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Exploring speech pathology services for Aboriginal and Torres Strait Islander peoples post stroke: a qualitative case study

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ABSTRACT

Purpose: To explore how speech pathology services are delivered for Aboriginal and Torres Strait Islander adults with acquired communication disorders (ACD) in hospital.

Methods: A qualitative instrumental case study design, informed by culturally responsive principles, was employed. Multiple data collection methods were used including medical record review, participant observation, interview, focus group, and reflective diaries. Data were analysed collectively using qualitative content analysis.

Results: Two Aboriginal and Torres Strait Islander stroke patients and four speech pathologists (SPs), including an Australian Aboriginal SP, participated. Data analysis revealed five categories: (a) finding out about patients' cultures and backgrounds, (b) speech pathologists' perspectives of collaborating with Indigenous Health Liaison Officers, (c) Aboriginal SP helping patients and non-Indigenous SPs, (d) building rapport, and (e) assessment and rehabilitation approaches and experiences.

Conclusions: To facilitate a culturally safe environment, speech pathologists should prioritise development of rapport with patients, collaborate with Indigenous Health Liaison Officers, and ensure ACD assessment and rehabilitation approaches are personally relevant and culturally appropriate. Findings emphasised the need for speech pathologists to build cultural capabilities and for health services to explore opportunities to increase the number of Aboriginal and Torres Strait Islander health professionals.

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Aboriginal; aphasia; speech pathology; case study; stroke

Introduction

Aboriginal and Torres Strait Islander peoples¹ who have experienced acquired communication disorders (ACDs) following stroke have reported an array of ACD- and cross-cultural-related communication challenges (Armstrong et al., 2012, 2015;

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Armstrong, Coffin, et al., 2021). These challenges include difficulty communicating verbally, impacting their ability to share stories and songs, and maintaining social relationships, all of which are particularly relevant and culturally important to Aboriginal and Torres Strait Islander peoples (Armstrong et al., 2012, 2015; Armstrong, Coffin, et al., 2021). As a consequence of these cultural-related communication challenges, Aboriginal and Torres Strait Islander peoples experience feelings of anger, frustration, loss of identity, and low self-worth (Armstrong, Coffin, et al., 2021). Cross-cultural communication and interaction challenges while navigating the healthcare system include health professionals' use of medical jargon and direct questioning styles, and provision of spoken and written information that is not accessible or meaningful to the patient (Armstrong, Coffin, et al., 2021; Shahid et al., 2011; Worrall-Carter et al., 2016; Wotherspoon & Williams, 2019). Differences in the use of communication and interaction styles between Aboriginal and Torres Strait Islander patients and non-Indigenous speech pathologists (SPs) may lead to communication breakdown and ACD misdiagnosis and, subsequently, feelings of cultural insecurity (Armstrong, Coffin, et al., 2021).

Indigenous health liaison officers (IHLOs) have identified concerns about SPs' diagnostic accuracy of Aboriginal and Torres Strait Islander patients' communication skills, particularly when the assessment approaches used by SPs are not culturally, linguistically, or personally relevant to the patient (Cochrane et al., 2024). When engagement and assessment or rehabilitation of ACDs are not connected with Aboriginal and Torres Strait Islander peoples' culture, Country,² and family, these peoples may feel culturally unsafe (Cochrane et al., 2024) which may subsequently contribute to Aboriginal Australians not engaging with ongoing community-based speech pathology services (Armstrong et al., 2012, 2015, 2019; Armstrong, Coffin, et al., 2021).

Aboriginal and Torres Strait Islander patients have reported that the presence of an IHLO or Aboriginal health worker makes them feel more culturally safe in hospital due to shared backgrounds, lived experience, and understanding (Chapman et al., 2014; Ciccone et al., 2019; Mackean et al., 2020; Mithen et al., 2021; Worrall-Carter et al., 2016; Wotherspoon & Williams, 2019). Close liaison between IHLOs and SPs is essential for all aspects of the patient's journey such as the first meeting, gathering information, and facilitating rapport building between the patient and SP (Cochrane et al., 2024).

Australian SPs have reported a lack of confidence and experience in the provision of services to Aboriginal and Torres Strait Islander peoples with ACDs, with a lack of culturally and linguistically appropriate assessment and therapy resources identified as a contributing factor (Cochrane et al., 2016; Hersh, Armstrong, & Bourke, 2015; Hersh, Armstrong, Panak, et al., 2015). In the absence of these assessment resources, SPs employ informal approaches (e.g., observation of patients' communication interactions), typically in conjunction with formal or published communication assessment tools, used in the intended standardised or adapted format, that privilege the English language and Western concepts (Cochrane et al., 2023; Hersh, Armstrong, Panak, et al., 2015). While Australian SPs have acknowledged the importance of investing time to develop rapport and trust with Aboriginal and Torres Strait Islander patients, collaborating with IHLOs, and engaging with patients' family members, they have also noted that workplaces do not always facilitate the additional time needed (Cochrane et al., 2016; Hersh, Armstrong, Panak, et al., 2015).

In a previous study, we reviewed medical records to identify documented evidence of SPs' cultural or linguistic adaptations of assessment or intervention approaches and SPs' engagement with IHLOs, interpreter services, or family members (Cochrane et al., 2023). Whilst documented patient chart notes provided some insight into SPs' practice, they did not provide sufficient information about the detailed nature of these services. Further exploration of these "how" and "why" factors may contribute to better understanding the challenges and facilitators faced by SPs within the real-world complexity of the hospital setting and how SPs provide, and can enhance, culturally responsive practice. Cultural responsiveness involves actions, strategies and approaches that are person-centred, culturally appropriate, accessible, and strengths-based that contribute to Aboriginal and Torres Strait Islander peoples feeling culturally safe (Indigenous Allied Health Australia [IAHA], 2019). Cultural safety is determined by the user of services and refers to an environment where peoples' cultural identity, practices and beliefs are acknowledged and valued. Cultural responsiveness is the practice to enable cultural safety (IAHA, 2019).

Similarly, there are gaps in the existing research regarding perspectives of Aboriginal and Torres Strait Islander peoples with ACDs regarding their experiences of speech pathology services and living with their communication challenges (Armstrong et al., 2012, 2015, 2019; Armstrong, Coffin, et al., 2021; Cochrane et al., 2020). Experiences of speech pathology services by Aboriginal and Torres Strait Islander adults with confirmed or suspected ACDs following stroke living outside Western Australia and those who are in hospital have not yet been explored. To date, no Torres Strait Islander peoples have participated in similar research.

The aim therefore of this study was to explore speech pathology service provision for Aboriginal and Torres Strait Islander adult patients with confirmed or suspected ACDs in a hospital setting. Specifically, the research questions addressed were as follows:

- (1) What approaches are used in the delivery of speech pathology services to Aboriginal and Torres Strait Islander adults with suspected or confirmed ACDs post stroke?
- (2) How are these services experienced by patients and speech pathologists?

Methods

Study design, context, and approvals

This study employed a qualitative instrumental case study design, guided by constructivist epistemology and based on the methodology described by Stake (Stake, 1995, 2005) to undertake a holistic exploration of the delivery and experience of speech pathology services for Aboriginal and Torres Strait Islander peoples with ACDs. In this type of case study design, purposively sampled cases, or bounded systems, are studied over time to understand an issue or phenomenon of interest in a real-life setting, using in-depth data collection approaches (Stake, 1995, 2005). The case study approach is particularly suited to research aimed at exploring processes or behaviours that are not well understood and for exploring the "how" and "why" questions about a set of events or processes in a naturalistic setting (Stake, 2005). Speech pathology services for Aboriginal and Torres Strait Islander peoples with ACDs are a complex phenomenon associated with a range of

factors. Multiple sources of rich, real-life situation data (e.g., patient interview and chart notes, observation data, speech pathologist reflections and focus group) were used to obtain various perspectives and enabled triangulation of the data and contributed to credibility and a holistic integrated view of the service (Stake, 1995, 2005).

The case for this investigation was the speech pathology services provided to Aboriginal and/or Torres Strait Islander adults admitted to hospital with the principal diagnosis of stroke. Binding the case delineated the scope of the research (Stake, 1995, 2005). The case was bound by *setting* (study site hospital), *social group* (Aboriginal and Torres Strait Islander adults who were diagnosed with ACD post stroke), and *activity* (those involved in the delivery and receipt of services to the social group of interest). The study site was a regionally based hospital in Queensland, Australia. Approximately 8% of residents within the hospital's health service area identify as Aboriginal and/or Torres Strait Islander (Stake, 2005) which is almost double the Queensland average (Australian Bureau of Statistics [ABS], 2021).

Ethics approval for the study was obtained from the human research ethics committee of the local hospital and health service (Details withheld for review purposes). As part of the ethics approval process, the hospital and health service's Aboriginal and Torres Strait Islander Health Leadership Advisory Council endorsed the study and ensured that it aligned with the principles for the ethical conduct of research with Aboriginal and Torres Strait Islander peoples and communities (National Health and Medical Research Council [NHMRC], 2018). The research planning and design, data collection and interpretation, and reporting and dissemination of the project findings have been guided by the Aboriginal and Torres Strait Islander quality appraisal tool (Harfield et al., 2020) and the Consolidated Criteria for Reporting Qualitative Research (COREQ) (Tong et al., 2007).

Researcher positionality

The principal investigator and first author (FC) is a non-Indigenous Australian and speech pathology academic at a regional Australian university. FC had prior qualitative research experience. The second author MA is a Gadjala woman and an SP at the study site. MA had a dual role of researcher and participant (Pope, 2020). MA provided consent to be identifiable in this study. MA completed reflective diaries, undertook observation, and participated in the focus group as a SP participant. MA was the only Indigenous Australian SP at the study site and was part of the research team prior to her involvement as a participant. MA's involvement as a participant arose due to operational requirements at the study site which necessitated her to provide services to the patient participants. Including MA as both a participant and co-researcher aligns with participatory methodological literature that highlights the value of "insider" perspectives in cross-cultural and qualitative research (Lyons et al., 2022). As such, MA was able to provide "insider" insights and shared understandings with both the Non-Indigenous SPs and Indigenous Australian participants, including professional expertise in stroke and aphasia, as well as shared culture and historical contexts with Indigenous Australian patients (Corbin-Dwyer & L, 2009; Lyons et al., 2022). In positioning herself as a participant, this was "an explicit act to sit beside fellow participants" (Phillips & Zavros, 2012). (p54) MA was integral in the development of trust and rapport building with Aboriginal and Torres Strait Islander participants, facilitating patient consent that contributed to culturally safe research

methodology and environment for these participants, and contributing to deeper contextual understanding, cultural integrity, co-construction and interpretation of data (Brewer et al., 2019; NHMRC, 2018). This dual role was managed through transparent research processes and reflexive practice (Pope, 2020). These included clear role delineation and articulation in the research design (e.g., prior to, and again at the start of the focus group, MA's participant role in the focus group was explicitly stated), as well as regular reflexivity and de-briefing sessions with the research team where decisions and assumptions were discussed and documented (Brewer et al., 2019; Corbin-Dwyer & L, 2009; Phillips & Zavros, 2012). The third and fourth authors (PC and SS respectively) are non-Indigenous speech pathology academics with expertise in culturally responsive and qualitative research. SS is a second-generation migrant who grew up in a bilingual household.

Participants and consent

Criterion-based convenience sampling was used in this study that involved identifying and selecting participants that met predetermined criteria of importance for the study (Palinkas et al., 2015). There were two different participant groups recruited for the case: (a) Aboriginal and/or Torres Strait Islander adults (≥ 18 years of age) admitted to the study site with the principal diagnosis of stroke who received ACD services, and (b) SPs who provided the ACD services to the Aboriginal and/or Torres Strait Islander patient/s. While we obtained ethical approval to also recruit family members, health professionals, and other professionals (e.g., IHLO), these individuals either did not consent to take part in the study or were not available during the study period. This is reflected in the dataset presented. Further detail regarding the inclusion and exclusion criteria for each participant group included in the study is detailed in Supplementary material 1.

Prior to the consent process, Aboriginal coresearcher MA met with patient participants who met the inclusion criteria to establish rapport and yarn³ about the research (Bessarab & Ng'andu, 2010; Brewer et al., 2019; Geia et al., 2013). Patient participants were provided with culturally appropriate aphasia-friendly written participant information and consent forms. The design of these consent forms aligned with aphasia-friendly guidelines for written information (Rose et al., 2012) and are consistent with those used in previous research where participants, including Australian Aboriginal participants, have presented with ACDs (Armstrong, Coffin, et al., 2021). To ensure cultural appropriateness, the participant information and consent forms were designed in collaboration with MA. All participants were offered the opportunity to provide verbal (audio recorded) or written consent. All participants provided written informed consent to participate in the research.

Patient participants

Participant 1 (P1)

P1 was 59 years of age at the time of her stroke. P1 identified as both Aboriginal and Torres Strait Islander and spoke English only. She lived with family in a Queensland regional city, however reported that her mob⁴ were from interstate. She also had bachelor degree qualifications. As documented in her electronic medical record, P1 was admitted to hospital due to an "acute left-sided intraparenchymal haematoma". On admission, her

score on the National Institute of Health Stroke Scale (NIHSS) (Brott et al., 1989) was 5 (moderate stroke) and on the Glasgow Coma Scale (GCS) (Teasdale & Jennett, 1974) was 13 to 14 (mild brain injury). Her communication presentation at the time of initial speech pathology review (within 24 hr of admission) was documented as “moderate receptive and expressive aphasia”. Two days after she consented to participate in the research, she experienced further medical complications due to which she was unable to participate in an interview or observation; however, consent was obtained to include data from her electronic medical record, SP reflective diaries, and SP focus group.

Participant 2 (P2)

P2 was 60 years of age at the time of her stroke. P2 identified as Aboriginal, not Torres Strait Islander, and spoke English only. She lived with family in a Queensland regional city. She completed schooling to Year 8. As documented in her electronic medical record, P2 was admitted to hospital due to an “infarct involving the posterior limb of the internal capsule and anterior thalamus on the right side”. On admission, her NIHSS score was 3 and GCS was 15. Her communication presentation at the time of initial SP review (3 days after admission) was documented as “increased processing time . . . functional communication however would benefit from a communication assessment”.

Speech pathologist participants

Four female SPs participated in this study, including MA who identified as Aboriginal Australian. All participants’ first language was Australian English, including MA. SPs’ years of practice in the hospital setting ranged from 2.5 to 9.5 years. All reported that they had previously attended cultural capability training provided in their workplaces. One reported having also completed the self-directed Indigenous Allied Health Australia (IAHA) Cultural Responsiveness Training provided via the Speech Pathology Australia (SPA) website.

Data collection

Aligned with the instrumental case study design, the research involved multiple data sources and associated collection methods (Stake, 1995, 2005). Across the two participant groups, these data collection methods were utilised: (a) review of the patient’s electronic medical record, (b) patient interview, (c) participant observation (including both the patient and SP), (d) reflective diaries kept by SPs, and (e) focus group with SPs. The research questions were used to develop predefined templates and topic guides (see Supplemental Material 2 to 4 for examples) that aligned with study aims to facilitate data collection across the different data collection methods. Data were collected between late 2022 and mid 2023. A summary of the participant-level data sources is provided in Table 1.

Electronic medical record

Data from consenting patients’ electronic medical records were extracted systematically into a predefined electronic data collection form, built around key study variables. The

Table 1. Participant-level data sources and data completeness.

Participant Group	Participant ID	Planned Recruitment	Actual participation	Data source	Data collection approach	Data collected	Data verification	Notes
Patient	P1	Yes	Partial	Electronic medical record [EMR]; SP reflective diaries; SP focus group	Predefined EMR data collection form; SP documented EMR notes; Reflective diary template; Focus group using flexible focus group guide.	33 P1 EMR entries reviewed - P1-related data in SP focus group 13 SP reflective diary entries relating to P1	100% EMR data verified by MA; 100% verification of focus group transcript by all SP participants.	No interview or observation completed.
Patient	P2	Yes	Yes	Electronic medical record [EMR]; SP Interview; SP reflective diaries; SP focus group; Observation	Predefined EMR data collection form; SP documented EMR notes; Reflective diary template; Focus group using flexible focus group guide; Face-to-face semistructured interview; SP assessment observation using structured observation template	34 P2 EMR entries reviewed - One interview completed - Observation data from one assessment session 24 SP reflective diary entries relating to P2. - P2-related data in SP focus group	100% EMR data verified by MA; 100% verification of focus group transcript by all SP participants.	Participated in all components. Unable to member-check interview transcript with P2 due to early discharge.
Speech pathologist	SP group	Yes	Yes	Electronic medical record [EMR]; SP reflective diaries; SP focus group; Observation	Reflective diary completed by participants following interactions with patients using diary template	67 EMR entries reviewed - Observation data from one assessment session 37 SP reflective diary entries - SP focus group transcript	100% EMR data verified by MA; 100% verification of focus group transcript by all SP participants.	Four SPs participated in the focus group
Family members	N/A	Yes	No	None	N/A	N/A	N/A	Not recruited / no participation
IHLs	N/A	Yes	No	None	N/A	N/A	N/A	Not recruited / no participation

study variables (e.g., demographic and clinical diagnoses information; SP documented notes) provided necessary background information and context to facilitate understanding of the clinical processes for each participant during their speech pathology journey.

Patient interview

One face-to-face, in-depth, semistructured conversationally based interview was undertaken with one patient participant. The purpose of the interview was to gain further in-depth and information-rich data about their perceptions and experiences of their interactions with SPs and other professionals, and their experiences of the ACD if relevant. The participant was offered the opportunity to participate in interview with MA and FC, or just MA. The patient participant consented to being interviewed by both researchers. The patient participant's partner was present during the interview; however, the partner declined to participate in the research. The interview was conducted in an outdoor garden space at the research site. Prior to the day of the interview, MA and FC dedicated time to developing rapport and shared understanding about the research project with the patient participant. This relationship building was an essential phase in the research project where participants included Aboriginal and Torres Strait Islander peoples (Bessarab & Ng'andu, 2010; Geia et al., 2013; Laycock et al., 2011). The interview lasted approximately 20 minutes, was audio recorded and transcribed verbatim with all participant information deidentified. A flexible interview guide was used to explore the patient participant's experiences and perceptions. After the interview, MA and FC reflected on the interview and field notes, and shared main learnings and messages from the interview. This process contributed to shared understanding and interpretation of the data. As the patient participant had discharged from hospital before transcription had occurred, we were unable to provide the participant with a copy of their transcript to review for accuracy.

Participant observation

Observational research involves noting a phenomenon in naturalistic settings (Creswell, 2013). In this study, nonparticipant observation was undertaken whereby the researcher, MA (observer), observed the interaction but did not participate in what was going on in the social setting (Bryman, 2016; Yin, 2009). MA was a nonparticipant/observer during a key event (i.e., a communication assessment session with P2) whereby they observed from a distance and recorded data without direct involvement in the activity or with the people (Bryman, 2016; Yin, 2009). This approach enabled MA to observe a real-life situation enabling rich, context-relevant data to be collected that contributed to an in-depth understanding of the phenomenon studied. The observation of this key event aligned with observer and participant availability. The purpose of this key event (i.e., the communication assessment session) was to guide ongoing intervention and support discharge planning by assessing functional communication skills using the Communication Activities of Daily Living (2nd edition) [CADL-2] (Holland, 1999). The presence of an Aboriginal SP (MA) during this observation may have contributed to the patient participant feeling more culturally safe (Armstrong, Coffin, et al., 2021; Ciccone

et al., 2019). The results, including those attained from MA indicated that the patient preferred MA's presence. The observation occurred in the rehabilitation unit at the research site. A structured observation template (see Supplementary material 3) was used to collect data relating to the observation event.

Speech pathologist reflective diaries

Each time the SP provided an occasion of service directly to or relating to the patient, the SP documented the service activity and their reflections of the interaction in the reflection diary, using the prompt questions in the diary template as a guide (see Supplementary material 2). All SP participants completed at least one reflective diary entry. A total of 37 reflective diary entries were made over a period of four weeks. Of these, MA completed three diary entries. The remaining reflective diary entries were relatively evenly distributed across the other SP participants.

Speech pathologist focus group

SPs who completed reflective diaries participated in one focus group (Bryman, 2016; Creswell, 2013) to further explore their thoughts, feelings, perceptions, and experiences of the services they provide and their interactions with Aboriginal and Torres Strait Islander adults with suspected or confirmed ACDs following stroke, as well as their interactions with others who provide services to this patient group. The face-to-face focus group was facilitated by the primary author. The focus group lasted approximately 90 min and was conducted at the research site. The focus group was audio recorded and transcribed verbatim, with all participant information deidentified. The primary author made written field notes during the focus group. The flexible interview guide (see Supplementary material 4) was used to explore the participants' experiences and perceptions. The open-ended nature of the questions provided the primary author with the opportunity to ask further probing questions or clarify answers that would contribute to the quality of data (Creswell, 2013). SP participants were provided with a copy of the transcript for review. No edits were requested.

Data analysis

Stake (Stake, 1995, 2005) identified two key approaches to data analysis: categorical aggregation and direct interpretation. We used qualitative content analysis (Graneheim & Lundman, 2004) as a means of collating and analysing the data using the broad stages of qualitative content analysis (1. Data immersion; 2. Identification of meaning units; 3. Coding of meaning units to identify sub-categories; 4. Condensing sub-categories into categories) to ultimately identify categories that remained close to participants' words. Categories identify *what* is in the data (Graneheim & Lundman, 2004; Morse, 2008). Using qualitative content analysis enabled us to ensure participants' voices were respected and maintained during the analysis process. Data were collated in Microsoft Word and hand coded. Researchers worked together to analyse, check, and recheck the data collaboratively to ensure culturally sensitive interpretation and extraction of the data (Brewer et al., 2019). This collaborative approach, regular analytic meetings, and consensus-building around sub-categories and categories, aligns with participatory insider-outsider research

approaches in managing bias to strengthen analytic rigor and reduce singular perspectives dominating the data interpretation (Brewer et al., 2019; Corbin-Dwyer & L, 2009; Phillips & Zavros, 2012).

To acquire a sense of the overall data, the initial stage of qualitative content analysis involved FC and MA immersing themselves in the data (interview and focus group transcripts, reflective diaries, SPs' electronic medical record entries, observation data) through reading, note-taking and discussion, to become better acquainted with the entire data set prior to coding. In this stage, transcripts were read repeatedly to achieve immersion. Secondly, meaning units were identified by FC and MA as segments of text relating to participants' words, phrases, and sentences contained in the data. These were condensed while preserving core meaning. In the third step, condensed meaning units were assigned an initial code by FC and MA. Following initial coding, all authors met regularly to discuss, reflect on, and clarify the assigned codes. Coding clarifications were discussed between all authors to reach consensus. Next, codes were compared for similarities and differences and grouped into subcategories reflecting shared manifest meaning. Finally, subcategories were then abstracted into categories representing latent content, where meaning units with similar messages were grouped into subcategories. Similarity was determined through comparison of semantic content and contextual meaning across codes. Codes were grouped when they reflected similar underlying experiences or interpretations. Movement from subcategory to category required conceptual rather than descriptive similarity. All authors met regularly to discuss, reflect on, and clarify the subcategory generation. This iterative and documented process continued until a set of subcategories was agreed. In the fourth step, subcategories with similar meanings were grouped into categories. Again, this process was iterative, reflective, and involved all authors. The Aboriginal SP/co-researcher contributed to all stages of analysis, with a specific role in interpreting culturally embedded meanings and ensuring that coding decisions reflected culturally appropriate understandings. Where coding differences related to cultural nuance, their interpretation was prioritised to avoid misrepresentation.

Results

Data analysis across all sources revealed five categories with associated subcategories that described how and why SP services are provided to Aboriginal and Torres Strait Islander adults with ACDs post stroke, as well as key stakeholders' experiences of these services. A detailed audit trail demonstrating the analytic process from raw data to categories following the approach of Graneheim and Lundman (Graneheim & Lundman, 2004) is provided in Supplementary material 5. Coding decisions are included to enhance transparency and demonstrate how categories were derived from the data. A summary of categories, subcategories, and representative extracts is presented in Table 2. Categories related to (a) finding out about patients' culture and background, (b) speech pathologists' perspectives of collaborating with IHLOs, (c) Aboriginal SP helping patients and non-Indigenous SPs, (d) building rapport, and (e) assessment and rehabilitation experiences and approaches. A description of the five categories with supporting evidence from the data sources are provided below. Categories identified reflect integration of all data sources and reflect the patient continuum of care (i.e., from seeking patient background information to undertaking therapy).

Table 2. Summary of categories, subcategories, and representative quotes.

Category	Subcategory	Representative Extract
Finding out about patients' culture and background	Reliance on medical records or self-report	"documented in chart ..."; "relying on patient ..."
Finding out about patients' culture and background	May not initially be priority	"busy day, you prioritise ..."
Speech pathologists' perspectives of collaborating with IHLOs	Navigating uncomfortable topics	"consult with ILO ..."
Speech pathologists' perspectives of collaborating with IHLOs	Visibility of and access to IHLOs	"IHLOs are stretched ..."
Aboriginal SP helping patients and non-Indigenous SPs	Shared lived experience	"could relate better ..."
Aboriginal SP helping patients and non-Indigenous SPs	Advocacy and increased awareness	"strong advocate ..."
Building rapport	Yarning and building connections	"shared info about myself ..."
Building rapport	Building rapport can be hard	"hard to justify ... two hours across your day for rapport ..."
Assessment and rehabilitation approaches and experiences	Assessment approaches	"important that we do a formal language assessment ..."
Assessment and rehabilitation approaches and experiences	Cultural and linguistic adaptations	"conversant-based format ..."
Assessment and rehabilitation approaches and experiences	Meaningful and culturally appropriate therapy	"doesn't want to do any of these tasks ..."

Categories

Finding out about patients' culture and background

SPs identified that finding out about Aboriginal and Torres Strait Islander patients' backgrounds was important, but the ways they sought this information varied. This information was often missing from electronic medical records and instead there was reliance on self-identification by the patient or family member or other staff to document this information in the electronic medical record. SPs indicated that they might not initially look for detailed information about patients' cultural backgrounds (including cultural identity and home Country) due to workload challenges or a focus on patients' medical status instead: "Especially in an acute ward, you might not think to check [patient's cultural background] ... you check their chart entries from a medical status point of view" (SP 2 Focus Group).

SPs also identified that even if they did have cultural background information, their approach during their initial contact with the patient may not change: "I still don't think that there would be anything that I would need to change, because it was still an initial session. I was checking her swallow function" (SP 1 Focus Group). Patients' backgrounds and cultural information were also gathered over time by SPs in collaboration with others. MA (Aboriginal SP and researcher focus group) discussed other information-seeking insights such as knowledge of Aboriginal surnames: "For me, because I have obviously grown up in this community as an Aboriginal woman, I will often see a last name and like that will be a kind of, a tick for me to then check. For example [P1 surname], I was like yep that's an Aboriginal last name".

Speech pathologists' perspectives of collaborating with Indigenous health liaison officers

As IHLOs did not participate in this study, the findings in this category reflect speech pathologists' accounts and interpretations of collaboration, rather than direct perspectives from IHLOs. SPs highlighted IHLOs' valuable role and described how and why they collaborated with IHLOs. The reasons for consultation and guidance were varied and included culturally appropriate and "safe" conversation topics for patients, how to support patients who were missing Country, and how to navigate uncomfortable topics: "There were topics [P2] didn't feel comfortable talking about, being stolen generation, those type of topics. I consulted with our ILO about what might be appropriate" [SP 2 focus group]. SPs expressed that having a consistent IHLO dedicated to the rehabilitation unit helped to establish good working relationships and understanding of each other's roles. One SP outlined, "We've had a fairly consistent IHLO ... I'll see him in the corridor" (SP 3 Focus Group). In contrast, SPs who worked in other areas of the hospital acknowledged difficulties in accessing IHLOs as they were not dedicated to specific wards or teams or were underresourced: "They [IHLOs] are very stretched. Like there's not many of them for such a busy hospital" [SP1 Focus Group]. SPs acknowledged that IHLOs had other cultural priorities at times that may limit their availability for SP collaboration. Challenges accessing IHLOs may influence SPs' inclination to collaborate with IHLOs.

Aboriginal speech pathologist helping patients and non-Indigenous speech pathologists

Findings highlighted patients and SPs strongly supported and valued working with an Aboriginal SP. Participants identified the patient's preferences for having an Aboriginal SP present during communication assessment. The patient's preference for an Aboriginal SP reflected their shared lived experience: "P1 felt that she could say to me about the language assessment that it would be best delivered by an Aboriginal or Torres Strait Islander person because she felt that their lived experience would help them understand her better" [SP 1 focus group]. The patient reportedly felt more at ease when she knew the Aboriginal SP would be in the rehabilitation unit: "P1 just didn't really understand what rehab was, so we chatted through that a little bit more and I said, also, I'm over at rehab. And that just changed something in her. After that she was like, yep, I'm happy to go to rehab because I know that you're there" [MA; focus group].

SPs felt that the presence of an Aboriginal SP enhanced their awareness and culturally responsive practice. SPs also described how their Aboriginal SP colleague had taught them about yarning and the importance of creating connections with patients: "She's [MA] taught all of us a lot about how you create that safeness to have a yarn ... I think now we all replicate that you've got to find a common connection" (SP 3 Focus Group).

Building rapport

SP participants indicated that building rapport with patients and family members was essential for creating a safe environment for patients and contributed to assessment-related decision-making processes. Rapport-building approaches outlined included

discussions, information sharing, active listening, and using personally relevant pictures. SPs highlighted that taking time to build rapport before communication assessment was necessary to make the patient feel comfortable and get a sense of the patient's goals to guide assessment approaches.

The Aboriginal SP offered unique insights into how she used her specialised ways of forming connections to build rapport with patients. These approaches included yarning and exchanging cultural information: "I first shared information about myself, my heritage (Aboriginal) and my mob. I then offered P2 to share information about herself by asking specific questions, e.g., 'where are you from?' I completed the yarning in this way in hopes of building connections to country and people" [MA; reflective diary]. In the focus group, MA described how disclosing her "Aboriginality" enabled the patient to "open up ... have further conversation ... and positively influenced quick rapport building". Even though patients and MA were from different Countries, their shared backgrounds and experiences enabled connections to be established. Whilst sharing of Aboriginal background did facilitate rapport building with the patient, in the focus group, MA identified that this was not something she did all the time: "Announcing my Aboriginality sometimes isn't the first thing that I do because there can be that sensitivity around it ... although there is a likeness between us there is also differences".

Even though all SPs described the value of rapport building with patients, they also expressed challenges that impacted rapport development. These challenges related to workplace issues such as insufficient time, staffing changes, and patients' hospital experiences. The impact of continuous staff changes on rapport development with a patient, and the patient's subsequent engagement with rehabilitation, was highlighted: "She [P2] had also been hesitant in some sessions to engage and had seen a variety of SPs due to unplanned and planned leave by treating clinician which impacted building rapport with P2" (SP 2 reflective diary). When patients have negative hospital experiences and interactions with staff, this can also affect rapport building (e.g., "It was hard to build rapport because she [P2] was already kind of offside with the whole system feeling as though staff were acting racist towards her" [SP 1 Focus Group]). These negative experiences can contribute to patients feeling culturally unsafe, thus impacting rapport building and their engagement in services.

Assessment and rehabilitation experiences and approaches

SPs appeared to rely on standardised assessment tools (for example, the "BEBLT", "WAB", and "CADL" were documented in patients' electronic medical records and SP reflective diaries and used during the assessment session that was observed) to determine patients' communication status. However, SPs acknowledged these tools were not appropriate for all Aboriginal and Torres Strait Islander peoples. SPs highlighted competing workplace challenges as reasons for using formal or standardised assessment. These included the need to adhere to the national Stroke Guidelines, feeling pressure from the multidisciplinary team, or completing formal assessment so patients could access healthcare or government funding services after discharge. These competing challenges are outlined in the following example: "Indigenous patients can come from a lot of different places ... we can't just have something stock standard ... but we also have the pressure of NDIS

[National Disability Insurance Scheme] because they want some scores. I feel like we're always finding it a hard balance" (SP 3 Focus Group).

SPs did appear to consider patients' linguistic backgrounds, home locations, education, and employment history when determining if an assessment tool should be used: "Because P2 had said to me that she had primarily grown up in an English-speaking household she'd held jobs in English, she wrote in English she was reading books and things in English, I felt okay about doing the WAB" [SP 3 Focus group]. SPs highlighted that communication assessment for Aboriginal and Torres Strait Islander patients was "different to our usual practice" (SP 1 Focus Group), and they identified ways that they adapted administration and analysis of formal or standardised communication assessment. Examples of adaptations included incorporating conversational approaches during formal assessment and including more qualitative analysis of assessment data. Although the need to adapt communication assessment was described by SPs, their uncertainties were highlighted – for example, "Even if I were to modify it am I doing that correctly?" (SP 1 Focus Group).

Terminology used in hospital can also impact Aboriginal and Torres Strait Islander patients' understanding of, and engagement with, therapy services. For example, the term "rehabilitation" (or "rehab") can have a different meaning for patients: "The doctors must have been there moments before I got there and they mentioned, P1 you're going to have to go to rehab so that you can get better. And she just didn't really understand what rehab was" (MA; Focus Group).

Findings indicated that SPs used mostly unstructured and conversation-based ACD therapy approaches that attempted to align to patients' cultural needs; however, these informal approaches mirrored typical receptive and expressive aphasia therapy and included "picture descriptions" (SP 3 Chart Entry), "event recall" (MA; Chart Entry), "abstract naming" (MA; Chart Entry), and "SFA" (SP 3 Chart Entry). Within these tasks, SPs did try to incorporate stimuli and images that were personally relevant to the patient. SPs reported occasions when patients did not respond well to therapy stimuli or approaches that were not relevant to the patient – for example, "One of the AHAs [allied health assistants] coming back one day and being like, P2 did not like the fact that I was just pulling cards out. She hated it. She wants something new" (MA; Focus Group). Better outcomes resulted when SPs adapted therapy approaches to be culturally appropriate. When SPs did not adapt their approaches to meet patients' cultural needs, patients lost interest in the activity. SPs reported cultural adaptations were challenging when delegating therapy tasks to allied health assistants (AHAs) who typically required more structure. SP 2 (reflective diary) highlighted that integrating more qualitative or person-centred measures, such as "comparing functional performance" and "patient's self-reports" over time, rather than quantitative measures of "correct vs incorrect responses", were more effective outcome measures to use.

Mixed experiences of group communication therapy were reported by SPs and a patient. SPs described that a patient participating in an all-female communication therapy group appeared "really comfortable within that group" (SP 2 Focus Group) and led to improvement in the patient's communication skills: "P2 had progressed a lot with her word finding" (SP 2 Focus Group). Conversely, patients may at times feel

culturally unsafe in the group setting leading to patient distress. For example, when talking about her experience in the communication group, P2 (interview) stated, “Them young girls [other patients or staff] were just sitting there laughing at me. Why were they laughing at me? I just didn’t like them laughing at me. It was like if I did something wrong”. Participants also highlighted the positive influence the presence of family could have on patients’ wellbeing and participation in rehabilitation. As described by a patient, “[Partner] makes it his business to come up here and visit me. He just kind of like cheers me on and makes me want to do it [rehab] more and more” (P2 Interview).

Discussion

Our findings highlight that SPs try to engage in strategies, collaborations, and approaches that contribute to culturally responsive practice and align with the IAHA cultural responsiveness framework (IAHA, 2019); however, a range of challenges exist for SPs and patients that affect SPs’ ability to enact genuine culturally responsive practice. These challenges include those relating to workplace processes and systemic issues, as well as challenges relating to SPs’ knowledge and actions. Examples of reported practice that aligns the IAHA cultural responsiveness framework key capabilities (IAHA, 2019) included: integration Aboriginal and Torres Strait Islander concepts and patient preferences through adopting a more informal assessment approach and integrating therapy activities that were contextualised and functionally relevant for the patient (*respect for centrality of culture* key capability); ongoing capacity development through participation in cultural responsiveness training as well as engaging in self-reflection to identify when cultural supports were needed (*self-awareness and proactive* key capabilities); and approaches to developing rapport and trust with patients and IHLOs (*inclusive engagement* key capability). The perspectives provided by the Aboriginal SP were particularly insightful, including the rapport-building and engagement approaches she adopted in her practice. The presence of the Aboriginal SP potentially facilitated cultural safety for patients, and non-Indigenous SPs’ approaches to culturally responsive practice. Culturally unsafe health care contributes to a range of detrimental health and wellbeing outcomes for Aboriginal and Torres Strait Islander peoples (Armstrong, Coffin, et al., 2021; Fitts et al., 2019; Grant & Draper, 2018; Worrall-Carter et al., 2016; Wotherspoon & Williams, 2019) while respect, development of trust and rapport, good communication, working collaboratively, and creating connections is associated with more positive outcomes (Armstrong et al., 2015, 2020; Armstrong, Coffin, et al., 2021; Cochrane et al., 2016, 2024; Dingwall et al., 2014).

Finding out about patients’ cultural backgrounds and developing rapport and connections with Aboriginal and Torres Strait Islander patients is central to SP service delivery when working with patients with ACDs. Building of trust and connections leads to a positive therapeutic environment through a better understanding of patients’ needs and perspectives (Chapman et al., 2014; Lin et al., 2016). SPs described various approaches to building rapport with patients including taking time, informal approaches, sharing information, and listening. These approaches are consistent with those recommended when working with Aboriginal and Torres Strait Islander peoples (e.g., (Brooks, Manias, & Bloomer, 2019; Graham & Byrne, 2017; Lin, Green, & Bessarab, 2016; Watts & Carlson, 2002; Wilson et al., 2020)). In the current study, the Aboriginal SP shared the approach she used

to uniquely create connections and rapport with patients; that is, disclosing her Aboriginality with patients appeared to facilitate the building of connections quickly with Aboriginal and Torres Strait Islander patients. Similar building of connections, confidence, and trust have been described by Aboriginal and Torres Strait Islander women in regional Queensland when Aboriginal and Torres Strait Islander student midwives were involved in their care during pregnancy and birth (Kelly et al., 2014). While building of connections, rapport, and trust was identified by SPs in the current study as a priority, they expressed challenges in being able to do this at times. These related to historical, environmental, and health system challenges. For example, Aboriginal and Torres Strait Islander patients may have had poor prior hospital or health system experiences. These may be related to experiences such as institutional racism, unequal access to services, feelings of loneliness and homesickness, and privacy issues (Armstrong et al., 2012, 2015; Durey et al., 2012; Einsiedel et al., 2013; Katzenellenbogen et al., 2013; Mithen et al., 2021; Worrall-Carter et al., 2016). These experiences can impact rapport development with non-Indigenous SPs in particular. Mirroring literature about time as a rapport-building facilitator^{13,52,58,39}, time was also identified by SPs in the current study as impacting the effectiveness of their rapport building with patients. SPs outlined that organisational policies, workplace performance measures focused on occasions of service (rather than time), and the associated lack of recognition for spending time with patients and families to build connections and rapport meant SPs felt they were unable to spend sufficient time dedicated to rapport building. SPs need to continue to advocate for their workplaces to recognise that sufficient time is allocated when working with Aboriginal and Torres Strait Islander patients in order to deliver more culturally safe services. Time for rapport development needs to be structurally enabled, and documenting time in electronic medical records, or other performance measure systems, may provide quantitative evidence to support and justify time allocation and workload needs.

SPs, especially non-Indigenous SPs, highlighted the invaluable support that Aboriginal and Torres Strait Islander health coworkers provided in helping SPs provide culturally responsive care, in particular the building of connections with patients. SPs in the current study discussed specific examples of how IHLOs helped them to navigate sensitive topics, including Stolen Generation and patients who were missing Country. These examples were provided by non-Indigenous SPs, which highlighted that these SPs were self-aware of the limitations of their knowledge of Aboriginal and Torres Strait Islander concepts and sensitive topics and that they needed support from IHLOs to better facilitate cultural safety for patients (Cochrane et al., 2016; Hersh, Armstrong, & Bourke, 2015). IHLOs and other Aboriginal and Torres Strait Islander health workers bring cultural insights and share common histories, cultures, and backgrounds with patients that enhances patients' feelings of cultural safety (Chapman et al., 2014; Cochrane et al., 2024; Grant & Draper, 2018; Worrall-Carter et al., 2016; Wotherspoon & Williams, 2019). In the current study, speech pathologists identified that patients expressed their preference to have the Aboriginal SP present during communication assessment due to their shared backgrounds and understanding, which may have facilitated rapport building and patients' feelings of being culturally safe. Similarly, Australian Aboriginal adults who have experienced stroke or brain injury expressed that having an Aboriginal brain injury coordinator as part of their care team contributed to their cultural safety (Armstrong, McCoy, et al., 2021). The positive outcomes for patients and health professionals through

interprofessional practice has been highlighted by SPs working with IHLOs and Aboriginal coworkers in the provision of ACD services to Aboriginal and Torres Strait Islander patients (Armstrong, McCoy, et al., 2021; Ciccone et al., 2019; Cochrane et al., 2016) as well as occupational therapists and Aboriginal health workers in rural and remote areas of Queensland, Australia (Hooper et al., 2007). Findings suggest that speech pathologists perceive collaboration with IHLOs as valuable; however, further research including IHLO perspectives is needed to inform service-level recommendations.

While our study highlights the value and respect SPs have for IHLOs, challenges in working collaboratively with IHLOs were identified from the perspective of the SPs. One of the challenges perceived by SPs was IHLOs' reduced availability for consultation due to their significant workload. IHLOs' roles are immensely diverse in nature and encompass services such as the provision of cultural, social, and emotional support to patients and their families, as well as facilitating health professionals' rapport building with patients and their provision of culturally responsive care (Ciccone et al., 2019; Cochrane et al., 2016; Grant & Draper, 2018; Mackean et al., 2020). The breadth and depth of IHLOs' roles, and insufficient numbers of IHLOs, may limit their availability to consult with SPs. This workload implication may have contributed to SPs' lack of proactiveness in consulting with IHLOs in different contexts. Interestingly, where IHLOs were not directly embedded in a team (e.g., emergency department or general wards), SPs were less inclined to consult with them due to IHLOs being less visible and less opportunity for developing strong working relationships. In contrast, where IHLOs were an integral member of the multi-disciplinary team and were colocated (e.g., rehabilitation unit), SPs interacted more with the IHLOs. This access and relationship were highlighted by occupational therapists working in remote and very remote areas (Hooper et al., 2007). Occupational therapists had more professional interactions with Aboriginal health workers who were part of their team and who were colocated, compared with those who worked in less remote areas (Hooper et al., 2007). Regular contact and having access to each other has been identified by occupational therapists and Aboriginal health workers as facilitating effective health services in Aboriginal communities (Hooper et al., 2007). The importance of IHLOs' role in helping to address inequities, their diverse and considerable workload, and the need for more IHLO positions has been highlighted (Mackean et al., 2020; Yashadhana et al., 2020). A report from the Queensland Audit Office (Queensland Audit Office, 2023) outlined the priority of increasing First Nations workforce with a specific recommendation of target ratios of IHLOs to First Nations people in each hospital and health service as a priority. There remains an urgent need at the organisational and policy level to enact this workforce strategy to enhance health and wellbeing outcomes for Aboriginal and Torres Strait Islander patients.

Study findings indicated that there were some points across the continuum of care where SPs were less likely to deliver culturally responsive services – for example, the initial SP encounter with the patient in the acute stages of care. Often, the first time that an SP will be able to see a patient is for the purpose of a swallowing assessment. This initial swallowing assessment involves patient interaction and review of the patient's cognitive and communication skills (McAllister et al., 2016); yet SPs in the current study outlined that they may not change their practice approach or seek additional background information for initial assessment with an Aboriginal or Torres Strait Islander patient. Rather, they prioritised seeking this information when conducting a communication review or

assessment with the patient. Management of swallowing has been commonly prioritised over management of communication disorder in acute hospitals (Foster et al., 2014; Rose et al., 2014); therefore, the focus on swallowing may have influenced SPs' decisions regarding seeking patient background information prior to initial review. Not acknowledging or acting upon a patient's background, culture, and language in service delivery does not align with culturally responsive practice and may restrict the patient's access to culturally safe and respectful environments and services such as IHLOs or interpreters (Cochrane et al., 2024; Lopez et al., 2011). Additionally, this practice conflicts with the rights of Indigenous peoples to receive culturally safe health services, including services that acknowledge and integrate considerations for their language (Hemberg & Sved, 2019; United Nations, 2007). To facilitate information seeking, rapport building, and culturally safe care, IHLOs have highlighted the importance of SPs and IHLOs seeing Aboriginal and Torres Strait Islander patients together, especially the first time an SP meets a patient (Cochrane et al., 2024).

SPs discussed using informal assessment approaches such as engaging in discourse with patients to determine presence of ACDs; however, they maintained reliance on using formal assessment tools (either in a standardised or adapted manner). Integration of informal and formal ACD assessment approaches has been reported by SPs working with Aboriginal and Torres Strait Islander peoples (Cochrane et al., 2023; Hersh, Armstrong, Panak, et al., 2015). SPs in the current study described using formal ACD tools such as the Western Aphasia Battery (WAB) (Kertesz, 2006) Frenchay Dysarthria Assessment (Enderby & Palmer, 2008,) Brisbane Evidence-Based Language Test (BEBLT) (Rohde et al., 2022,) and Communication Activities of Daily Living (CADL) (Holland, 1999) to either diagnose ACD or use these as guides to determine a person's functional communication skills. These formal tools are commonplace in SPs' ACD assessment practice worldwide (Murray & Coppens, 2013; Rohde et al., 2018; Verna et al., 2009; Vogel et al., 2010). While regularly used in clinical practice, these English-based formal assessments integrate bias for Western concepts and were not specifically normed on, or developed for, Aboriginal and Torres Strait Islander peoples (Armstrong et al., 2020). SPs in the current study did acknowledge that the use of these formal tools was not culturally appropriate for all Aboriginal and Torres Strait Islander patients; however, they identified a lack of availability of culturally and linguistically diverse assessment tools, and workplace challenges, as reasons why they used formal tools. SPs' lack of confidence and lack of availability of culturally and linguistically appropriate resources for Aboriginal and Torres Strait Islander populations has been identified previously (Armstrong et al., 2020; Cochrane et al., 2016; Hersh, Armstrong, & Bourke, 2015). Immense linguistic and cultural diversity exists for Aboriginal and Torres Strait Islander patients (Australian Institute of Aboriginal and Torres Strait Islander Studies AIATSIS, 2005; Cochrane et al., 2021). When culturally and linguistically inappropriate ACD communication tools are used, there is a risk of over- or underdiagnosis of ACDs (Cochrane et al., 2024). IHLOs have identified ACD misdiagnosis concerns when SPs use assessment tools and approaches that are not culturally, linguistically, or personally relevant to Aboriginal and Torres Strait Islander patients (Cochrane et al., 2024). Accurate ACD diagnosis facilitates rehabilitation approaches that more specifically target patients' needs.

SPs also discussed professional tension and competing priorities in trying to balance patient needs with workplace challenges as further reasons for integrating

formal ACD assessment. These workplace challenges included the need to comply with practice directions such as the Australian national *Clinical Guidelines for Stroke Management* (Stroke Foundation, 2020) as well as feeling pressure to use formal assessment so patients had the best opportunity to access government or other healthcare services, such as the National Disability Insurance Scheme (NDIS) following discharge. There remains a need for government policies and processes to integrate more consideration and guidance of alternative ACD assessment approaches for Aboriginal and Torres Strait Islander peoples that meet the needs of patients, as well as clinical guidelines and service processes. For example, a practical approach would be the identification of a range of national, as well as specific hospital actions in the *Clinical Guidelines for Stroke Management* that could be adopted by SPs. While SPs maintained use of formal assessments, they outlined various ways they adapted administration and analysis of these assessments to potentially be more culturally responsive. These adaptations included modifying the structure of assessment by integrating more time for conversation between tasks, providing further explanations of tasks, omitting tasks that were not relevant to a patient, and analysing data using more qualitative, rather than quantitative, methods by describing patients' communication strengths and challenges in a functional context. While SPs were aware of the need for ACD assessment processes to be person-centred and adapted for Aboriginal and Torres Strait Islander peoples, some remained uncertain if the adaptations were appropriate. SPs rarely described or documented collaborating with patients' family members or IHLOs during the ACD assessment process. Family members who know the patient well are in the best position to provide background information and determine whether communication challenges exist for patients who have experienced stroke (Cochrane et al., 2024; Hersh, Armstrong, Panak, et al., 2015).

SPs included considerations for patients' cultural needs into ACD rehabilitation processes. SPs frequently used cognitive – neuropsychological therapy methods (e.g., semantic feature analysis; naming therapy) but tried to deliver these using unstructured and conversation-based approaches, where they integrated stimuli that were personally relevant for the patient (e.g., images from the patient's Community). Therapy tasks that were personally and functionally relevant and contextualised for the patient (e.g., filling out a form) potentially led to enhanced engagement and patient satisfaction, whereas therapy approaches with little relevance or meaning to the Aboriginal and Torres Strait Islander patient led to reduced engagement with the task. Shame, which may be experienced by an Aboriginal or Torres Strait Islander person when they feel singled out or their dignity is impacted (Mental Health First Aid Australia, 2014) was also reported by an Aboriginal participant in response to group therapy. The patient described feeling as though others in the communication group were laughing at her. While communication group therapy has shown many benefits for patients and family members in offering social communication opportunities (Brown et al., 2012; Lanyon et al., 2013) there is no literature that explores the appropriateness of traditional communication group therapy for Aboriginal and Torres Strait Islander peoples. As highlighted by IHLOs, Aboriginal and Torres Strait Islander patients require connection to ACD therapy tasks and approaches for these to be effective, culturally appropriate, and for patients to feel culturally safe (Armstrong et al., 2020; Cochrane et al., 2024; Dingwall et al., 2014).

Limitations

While this study has identified a number of valuable findings, some of which have not been previously reported, some limitations must be noted. Firstly, whilst multiple data sources and methods were used, the data were collected at a single study site. Therefore, the results may not be representative of wider participant populations or service contexts. Secondly, due to research timeframes and the availability of eligible patients, there were only two patient participants who consented to take part. Unfortunately, one of these patients was unable to continue in the research due to medical challenges; therefore, we were unable to collect interview or observation data from this participant. Both patient participants identified as speaking English only, therefore the impact of dialectal and language difference was not more broadly explored and is recommended as a focus for future research. Despite these limitations, the insights provided by the Aboriginal SP (MA) were invaluable and previously unreported. Finally, we were only able to undertake observation of one key event (i.e., a communication assessment session) due to participant, SP, and observer availability. Although collaboration with IHLOs was identified as important by speech pathologists, IHLOs did not participate in this study. As such, the findings related to IHLOs reflect SPs' perspectives only and do not represent the views or experiences of IHLOs. Future research should include IHLO perspectives to provide a more comprehensive understanding of collaborative practice.

Conclusions

This instrumental case study provided valuable insights into the nature of speech pathology services for Aboriginal and Torres Strait Islander peoples with ACD following stroke in hospital. The multiple data sources enabled a comprehensive exploration of the services with several outcomes being previously unreported. It was evidenced that SPs do try to demonstrate cultural responsiveness in their practice; however, at times, there are individual and organisational challenges that impede SPs' ability to do so. Collaborating with Aboriginal and Torres Strait Islander colleagues including IHLOs and Aboriginal SP were valued by SPs, and ongoing collaborations are essential in ACD service models. Whilst the patient participants in our study self-identified as speaking English only, the findings from this study are transferable to Aboriginal and Torres Strait Islander peoples, and likely diverse peoples globally, in terms of the broader cultural factors and culturally responsive practice aspects outlined in this study. For example, the importance of developing rapport and trust, collaborating with cultural experts, and ensuring ACD assessment and intervention practices are personally and culturally relevant. In hospital environments where Western biomedical and English language concepts dominate, acknowledgement and change are required at policy, organisational, and individual levels in order to create transformative structural change to facilitate genuine culturally responsive and decolonising healthcare practice.

Notes

1. Aboriginal and Torres Strait Islander peoples are the First Peoples of Australia and are richly diverse in terms of culture, language, experiences and geography (Taylor & Guerin, 2019).

2. Country is a term that refers to the ancestral lands, waterways and skies to which Aboriginal and Torres Strait Islander peoples are culturally, emotionally and spiritually connected (Taylor & Guerin, 2019).
3. Yarning is a communication approach that incorporates a more informal, relaxed, and conversational style of interaction with the patient and is more consistent with Indigenous Australian communication styles for sharing information (Lin et al., 2016).
4. Mob is a term that identifies a group of Aboriginal or Torres Strait Islander people who are associated with a particular geographical location or Country (Taylor & Guerin, 2019).

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Author contributions

CRedit: **Frances Cochrane:** Conceptualization, Data curation, Formal analysis, Investigation, Methodology, Project administration, Writing – original draft, Writing – review & editing; **Petrea Cornwell:** Formal analysis, Supervision, Writing – review & editing; **Samantha Siyambalapitiya:** Conceptualization, Formal analysis, Methodology, Supervision, Writing – review & editing.

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Consent to participate and for publication

Participants provided written informed consent to participate in this research, including informed consent for publication via the Participant Information and Consent Forms approved by the HREC.

Ethical considerations

Ethics approvals for the study were obtained from the relevant human ethics research committee of the research site hospital and health service (Details withheld for review purposes).

References

Armstrong, E., Coffin, J., Hersh, D., Katzenellenbogen, J., Thompson, S., Ciccone, N., Flicker, L., Woods, D., Hayward, C., Dowell, C., & McAllister, M. (2021). "You felt like a prisoner in your own

- self, trapped”: The experiences of Aboriginal people with acquired communication disorders. *Disability and Rehabilitation*, 43(13), 1903–1916. <https://doi.org/10.1080/09638288.2019.1686073>
- Armstrong, E., Coffin, J., McAllister, M., Hersh, D., Katzenellenbogen, J., Thompson, S., Ciccone, N., Flicker, L., Hayward, C., Arabi, L., Woods, D., & Hayward, C. (2019). “I’ve got to row the boat on my own, more or less”: Aboriginal Australian experiences of traumatic brain injury. *Brain Impairment*, 20(2), 120–136. <https://doi.org/10.1017/BrImp.2019.19>
- Armstrong, E., Hersh, D., Hayward, C., & Fraser, J. (2015). Communication disorders after stroke in Aboriginal Australians. *Disability and Rehabilitation*, 37(16), 1462–1469. <https://doi.org/10.3109/09638288.2014.972581>
- Armstrong, E., Hersh, D., Hayward, C., Fraser, J., & Brown, M. (2012). Living with aphasia: Three Indigenous Australian stories. *International Journal of Speech-Language Pathology*, 14(3), 271–280. <https://doi.org/10.3109/17549507.2011.663790>
- Armstrong, E., McAllister, M., Hersh, D., Katzenellenbogen, J. M., Thompson, S. C., Coffin, J., Flicker, L., Woods, D., Hayward, C., & Ciccone, N. (2020). A screening tool for acquired communication disorders in Aboriginal Australians after brain injury: Lessons learned from the pilot phase. *Aphasiology*, 34(11), 1388–1412. <https://doi.org/10.1080/02687038.2019.1678107>
- Armstrong, E., McCoy, K., Clinch, R., Merritt, M., Speedy, R., McAllister, M., Heine, K., Ciccone, N., Robinson, M., & Coffin, J. (2021). The development of Aboriginal brain injury coordinator positions: A culturally secure rehabilitation service initiative as part of a clinical trial. *Primary Health Care Research & Development*, 22(e49), 1–9. <https://doi.org/10.1017/S1463423621000396>
- Australian Bureau of Statistics. (2021). Estimates of Aboriginal and Torres Strait Islander Australians. <https://www.abs.gov.au/ausstats/abs@nsf/mf/3238.0.55.001>
- Australian Institute of Aboriginal and Torres Strait Islander Studies. Federation of Aboriginal and Torres Strait Islander languages (FATSIL). *National Indigenous Languages Survey Report 2005*. 2005. <https://www.abs.gov.au/ausstats/abs@nsf/mf/3238.0.55.001>
- 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. <https://doi.org/10.5204/ijcis.v3i1.57>
- Brewer, K., Lewis, T., Bond, C., Armstrong, E., Hill, A., Nelson, A., & Coffin, J. (2019). Maintaining cultural integrity in Australian Aboriginal and Māori qualitative research in communication disorders. In R. Lyons & L. McAllister (Eds.), *Qualitative research in communication disorders: An introduction for students and clinicians* (pp. 407–433). J & R Press.
- Brooks, L., Manias, E., & Bloomer, M. (2019). Culturally sensitive communication in healthcare: A concept analysis. *Collegian*, 26(3), 383–391. <https://doi.org/10.1016/j.colegn.2018.09.007>
- Brott, T., Adams, H., Olinger, C., Marler, J., Barsan, W., Biller, J., Spilker, J., Holleran, R., Eberle, R., Hertzberg, V., Rorick, M., Moomaw, C., & Walker, M. (1989). Measurements of acute cerebral infarction: A clinical examination scale. *Stroke*, 20(7), 864–870.
- Brown, K., Worrall, L., Davidson, B., & Howe, T. (2012). Living successfully with aphasia: A qualitative meta-analysis of the perspectives of individuals with aphasia, family members, and speech-language pathologists. *International Journal of Speech-Language Pathology*, 14(2), 141–155. <https://doi.org/10.3109/17549507.2011.632026>
- Bryman, A. (2016). *Social research methods* (5th ed.). Oxford University Press.
- Chapman, R., Smith, T., & Martin, C. (2014). Qualitative exploration of the perceived barriers and enablers to Aboriginal and Torres Strait Islander people accessing healthcare through one Victorian emergency department. *Contemporary Nurse*, 48(1), 48–58. <https://doi.org/10.1080/10376178.2014.11081926>
- Ciccone, N., Armstrong, E., Hersh, D., Adams, M., & McAllister, M. (2019). The Wangi (talking) project: A feasibility study of a rehabilitation model for Aboriginal people with acquired communication disorders after stroke. *International Journal of Speech-Language Pathology*, 21(3), 305–316. <https://doi.org/10.1080/17549507.2019.1595146>
- Cochrane, F., Brown, L., Siyambalapitiya, S., & Plant, C. (2016). “... trial and error ...”: Speech-language pathologists’ perspectives of working with Indigenous Australian adults with acquired communication disorders. *International Journal of Speech-Language Pathology*, 18(5), 420–431. <https://doi.org/10.3109/17549507.2015.1101157>

- Cochrane, F., Singleton-Bray, J., Canendo, W., Cornwell, P., & Siyambalapitiya, S. (2024). "Working together ... I can't stress how important it is": Indigenous health liaison officers' insights into working with speech-language pathologists and Aboriginal and Torres Strait Islander peoples with stroke and TBI. *International Journal of Speech-Language Pathology*, 26(2), 149–161. <https://doi.org/10.1080/17549507.2023.2181225>
- Cochrane, F., Siyambalapitiya, S., & Cornwell, P. (2020). Speech-language pathology services for Indigenous Australian adults with acquired communication disorders: A systematic quantitative literature review. *Speech, Language and Hearing*, 23(2), 79–90. <https://doi.org/10.1080/2050571X.2018.1544729>
- Cochrane, F., Siyambalapitiya, S., & Cornwell, P. (2021). Clinical profile of Aboriginal and Torres Strait Islander adults with stroke and traumatic brain injury at a regional Australian hospital: A retrospective chart audit. *Brain Impairment*, 22(3), 281–293. <https://doi.org/10.1017/Brlmp.2021.1>
- Cochrane, F., Siyambalapitiya, S., & Cornwell, P. (2023). Assessment and rehabilitation of acquired communication disorders in Aboriginal and Torres Strait Islander adults with stroke or traumatic brain injury: A retrospective chart review. *Disability and Rehabilitation*, 45(7), 1154–1164. <https://doi.org/10.1080/09638288.2022.2055160>
- Corbin-Dwyer, S., & L, B. J. (2009). The space between: On being an insider-outsider in qualitative research. *International Journal of Qualitative Methods*, 1(1), 54–63. <https://doi.org/10.1177/160940690900800105>
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among five approaches* (3rd ed.). SAGE.
- Dingwall, K., Lindeman, M., & Cairney, S. (2014). "You've got to make it relevant": Barriers and ways forward for assessing cognition in Aboriginal clients. *BMC Psychology*, 2(13), 1–11. <https://doi.org/10.1186/2050-7283-2-13>
- Durey, A., Thompson, S. C., & Wood, M. (2012). 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. <https://doi.org/10.1111/j.1445-5994.2011.02628.x>
- Einsiedel, L., van Lersel, E., Macnamara, R., Spelmen, T., Heffernan, M., Bray, L., Morris, H., Porter, B., & Davis, A. (2013). Self-discharge by adult Aboriginal patients at Alice Springs Hospital, Central Australia: Insights from a prospective cohort study. *Australian Health Review*, 37(2), 239–245. <https://doi.org/10.1071/AH11087>
- Enderby, P., & Palmer, R. (2008). *Frenchay dysarthria assessment* (2nd ed.). Pearson.
- Fitts, M., Bird, K., Gilroy, J., Fleming, J., Clough, A., Esterman, A., Maruff, P., Fatima, Y., & Bohanna, I. (2019). A qualitative study on the transition support needs of Indigenous Australians following traumatic brain injury. *Brain Impairment*, 20(2), 137–159. <https://doi.org/10.1017/Brlmp.2019.24>
- Foster, A., O'Halloran, R., Rose, M., & Worrall, L. (2014). "Communication is taking a back seat": Speech pathologists' perceptions of aphasia management in acute hospital settings. *Aphasiology*, 30(5), 585–608. <https://doi.org/10.1080/02687038.2014.985185>
- Geia, L. K., Hayes, B., & Usher, K. (2013). Yarning/aboriginal storytelling: Towards an understanding of an indigenous perspective and its implications for research practice. *Contemporary Nurse*, 46(1), 13–17. <https://doi.org/10.5172/conu.2013.46.1.13>
- Graham, L., & Byrne, N. (2017). Aboriginal families' experiences of attending speech-language pathology services. *JCPSLP*, 19(1), 19–26.
- Graneheim, U., & Lundman, B. (2004). Qualitative content analysis in nursing research: Concepts, procedures and measures to achieve trustworthiness. *Nurse Education Today*, 24(2), 105–112. <https://doi.org/10.1016/j.nedt.2003.10.001>
- Grant, R., & Draper, N. (2018). The importance of Indigenous health liaison officers and family meetings to improve cardiovascular outcomes in Indigenous Australians. *Australian and New Zealand Journal of Public Health*, 42(5), 499–500. <https://doi.org/10.1111/1753-6405.12824>
- Harfield, S., Pearson, O., Morey, K., Kite, E., Canuto, K., Glover, K., Gomersall, J. S., Carter, D., Davy, C., Aromataris, E., & Braunack-Mayer, A. (2020). Assessing the quality of health research from an

- indigenous perspective: The Aboriginal and Torres Strait Islander quality appraisal tool. *BMC Medical Research Methodology*, 20(1), 1–9. <https://doi.org/10.1186/s12874-020-00959-3>
- Hemberg, J., & Sved, E. (2019). The significance of communication and care in one's mother tongue: Patients' views. *NJNR*, 41(1), 42–543.
- Hersh, D., Armstrong, E., & Bourke, N. (2015). A narrative analysis of a speech pathologist's work with Indigenous Australians with acquired communication disorders. *Disability and Rehabilitation*, 37(1), 33–40. <https://doi.org/10.3109/09638288.2014.890675>
- Hersh, D., Armstrong, E., Panak, V., & Coombes, J. (2015). Speech-language pathology practices with Indigenous Australians with acquired communication disorders. *International Journal of Speech-Language Pathology*, 17(1), 74–85. <https://doi.org/10.3109/17549507.2014.923510>
- Holland, A. (1999). Communication activities of daily living.
- Hooper, K., Thomas, Y., & Clarke, M. (2007). Health professional partnerships and their impact on Aboriginal health: An occupational therapist's and Aboriginal health worker's perspective. *Australian Journal of Rural Health*, 15(1), 46–51. <https://doi.org/10.1111/j.1440-1584.2007.00849.x>
- Indigenous Allied Health Australia. (2019). Cultural responsiveness in action: An IAHA framework. <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001>
- Katzenellenbogen, J., Sanfilippo, F., Hobbs, M., Knuiman, M., Bessarab, D., Durey, A., & Thompson, S. (2013). Voting with their feet-predictors of discharge against medical advice in Aboriginal and non-Aboriginal ischaemic heart disease patients in Western Australia: An analytic study using data linkage. *BMC Health Services Research*, 13(330), 1–10. <https://doi.org/10.1186/1472-6963-13-330>
- Kelly, J., West, R., Gamble, J., Sidebottom, M., Carson, V., & Duffy, E. (2014). 'She knows how we feel': Australian Aboriginal and Torres Strait Islander childbearing women's experience of continuity of care with an Australian Aboriginal and Torres Strait Islander midwifery student. *Women and Birth*, 27(3), 157–162. <https://doi.org/10.1016/j.wombi.2014.06.002>
- Kertesz, A. (2006). *Western aphasia battery-revised*. Pearson.
- Lanyon, L. E., Rose, M. L., & Worrall, L. (2013). The efficacy of outpatient and community-based aphasia group interventions: A systematic review. *International Journal of Speech-Language Pathology*, 15(4), 359–374. <https://doi.org/10.3109/17549507.2012.752865>
- Laycock, A., Walker, D., Harrison, N., & Brands, J. (2011). *Researching indigenous health: A practical guide for researchers*. The Lowitja Institute. <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001>
- Lin, I., Green, C., & Bessarab, D. (2016). "Yarn with me": Applying clinical yarning to improve clinician-patient communication in Aboriginal health care. *Australian Journal of Primary Health*, 22(5), 377. <https://doi.org/10.1071/PY16051>
- Lopez, L., Green, A., Tan McGrory, A., King, R., & Betancourt, J. (2011). Bridging the digital divide in health care: The role of health information technology in addressing racial and ethnic disparities. *The Joint Commission Journal on Quality and Patient Safety*, 37(10), 437–445. [https://doi.org/10.1016/S1553-7250\(11\)37055-9](https://doi.org/10.1016/S1553-7250(11)37055-9)
- Lyons, R., Armstrong, E., Atherton, M., Brewer, K., Lowell, A., Maypilama, L., Rethfeldt, W., & Watermeyer, J. (2022). Cultural and linguistic considerations in qualitative analysis. In R. Lyons, L. McAlister, C. Carroll, D. Hersh, & J. Skeat (Eds.), *Diving deep into qualitative data analysis in communication disorders research* (pp. 277–318). J & R Press Ltd.
- Mackean, T., Withall, E., Dwyer, J., & Wilson, A. (2020). Role of aboriginal health workers and liaison officers in quality care in the Australian acute care setting: A systematic review. *Australian Health Review*, 44(3), 427–433. <https://doi.org/10.1071/AH19101>
- McAllister, S., Kruger, S., Doeltgen, S., & Tyler-Boltrek, E. (2016). Implications of variability in clinical bedside swallowing assessment practices by speech language pathologists. *Dysphagia*, 31(5), 650–662. <https://doi.org/10.1007/s00455-016-9724-8>
- Mental Health First Aid Australia. (2014). Communicating with an Aboriginal or Torres Strait Islander adolescent: Guidelines for being culturally appropriate when providing mental health first aid. <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001>
- Mithen, V., Kerrigan, V., Dhurrkay, G., Morgan, T., Keilor, N., Castillon, C., Hefler, M., & Ralph, A. (2021). Aboriginal patient and interpreter perspectives on the delivery of culturally safe hospital-based care. *Health Promotion Journal of Australia*, 32(S1), 155–165. <https://doi.org/10.1002/hpja.415>

- Morse, J. (2008). Confusing categories and themes. *Qualitative Health Research*, 18(6), 727–728. <https://doi.org/10.1177/1049732308314930>
- Murray, L., & Coppens, P. (2013). Formal and informal assessment of aphasia. In I. Papathanasiou, P. Coppens, & C. Potagas (Eds.), *Aphasia and related neurogenic communication disorders* (pp. 67–91). Jones and Bartlett Learning.
- National Health and Medical Research Council. (2018). Ethical conduct in research with Aboriginal and Torres Strait Islander peoples and communities: Guidelines for researchers and stakeholders. <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001>
- Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research*, 42(5), 533–544. <https://doi.org/10.1007/s10488-013-0528-y>
- Phillips, L., & Zavros, A. (2012). Researchers as participants, participants as researchers. In W. Midgley, P. Danaher, & M. Baguley (Eds.), *The role of participants in education research: Ethics, epistemologies, and methods* (p. 54). Routledge.
- Pope, E. (2020). From participants to co-researchers: Methodological alterations to a qualitative case study. *The Qualitative Report*, 25(10), 3749–3761. <https://doi.org/10.46743/2160-3715/2020.4394>
- Queensland Audit Office. (2023). Health outcomes for First Nations people. In *Report* (Vol. 14, pp. 2022–23). The State of Queensland.
- Rohde, A., Doi, S., Worrall, L., Godecke, E., Farrell, A., O'Halloran, R., McCracken, M., Lawson, N., Cremer, R., & Wong, A. (2022). Development and diagnostic validation of the Brisbane evidence-based language test. *Disability and Rehabilitation*, 44(4), 625–636. <https://doi.org/10.1080/09638288.2020.1773547>
- Rohde, A., Worrall, L., Godecke, E., O'Halloran, R., Farrell, A., & Massey, M. (2018). Diagnosis of aphasia in stroke populations: A systematic review of language tests. *PLOS ONE*, 13(3), e0194143–17. <https://doi.org/10.1371/journal.pone.0194143>
- Rose, M., Ferguson, A., Power, E., Togher, L., & Worrall, L. (2014). Aphasia rehabilitation in Australia: Current practices, challenges and future directions. *International Journal of Speech-Language Pathology*, 16(2), 169–180. <https://doi.org/10.3109/17549507.2013.794474>
- Rose, T., Worrall, L., Hickson, L., & Hoffmann, T. (2012). Guiding principles for printed education materials: Design preferences of people with aphasia. *International Journal of Speech-Language Pathology*, 14(1), 11–23. <https://doi.org/10.3109/17549507.2011.631583>
- Shahid, S., Finn, L., Bessarab, D., & Thompson, S. (2011). “Nowhere to room . . . nobody told them”: Logistical and cultural impediments to Aboriginal peoples’ participation in cancer treatment. *Australian Health Review*, 35(2), 235–241. <https://doi.org/10.1071/AH09835>
- Stake, R. E. (1995). *The art of case study research*. SAGE.
- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The SAGE handbook of qualitative research* (3rd ed. pp. 443–466). SAGE.
- Stroke Foundation. (2020). Clinical guidelines for stroke management: Summary speech pathology. <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.5r5.001>
- Taylor, K., & Guerin, P. (2019). *Health care and Indigenous Australians* (2nd ed.). Palgrave MacMillan.
- Teasdale, G., & Jennett, B. (1974). Assessment of coma and impaired consciousness: A practical scale. *Lancet*, 304(7872), 81–84. [https://doi.org/10.1016/S0140-6736\(74\)91639-0](https://doi.org/10.1016/S0140-6736(74)91639-0)
- Tong, A., Sainsbury, P., & Craig, J. (2007). Consolidated criteria for reporting qualitative research (COREQ): A 32-item checklist for interviews and focus groups. *The International Journal for Quality in Health Care*, 19(6), 349–357. <https://doi.org/10.1093/intqhc/mzm042>
- United Nations. (2007). United Nations declaration on the rights of Indigenous peoples. <https://www.abs.gov.au/ausstats/abs@.nsf/mf/3238.0.55.001>
- Verna, A., Davidson, B., & Rose, M. (2009). Speech-language pathology services for people with aphasia: A survey of current practice in Australia. *International Journal of Speech-Language Pathology*, 11(3), 191–205. <https://doi.org/10.1080/17549500902726059>
- Vogel, A., Maruff, P., & Morgan, A. (2010). Evaluation of communication assessment practices during the acute stages post stroke. *Journal of Evaluation in Clinical Practice*, 16(6), 1183–1188. <https://doi.org/10.1111/j.1365-2753.2009.01291.x>

- Watts, E., & Carlson, G. (2002). Practical strategies for working with indigenous people living in Queensland, Australia. *Occupational Therapy International*, 9(4), 277–293. <https://doi.org/10.1002/oti.169>
- Wilson, A., Kelly, J., Jones, M., O'Donnell, K., Wilson, S., Tonkin, E., & Magarey, A. (2020). Working together in Aboriginal health: A framework to guide health professional practice. *BMC Health Services Research*, 20(1), 601. <https://doi.org/10.1186/s12913-020-05462-5>
- Worrall-Carter, L., Daws, K., Rahman M, A., MacLean, S., Rowley, K., Andrews, S., MacIsaac, A., Lau, P. M., McEvedy, S., Willis, J., & Arabena, K. (2016). Exploring Aboriginal patients' experiences of cardiac care at a major metropolitan hospital in Melbourne. *Australian Health Review*, 40(6), 696–704. <https://doi.org/10.1071/AH15175>
- Wotherspoon, C., & Williams, C. (2019). Exploring experiences of Aboriginal and Torres Strait Islander patients admitted to a metropolitan health service. *Australian Health Review*, 43(2), 217–223. <https://doi.org/10.1071/AH17096>
- Yashadhana, A., Fields, T., Blitner, G., Stanley, R., & Zwi, A. (2020). Trust, culture and communication: Determinants of eye health and care among Indigenous people with diabetes in Australia. *BMJ Global Health*, 5(1), 5(e001999). <https://doi.org/10.1136/bmjgh-2019-001999>
- Yin, R. (2009). *Case study research design and methods* (4th ed.). SAGE.