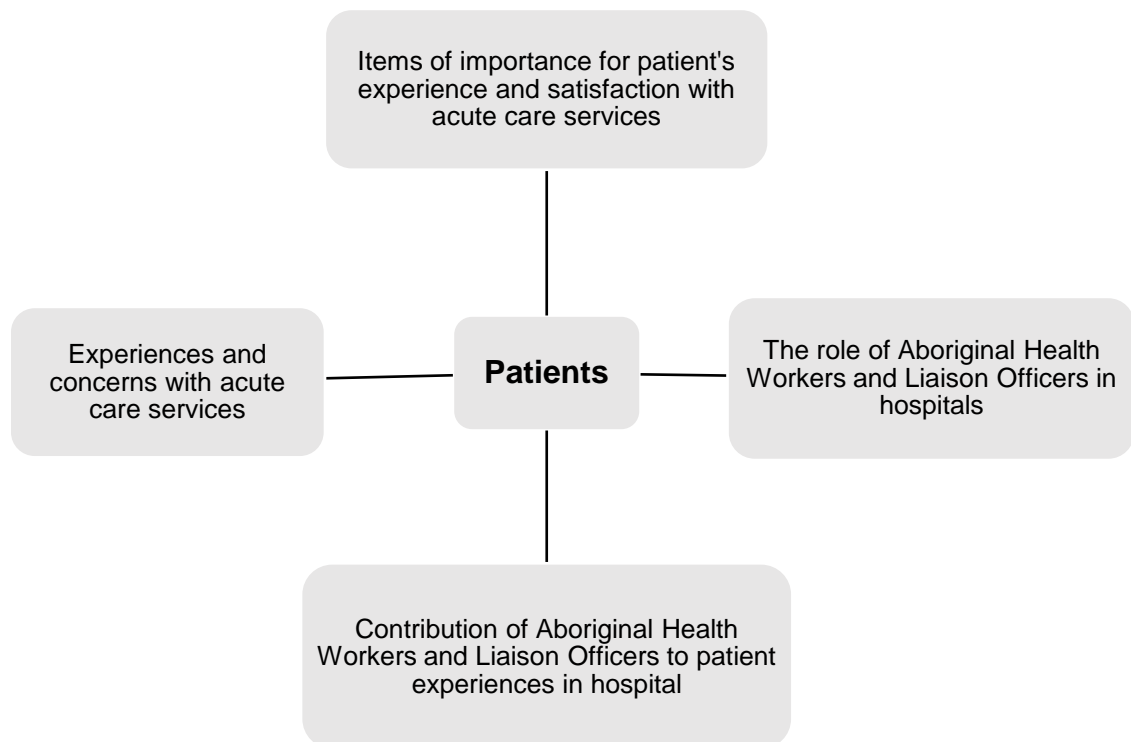
3. Dadirri Phase

In keeping with the principle of drawing on Indigenous methodologies, Dadirri is a traditional practice of Aboriginal people (Laylock 2011) in the Top End of Australia based on inner deep listening, quiet awareness and connectivity to surroundings (Ungunmerr, 1988). It will be used to explore patients' experiences of the provision of acute health care, as well as in analysis processes by the researchers. The Dadirri process is also about the patient having the time and space to tell their story in the way that they wish.

The ACSQHC "National set of core common patient experience questions" (Australian Commission on Safety and Quality in Health Care, 2014) will provide a basis for Dadirri sessions coupled with aspects of care provided by Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers. The PSC will also guide this aspect of the project. Some preliminary themes are included in the figure below. The Dadirri sessions with patients will require researchers to listen deeply to develop a genuine connection with patients' and their stories.

Figure 3

Preliminary Themes to Explore Patient Experiences with Aboriginal Health Workers/Practitioners and Liaison Officers in Acute Health Care Services



Participants will be recruited using purposive sampling, a strategy whereby people with knowledge and experience on the topic are invited to take part in the study, thereby supporting information-rich data collection (Palinkas et al., 2015). Specifically, Aboriginal research staff will invite a diverse group of patients, including men and women, those having short and long hospital stays, different age groups and simple and complex admissions from across the hospitals. Different clinical areas will be sought as Aboriginal and Torres Strait Islander Health Workers/Practitioners work across different clinical units in acute care services.

Photovoice will be used to supplement the oral component of Dadirri. Photovoice is a research method that allows participants to use both visual images and dialogue to record and reflect on their experiences, concerns and achievements (Petteway, 2019). For marginalised or underserved groups such as children, women and non-concordant language speakers (Palibroda et al., 2009; Wang & Burris, 1997) it gives 'voice' to their

experiences as it is a visual record of aspects of their admission and experiences that they feel are important to their care. It is also relevant to the contemporary Aboriginal and Torres Strait Islander context, by drawing upon the use of imagery in storytelling. A Photovoice Guide will be developed to provide guidance to patients about what can and cannot be ethically photographed in a hospital. Photovoice contributes to the ability to engage in Dadirri because it provides an alternative way for patients to tell their stories and for researchers to listen and see deeply.

4. Patient Journey Phase

Patient Journey Mapping is a proven method that enables exploration of the steps involved in a patient's journey from home to hospital, across health services and back again (Trebble et al., 2010). A set of patient journey mapping tools for Aboriginal patients have been created and trialled across urban, rural and remote locations (Dwyer et al., 2011; Kelly et al., 2012). The tools have assisted the identification of access, quality and practice issues, and strategies at professional, organisational and systems levels to improve care (Kelly et al., 2016). The project team, in consultation with the PSC, will adapt this method to incorporate quality indicators for acute health care (Australian Commission on Safety and Quality in Health Care, 2012.), and to identify both issues and solutions for a patient's journey through the acute health care system.

Patients who participate in Dadirri and photovoice will also be invited to participate in patient journey mapping. We will endeavour to include a mix of patients including men and women, those experiencing short and long stays, different age groups, simple and complex admissions, and those experiencing minimal to full involvement of Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers in the journey.

Where possible we will link patient journeys (for patient journey mapping) to patient perspectives (as collected through Dadirri and photovoice). In doing so we will be able to demonstrate how structural and systemic issues manifest for individuals in their care and thus identify where systemic actions and reform are needed to improve patient experiences as well as quality of care.

5. Survey and Semi-structured Interview Phase

Health professionals and managers working at the three sites will be invited to participate in an online survey about their experiences working with Aboriginal and Torres Strait Islander Health Workers/Practitioners and Liaison Officers. Recruitment will be via Aboriginal research staff, flyers and emails to unit leaders. An online link will direct people to information regarding the survey and a consent form, whereby those who consent to be involved can continue to the survey. Participants will be invited to take part in a follow-up semi-structured interview. Survey and interviewing are well-utilised methods and considered appropriate for use with non-Indigenous participants.

The survey will be developed by the project team using a 3-step process: (1) a scoping review to identify similar tools in the literature for health professionals' experiences working with Aboriginal and Torres Strait Islander Health Workers/Practitioners, or similar health professionals, (2) choosing suitable and relevant questions for the target group to inform our tool development and (3) trialling these questions on a similar pilot target group and incorporating new questions as needed.

Data Analysis and Management

Data will be analysed by the project team using a collaborative approach. The interview data will be coded by both Aboriginal and Torres Strait Islander researchers and non-Indigenous researchers, independently then collectively. Analysis will be assisted using NVivo software (QSR International) which is designed to help in the management, shaping and analysis of detailed textual data. The quantitative data derived from the survey will be analysed using descriptive statistics. Patient journey mapping includes process analysis which will be done collaboratively to identify the parts of the journey where quality was achieved and where it was not, and the contributing factors. The analysis will also identify critical points that could be amenable to intervention to improve the journey. Those critical points and factors enabling or inhibiting quality will be compared across sites.

Data will be stored according to university guidelines and ethical protocols to ensure participant confidentiality is maintained. Access to the data will be restricted to those members of the research team outlined in the final approved ethics applications.

Ethics and Dissemination

Ethics approval for this study has been provided from the following committees: Southern Adelaide Clinical Human Research Ethics Committee (with reciprocal ethics approval for Royal Prince Alfred Hospital), Central Australian Human Research Ethics Committee (Northern Territory), Aboriginal Health Research Ethics Committee (South Australia) and the Aboriginal Health and Medical Research Council (New South Wales). Informed consent will be obtained from participants. Aboriginal research assistants and in some instances, interpreters where appropriate will assist in gathering informed consent of participants in this study.

Key findings and recommendations will be disseminated through a range of communication channels in a variety of formats as informed by the PSC and participants. Site roundtables (including administration staff, clinicians, and patient representatives) will be part of the dissemination along with knowledge translation relevant to each site. A compendium of Aboriginal and Torres Strait Islander patient and family stories of acute health care will also be developed. The compendium will provide concrete examples of the challenges and facilitators of providing quality acute health care from Aboriginal and Torres Strait Islander perspectives.

Expected Outcomes

This research, conducted according to the protocols described, will provide a rigorous assessment of the systematic integration of Aboriginal and Torres Strait Islander Health Workers/Practitioners in acute care processes, including, for the first time, a detailed picture of their roles in achieving quality acute health care. Given the over-representation of Aboriginal and Torres Strait Islander people using acute care services, this research is timely.

The study will inform initiatives to improve hospital processes and care for Aboriginal and Torres Strait Islander peoples. This is particularly important because differential access to health care interventions is a major problem Aboriginal and Torres Strait Islander peoples face in Australian hospitals.

The data, collected in a culturally safe way as described, will provide important information about how Aboriginal and Torres Strait Islander peoples' hospital experience can be culturally safe, inclusive and high quality.

Significance

This research is the first of its kind and has the potential to be highly significant. The outcomes of this research are likely to have an impact on the hospital system including improved effectiveness of acute health care, with a flow on effect for health outcomes for Aboriginal and Torres Strait Islander peoples in Australia. It uses innovative methodology founded on principles including privileging Aboriginal and Torres Strait Islander knowledges to collect Aboriginal and Torres Strait Islander perspectives and understand the journeys of Aboriginal and Torres Strait Islander patients through the acute health care system. Importantly, this study will apply Indigenous theoretical frameworks, including the Knowledge Interface described by Maori Elder and Scholar, Sir Mason Durie (Durie 2005), to understanding health care issues, allowing Aboriginal voices to be heard in data collection, analysis and synthesis. This mitigates risks associated with applying non-Indigenous theoretical frameworks to Indigenous data and enables the findings of the research to be positioned at the interface of knowledge systems whereby Aboriginal and Torres Strait Islander knowledges are at the centre of the research as both subject matter (participants) and interpretation of that subject matter (researchers). If this was not the case, there is a risk that Aboriginal and Torres Strait Islander perspectives would not be

truly represented. Through employment of Aboriginal and Torres Strait Islander research assistants, and involvement of Aboriginal and Torres Strait Islander Chief Investigators, this project also strengthens the capability of the Indigenous health research workforce. Strengthening the Aboriginal and Torres Strait Islander research workforce is essential to improving the conduct and translation of Indigenous health research efforts.

Declarations

Competing Interests

Since obtaining the grant for this study, Associate Professor Tamara Mackean is a current member of the Southern Adelaide Local Health Network (SALHN) Board. SALHN governs the health service in Adelaide where data will be collected.

Funding

This work was supported by the National Health and Medical Research Council, grant number: 1143222. Email: nhmrc@nhmrc.gov.au; Kate Hunter was supported by a NSW Health Early Mid Career Fellowship.

Authors' Contributions

TM, a Waljen woman, authored the grant application and leads the project on which this paper is based. TM led the design of the project which was also contributed to by FB, AW, EW, KT, OP, KH, KO, JK, JD, and RI. OP, a Kuku Yalanji/Torres Strait Islander woman, and KO, a Barkindji/Malyangapa woman, bring their life experiences and Indigenous research knowledge to the team. AW wrote the first draft of the paper and refined drafts two and three in collaboration with LW. All other authors contributed to the content and review of this paper. All authors contributed to development of the tools and processes referred to in the paper.

References

- Australian Commission on Safety and Quality in Health Care. (2012). *Australian Safety and Quality Framework for Health Care*.
<https://www.safetyandquality.gov.au/sites/default/files/migrated/Australian-SandQ-Framework1.pdf>
- Australian Commission on Safety and Quality in Health Care. (2014). *National set of core, common patient experience questions - for overnight-admitted patients (CATI version)*.
<https://www.safetyandquality.gov.au/sites/default/files/migrated/National-set-of-core-common-patient-experience-questions-%E2%80%93-for-overnight-admitted-patients-Pen-and-Paper.pdf>
- Australian Commission on Safety and Quality in Health Care. (2016). *National Safety and Quality Health Service Standards Version 2*.
<https://www.safetyandquality.gov.au/standards/nsqhs-standards>
- Australian Institute Health and Welfare. (2019). *Deaths in Australia*.
<https://www.aihw.gov.au/reports/life-expectancy-death/deaths/contents/life-expectancy>
- Australian Institute of Health and Welfare. (2021). *Aboriginal and Torres Strait Islander Health Performance Framework*. <https://www.indigenoushpf.gov.au/measures>
- Bessarab, D., & Ng'andu, B. (2010). Yarning about yarning as a legitimate method in Indigenous research. *International Journal of Critical Indigenous Studies*, 3(1), 37-50.

- Department of Health. (2015). Aboriginal Support Services. <https://www.health.gov.au/health-topics/aboriginal-and-torres-strait-islander-health>
- Department of Health and Ageing. (2013). *National Aboriginal and Torres Strait Islander Health Plan 2013-2023*. <https://www.health.gov.au/resources/publications/national-aboriginal-and-torres-strait-islander-health-plan-2013-2023>
- Deshmukh, T., Abbott, P., & Reath, J. (2014). 'It's got to be another approach': An Aboriginal Health Worker perspective on cardiovascular risk screening and education. *Australian Family Physician*, 43(475-8).
- Durey, A., Thompson, S., & Wood, M. (2011). Time to bring down the twin towers in poor Aboriginal hospital care: Addressing institutional racism and misunderstandings in communication. *Internal Medicine Journal*, 42(1), 17-22.
- Durie, M. (2005). Indigenous knowledge within a global knowledge system. *Higher Education Policy*, 18(3), 301-312.
- Dwyer, J., Kelly, J., Willis, E., Glover, J., Mackean, T., Pekarsky, B. (2011). *Managing two worlds together: city hospital care for country Aboriginal people - project report*. <https://www.lowitja.org.au/page/services/resources/health-services-and-workforce/cultural-safety/M2WT-City-Hospital-Care-Community-Summary>
- Hayman, N., White, N., & Spurling, G. (2009). Improving Indigenous patients' access to mainstream health services: The Inala experience. *Medical Journal Australia*, 190, 604-606.
- Health Workforce Australia. (2011). Growing Our Future: the Aboriginal and Torres Strait Islander Health Worker Project Final Report. <https://www.naatsihwp.org.au/sites/default/files/atsihw-project-interim-report-20111017.pdf>
- Katzenellenbogen, J., Miller, L., Somerford, P., Mcevoy, S., & Bessarab, D. (2015). Strategic information for hospital service planning: A linked data study to inform an urban Aboriginal Health Liaison Officer program in Western Australia. *Australian Health Review*, 39(4), 429-436.
- Katzenellenbogen, J. M., Sanfilippo, F. M., Hobbs, M. S. T., Knuiman, M. W., Bessarab, D., Durey, A., & Thompson, S. C. (2013). Voting with their feet - predictors of discharge against medical advice in Aboriginal and non-Aboriginal ischaemic heart disease inpatients in Western Australia: An analytic study using data linkage. *BMC Health Services Research*, 13(1), 330. doi:10.1186/1472-6963-13-330
- Kelly, J., Dwyer, J., Mackean, T., O'Donnell, K., & Willis, E. (2016). Coproducing Aboriginal patient journey mapping tools for improved quality and coordination of care. *Australian Journal of Primary Health*, 23. doi:10.1071/PY16069
- Kelly, J., Dwyer, J., Pekarsky, B., Mackean, T., Willis, E., Battersby, M., & Glover, J. (2012). *Managing Two Worlds Together: Stage 2—Patient Journey Mapping Tools*. <https://www.lowitja.org.au/page/services/resources/health-services-and-workforce/cultural-safety/M2WT-Stage-2-Mapping-Tools>
- Lai, G. C., Taylor, E. V., Haigh, M. M., & Thompson, S. C. (2018). Factors Affecting the Retention of Indigenous Australians in the Health Workforce: A Systematic Review. *International Journal of Environmental Research and Public Health*, 15(5), 914. <https://www.mdpi.com/1660-4601/15/5/914>
- Laycock, A., Walker, D., Harrison, N., & Brands, J. (2011). *Researching Indigenous Health: a practical guide for researchers*. The Lowitja Institute.

- Mackean, T., Withall, E., Dwyer, J., & Wilson, A. (2020). Aboriginal Health Workers' and Liaison Officers' role in quality care in the Australian acute care setting: A systematic review. *Australian Health Review*, 44(3), 427-433. doi: 10.1071/AH19101.
- Markwick, A., Ansari, Z., Sullivan, M., Parsons, L., & McNeil, J. (2014). Inequalities in the social determinants of health of Aboriginal and Torres Strait Islander People: A cross-sectional population-based study in the Australian state of Victoria. *International Journal for Equity in Health*, 13(1), 91. doi:10.1186/s12939-014-0091-5
- Mieklejohn, J., Adams, J., Valery, P., Walpole, E., Martin, J., Williams, H., & Garvey, G. (2016). Health professional's perspectives of the barriers and enablers to cancer care for Indigenous Australians. *European Journal of Cancer Care*, 25(2), 54-61.
- National Aboriginal and Torres Strait Islander Health Worker Association. (2018). Aboriginal and Torres Strait Islander Health Workers and Health Practitioners: Who we are and what we do In: National Aboriginal and Torres Strait Islander Health Worker Association. <https://www.naatsihwp.org.au/>
- National Aboriginal Community Controlled Health Organisation. (2013). Investing in Healthy Futures for Generational Change: National Aboriginal Community Controlled Health Organisation 10 Point Plan 2013-2030. <https://aodknowledgecentre.ecu.edu.au/key-resources/publications/25356/?title=Healthy%20Futures%202013-2030%3A%20NACCHO%2010%20point%20plan>
- Palibroda, B., Krieg, B., Murdock, L., & Havelock, J. (2009). *A practical guide to photovoice: Sharing pictures, telling stories and changing communities*. http://www.pwhce.ca/photovoice/pdf/Photovoice_Manual.pdf
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and policy in mental health*, 42(5), 533-544. doi:10.1007/s10488-013-0528-y
- Petteway, R. J. (2019). Intergenerational photovoice perspectives of place and health in public housing: Participatory coding, theming, and mapping in/of the "structure struggle". *Health & Place*, 60, 102229. doi:<https://doi.org/10.1016/j.healthplace.2019.102229>
- QSR International NVivo 12. http://www.qsrinternational.com/products_nvivo.aspx.
- Renhard, R., Chong, A., Willis, J., Wilson, G., & Clarke, A. (2014). *Aboriginal and Torres Strait Islander Quality Improvement Framework and Toolkit for Hospital Staff (AQIFTHS)*. <https://www.svhm.org.au/ArticleDocuments/1572/Aboriginal-Quality-Improvement-Framework-and-Toolkit-for-Hospital-Staff-January-2015-For-Web.pdf.aspx?embed=yhttp://www.svhm.org.au/aboutus/community/ICHPToolkit/Pages/toolkit.aspx>
- The Wardliparingga Aboriginal Research Unit of the South Australian Health, & South Australian Health and Medical Research Institute. (2017). *National Safety and Quality Health Service Standards user guide for Aboriginal and Torres Strait Islander health*. <https://www.safetyandquality.gov.au/publications-and-resources/resource-library/nsqhs-standards-user-guide-aboriginal-and-torres-strait-islander-health>
- Topp, S. M., Edelman, A., & Taylor, S. (2018). "We are everything to everyone": A systematic review of factors influencing the accountability relationships of Aboriginal and Torres Strait Islander health workers (AHWs) in the Australian health system. *International Journal for Equity in Health*, 17(1), 67. doi:10.1186/s12939-018-0779-z

- Treble, T. M., Hansi, N., Hydes, T., Smith, M. A., & Baker, M. (2010). Process mapping the patient journey: An introduction. *BMJ*, *341*, c4078. doi:10.1136/bmj.c4078
- Ungunmerr, M.-R. (1988). Dadirri: Inner deep listening and quiet still awareness. Retrieved from <https://www.miriamrosefoundation.org.au/about-dadirri>
- Walker, M., Fredericks, B., Mills, K., & D. Anderson (2014). 'Yarning' as a method for community-based health research with indigenous women: The Indigenous women's wellness research program. *Health Care for Women International*, *35*(10), 1216-1226.
- Wang, C., & Burris, M. (1997). Photovoice: Concept, methodology, and use for participatory needs assessment. *Health Education & Behavior*, *24*(3), 367-387.