Developing a community rehabilitation and lifestyle service for a remote Indigenous community

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Abstract

Purpose: Community rehabilitation is an essential health service that is often not available to remote Australians. This paper describes the first cycle of a collaborative project, between local community members, allied health professionals and a university, to co-design a community rehabilitation and lifestyle service to support adults and older people to stay strong and age well in place.

Methods: An action research framework was used to develop the service for adults in two remote communities, one being a discrete Aboriginal community. The first cycle involved planning for, and trialling of a service, with observations, reflections and feedback from clients, community members, university students and health service providers, to inform the subsequent service.

Results: Over two years, stakeholders worked collaboratively to plan, trial, reflect and replan an allied health student-assisted community rehabilitation service. The trial identified the need for dedicated clinical and cultural supervision. During replanning, three key elements for culturally responsive care were embedded into the service: reciprocity and yarning; holistic community-wide service; and Aboriginal and Torres Strait Islander mentorship.

Conclusions: An action-research approach to co-design has led to the establishment of a unique community rehabilitation service to address disability and rehabilitation needs in two remote Australian communities.

Keywords: Aboriginal, Torres Strait Islander, First Nations, allied health, rehabilitation, community rehabilitation, rural, action research, cultural safety.

Implications for Rehabilitation

- Co-design of community rehabilitation services between Aboriginal and Torres Strait Islander community members and local allied health professionals can lead to development of an innovative service model for remote Aboriginal communities.
- Culturally responsive community rehabilitation services in Aboriginal and Torres Strait Islander communities requires holistic and community-wide perspectives of wellbeing.
- Incorporating Aboriginal and Torres Strait Islander ways of engaging and communicating, and leadership and mentorship for non-Indigenous allied health professionals and students are essential components for students-assisted culturally responsive services.

Introduction

Enabling individuals to optimise their physical, cognitive and emotional health and wellbeing is one of society's greatest challenges. To meet that challenge, community rehabilitation services aim to improve or maintain function and promote quality of life for children with developmental disorders, adult conditions such as stroke or cardiac event or with deterioration due to aging. [1] Community rehabilitation services are readily available in metropolitan areas [2] however, people living in remote communities throughout Australia have very limited access to community rehabilitation services, despite the WHO recommendations for disability services to be available for all. [3] This is in part due to the limited number and fluctuating availability of allied health professionals that usually provide these services. [4, 5] This is particularly evident in Northern Australia, a very sparsely populated area that includes a high proportion of Indigenous people. Consequently, in these communities, services are commonly fragmented, sporadic and inflexible to demand, in part due to inflexible organisational policies [6].

The need for community rehabilitation and disability services in remote Indigenous communities is largely undocumented. [7] However, Indigenous Australians, who make up 18% of remote and 47% of the very remote population living in Australia, are up to 2.9 times more likely than non-Indigenous Australians to have a disability or restrictive long-term health condition and need assistance with self-care, mobility or communication.[8] Long-term disability affects almost half (45%) of Indigenous Australians who are at greater risk of disability earlier in life due to the high rates of chronic disease, infectious diseases, accident related trauma and injury from substance use.[9, 10, 11] Generally, age-related conditions affect Aboriginal and Torres Strait Islander people at a younger age than non-Indigenous Australians. For example,

111 the rate of dementia in people aged 45+ years is five times higher for Aboriginal and
112 Torres Strait Islander people, than for the Australian population overall. [12, 13]
113 Furthermore, the experience of disability is known to increase with increasing
114 remoteness. [14]

115 Allied health professionals (AHPs) working in rural communities across
116 Australia have reported being unable to support demand for rehabilitation and disability
117 services.[15] Innovative models of rehabilitation service delivery in remote and
118 resource poor communities within Australia have explored the use of Community
119 Rehabilitation Assistants [16], allied health assistants and Community-Based
120 Rehabilitation (CBR). [2, 17, 18, 19] The translation of this research and other
121 innovative models however, have not achieved widespread application and considerable
122 work is required to develop sustainable models for remote Australia.[20] Lastly, other
123 models such as student-assisted or implemented rehabilitation services have been
124 trialled in other regional and rural areas within Australia.[21, 22, 23] This is an
125 emerging field of practice that requires ongoing evaluation of the feasibility,
126 acceptability and effectiveness of student-assisted models.

127 Evidence of implementation and evaluation of community rehabilitation models
128 that are sustainable, culturally responsive, acceptable, accessible and effective in remote
129 Australia is limited though emerging.[19, 24, 25, 26, 27] There is considerable research,
130 however, drawing on client, family and community perspectives on what culturally
131 responsive disability, aged care and rehabilitation services may look like, building the
132 evidence for a change in current practice. [6, 26, 27, 28, 29, 30] Culturally safe service
133 provision for Indigenous people requires a philosophical shift in practice away from a
134 biomedical, neoliberal discourse on health provision to one that positions an Indigenous
135 perspective of health, which is holistic and collective, at the centre.[31, 32]

Cultural safety is central to effective health care. Developed by Maori nurse Irihapeti Ramsden, its tenet is challenging issues of power, in knowledge and other inherent power relations in health service provision [33]. Ramsden theorised that health care provision for all peoples need to recognise and work with a person's humanity in their unique culture. Cultural safety shines the spotlight on non-Indigenous practitioners to reflect on the self, the rights of others (Indigenous people), the legitimacy of difference, and its application to all relationships and structures in developing a culturally safe workforce and safe service delivery. [33]

Researchers and clinicians often recognise the need for culturally safe practice to reduce health inequities between Indigenous and non-Indigenous Australians [34, 35] but stop short of documenting the daily practices to support this.[34, 36] A recent scoping review on cultural competence in rehabilitation services identified key facilitators for service provision including increasing cultural awareness amongst clinicians (e.g. recording cultural diversity, encouraging reflective practice), fostering a culturally competent work environment (e.g. diverse workforce, flexible appointment time and place, partnering with cultural organisations) and supporting the navigation of the health system.[35] Barriers to access rehabilitation services or therapy for Indigenous people have been reported as transport to services, unwelcoming clinic space and family obligations.[25, 37] In Australian mainstream health services, the responsibility for the delivery of culturally safe services is embedded in the role of Aboriginal Health Workers.[38] This sense of responsibility by Aboriginal Health Workers for ensuring services are safe and accessible has been reported previously, they become 'everything to everybody'.[38] However, a culturally safe service, particularly in remote Indigenous communities, will require a more structural change of practice, where the provision of culturally safe services is embedded in the inception of every

aspect of service development, design, delivery and evaluation. The current practice of positioning one group of people (Aboriginal Health Workers) to be responsible for this change potentially absolves the rest of the service from taking responsibility for meeting this requirement.

To address the lack of culturally safe and accessible community rehabilitation services, community members in two remote Northern Australian communities collaborated with allied health professionals and a university to develop a locally based community rehabilitation and lifestyle service. This project is the outcome of engagement and discussions between stakeholder groups and individual community elders who identified the need to support older people to age well in community.

Indigenous research framework

This project was the result of people and organisations coming together to explore a better way to support adults and older people to live a strong and healthy life. While community consultation was an integral part of this project from the outset, the project was initially dominated by non-Indigenous researchers and health service providers, creating a power imbalance rooted in colonial structures. Recognising the risk of developing a service that would fit a western world view of health service delivery, changes were made to align the research with an Aboriginal Research Framework [39]. This approach incorporates a Strengths-based Approach [40] to explore the capacity and resilience within the communities to improve the health and wellbeing of the whole community. This included leadership by Aboriginal researchers in the research team at both the academic and community level, representation of the diversity of Indigenous people within the community, and the impact on colonisation on the social determinant of disability.

The purpose of this paper is to describe the first cycle of the development of this service. The aim of the first cycle was to explore the opportunity for, a culturally-responsive community rehabilitation service for the two remote northern Australian communities.

Methods

Study Design

A mixed-method action research approach was employed to develop a co-designed community rehabilitation service. Action research is a participative methodology, which aims to facilitate innovation and change.[41] It is increasingly been used in healthcare as a process-oriented approach to problem solving complex, systems-based, health service issues.[41, 42] The action research process entails an iterative cyclical process of planning, acting, observing, reflecting and replanning, where findings are fed back to stakeholders to inform decisions about subsequent stages of the study.[42]

The focus of this paper is on the first action-research cycle as follow: (figure 1): i) planning –formation of a stakeholder group, community consultation, and development of an innovative service model. ii) trialling of the service whilst observing, reflecting and obtaining feedback from all stakeholders on the acceptability and feasibility of the service model. iii) replanning the service based on the trial experience.

For the purpose of this project, community rehabilitation was defined as ‘a process that seeks to equip, empower and provide education and training for rehabilitation clients, carers, family, community members and the community sector to take on appropriate roles in the delivery of health and rehabilitation services to achieve enhanced and sustainable client outcomes’. [43] Although elements of community-based rehabilitation are reflected in the project, CBR was not the underpinning

philosophy. [44] Instead we focused on a culturally responsive approach to address the needs of the community by drawing on the Indigenous Allied Health Australia (IAHA) framework.

Guiding Principle - Cultural Safety

The Indigenous Allied Health Australia (IAHA) cultural responsiveness framework [45] was used as the guide for embedding culturally responsiveness into the service. IAHA asserts that "cultural responsiveness has cultural safety at its core", it aims to transform the way people practice by incorporating knowledge (knowing), self-knowledge and behaviour (being) and action (doing).[45]

The IAHA cultural responsiveness framework has three driving principles – Being, Knowing and Doing. and key capabilities; respect for the centrality of cultures, self-awareness, proactivity, inclusive engagement, leadership and, responsibility and accountability were explored and incorporated into the service philosophy and model.[45] The stakeholder group used an iterative process, involving constant reflection and rechecking of the service model.

The Aboriginal view of health, "not just the physical well-being of an individual but refers to the social, emotional and cultural wellbeing of the whole Community in which each individual is able to achieve their full potential as a human being thereby bringing about the total well-being of their Community",[46] was recognised as the key philosophy for the service.

Ethical approval was obtained from the Far North Queensland Human Research Ethics Committee (HREC/2018/QCH/46467 - 1291) with support from the local Aboriginal Community Controlled Health Service and local council.

Setting

This project was undertaken in two communities in Northern Queensland, Australia. These two communities are classified as very remote (Modified Monash 7) and are over 800km by road from the nearest regional centre [47]. The larger of the two communities (population 3500) has approximately 20% Indigenous residents and is a mining town. A small hospital functions as the 'hub' for local allied health services. The smaller of the two communities (population approximately 1000) is a discrete Aboriginal community that also has a significant Torres Strait Islander presence. The two communities are 10kms apart and are accessible to each other by road all year. The discrete Aboriginal community became the focus and 'hub' for the community rehabilitation and lifestyle service however, both communities had access to the newly developing service. At the commencement of the project, no additional financial resources were available to develop this project. Members of the stakeholder group used existing resources within their facilities to participate, demonstrating a genuine commitment for change by all parties involved.

Stakeholder Group

This project was a collaboration between the key stakeholder organisations: local health services, Aboriginal community council services, community organisations such as the Police-Citizens Youth Club (PCYC), and the local University Department of Rural Health (UDRH). A stakeholder group with representation from all collaborating organisations was established to guide the development and implementation of the service and to provide oversight of the entire project. Consisting of both Indigenous and non-Indigenous people, the members of the stakeholder group who all lived and worked within the region, included: allied health staff employed by the state government health

service; the manager and health staff employed by the local Aboriginal Community Controlled Health Service; the managers of key community organisations (PCYC and the Aged and Disability Services); executive members of the Regional Council; and, a researcher and student co-ordinator for the UDRH. Mentorship and supervision for the project was sought from experienced researchers and rehabilitation clinicians across Northern Australia.

The stakeholder group provided the formal process of community consultation and engagement. In addition, informal engagement was constantly used by all members of the stakeholder group to explore ideas and receive feedback from a large number of community members, including students, health staff and clients. This included community members with disabilities and frail age and their carers, support workers from various organisations, disability service providers, representatives from other community organisations such as the local church, community elders, and non-allied health primary care health providers.

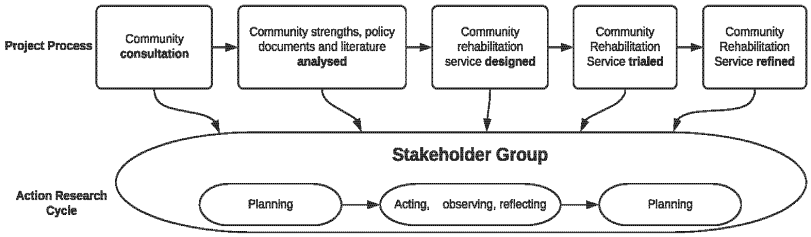
The procedure for informal feedback and adjustment to service delivery during this time was iterative and constant requiring a fluidity of service development and management. Collation of this process was formally feedback to the stakeholder group at the end of the service trial period. Successes and challenges of the trial were discussed and documented. The stakeholder group then determined key areas for service improvement and redesigned the service accordingly.

Project Procedure

The project planning, action, reflection and replanning process is illustrated in figure 1. The planning process for the service model consisted of formal stakeholder meetings where members discussed their experiences of rehabilitation services, including

findings in the scientific literature and key policy documents on rehabilitation services and healthy aging; explored community strengths for supporting healthy aging; and provided feedback from their informal community consultations. The formal stakeholder group meetings initially occurred monthly, then transitioned to a minimum of three times a year. Informal engagement across the stakeholder group and the wider community was constant and fluid. Through yarning and informal conversations, members of the stakeholder group explored other community member's ideas, aspirations, experiences and preferences for rehabilitation and healthy aging services. Yarning is a storytelling process, grounded in Indigenous methodology, for developing a shared understanding between researcher and participant, [32] and in this case, a shared understanding with members of the stakeholder group and the broader community. Information gathered between stakeholder meetings was collated by the PI and presented to the stakeholder group during formal meetings, and included in the minutes for each meeting.

Figure 1: Procedure and action-research steps described in this project.



Results

Planning: Reviewing literature, identifying community strengths, developing a model

Reviewing literature: Members of the stakeholder group reviewed the key strategies to achieve healthy aging outlined in the National Aboriginal and Torres Strait Islander Health Plan 2013-2023. [48, 49] The underlying principles for the rehabilitation service were derived from these strategies [49], the six key capabilities identified in the IAHA culturally responsive framework, [45] and previous research exploring key elements for successful rehabilitation services in remote Indigenous communities. [19, 25, 26, 27, 29] These documents and the feedback from the wider community consultations were used to develop three key principles for the service which included; ongoing and consistent community engagement, community-based and culturally responsive care, and flexible service delivery.

The strengths of existing community resources were explored, recognising the current efforts being made by each of the contributing stakeholders to support healthy ageing. Such efforts included delivery of primary health care services, existing partnerships between allied health staff and local aged and disability services, health service partnerships with the local UDRH to support allied health student placements, social activity programs run by local aged and disability service, and PCYC funding to support recreation across the lifespan.

Components of the community rehabilitation service model

During the planning process the opportunity for an allied health student-led community rehabilitation service was discussed and considered a feasible option. Local government health services and the local UDRH agreed to arrange for allied health students

(physiotherapy, occupational therapy, social work, dietetics and speech pathology) to complete university clinical placements in the two remote communities. Student placements ranged from 5-14 weeks in length, and a portion of the student's time (up to 3 days/week) could be dedicated to providing a student-assisted rehabilitation service, a process successfully trialled elsewhere.[22, 50, 51]

Local allied health professionals agreed to provide supervision of students using an inter-professional model of supervision depending on which allied health profession was available to supervise the students on any given day. This model also involved students receiving discipline-specific placement opportunities and supervision while they were not providing the community rehabilitation service and at least once a week their discipline supervisor provided the community rehabilitation supervision.

To support a trial of a student-assisted service, the community aged and disability service, run by the Regional Council as well as the residential aged care service, recognised an opportunity to 'host' the service. These community organisations became the base for the allied health professionals and students providing community rehabilitation. This meant allied health professionals and students could work alongside the support workers at the aged and disability service and aged care facility to provide individual and group rehabilitation services in a way that it would be embedded in the community. Students completed mandatory online cultural awareness training prior to arriving on site. During their first week they received up to three hours of local cultural awareness training from an Indigenous Liaison Officer, based at the local health service. Students had weekly formal Interprofessional Education Sessions that included cultural mentoring from a local Aboriginal and/or Torres Strait Islander Health Workers or the Indigenous Liaison Officer.

Support also came from health services for local Aboriginal and/or Torres Strait Islander Health Workers based at the primary health care clinics to act as key personnel for students in the role of 'cultural brokers' [38], supporting students to engage with clients in their homes or in community spaces external to the residential and aged care disability service.

Delivery of services

A decision was made by the stakeholder group that anyone in the community was able to refer to the service including self-referral. Once a referral was received, engagement of clients in the service involved three stages; an engagement phase, therapy phase, and review phase. The engagement phase involved introducing the client to the service, to the allied health professionals and students followed by completion of an allied health assessment, a quality of life measure, and goal setting with the client.

During the therapy phase, the client participated in a service that was tailored to suit their needs and goals. Goals varied and included; throwing a fishing cast net off the beach; shopping independently; remain living at home. Therapy involved a mix of individual and group sessions, including (but not limited to) balance and mobility activities, upper limb activities, social engagement and cognitive maintenance, with the intensity and duration of therapy dependent on client needs, wishes, goals and progress. The service was delivered wherever was most appropriate for the client and this included, in the community, at the client's homes, recreational areas (e.g. beaches), shops and community meeting places.

During the review phase, the client's goals and quality of life measures were reviewed, and then the client would decide if they wanted to continue with the service or be discharged. Clients were welcome to re-engage with the service at any time.

Group rehabilitation sessions, such as balance and mobility groups, were open groups, allowing people without a formal rehabilitation plan to attend.

Acting, Observing and Reflecting: Delivering the service, gathering, presenting and discussing feedback.

The student-assisted service was trialled for a six-month period between July and November 2018. The successes and challenges of providing the student-assisted community rehabilitation and lifestyle service three days/week were explored by the stakeholder group. Dietetics, occupational therapy and social work students were available to be involved, with the shortest placement being seven weeks. Using a collaborative framework, the local allied health professionals coordinated their time to provide interprofessional supervision to the service, relying on the Aboriginal and/or Torres Strait Islander Health Workers to support home visits and the host organisations to provide the environment for group and individual therapy for their clients and residents.

Successes that were reported during stakeholder meetings included clients and their families being very receptive to the service, reporting to the Aboriginal and/or Torres Strait Islander Health Workers they enjoyed the students company and the support they gave them. Allied health staff were of the opinion that the students were offering a proactive approach to health and wellbeing and there was great potential with the service model. Students reported feeling more confident in managing caseloads independently and working in a culturally diverse environment.

Challenges reported in stakeholder meetings focused on for the need for more adequate cultural and professional supervision of the students who were implementing the service. Allied health staff were supervising the students as well as trying to manage a full acute caseload at the local hospital as well as outreach services to neighbouring

communities. This was considered unfeasible by the allied health team if the service was to be a continuous service (as requested by the community) without greater resources. Likewise, the local primary health care clinics experienced a significant reduction in their Aboriginal and/or Torres Strait Islander Health workforce during the trial period, creating a challenge for the students and staff to continue to provide services outside of the 'host' organisations (e.g. home visits). Although the Aboriginal and/or Torres Strait Islander Health Workers were supportive of the service trial, it increased their workload which raised obvious sustainability issues.

There was also challenges around the process for delivery of services. Initially, a locally developed allied health comprehensive assessment was used, based on the WHO International Classification for Functioning, Disability and Health (ICF) [52] framework. Use of a resource that was based on the ICF was initially seen as important for novice clinicians (e.g. students) to improve their comfort to lead discussions with clients. Consistent with previous findings however, we found that the ICF had considerable limitations in aiding clinicians to interpret the Indigenous context and the impact of colonisation on the experience and understanding of disability. [53] Despite the best intentions on how the assessment form should be used (flexibly) it quickly became clear that its use led to a structured assessment process that only reinforced perceptions of asymmetric power relations and did not support a culturally responsive service.

Replanning: Identifying changes required to service model, planning for sustainability.

After the initial service trial, the stakeholder group confirmed their commitment to continue to develop a local service model. Informed by the challenges, recommendations for changes to the service model were developed. These

recommendations included:

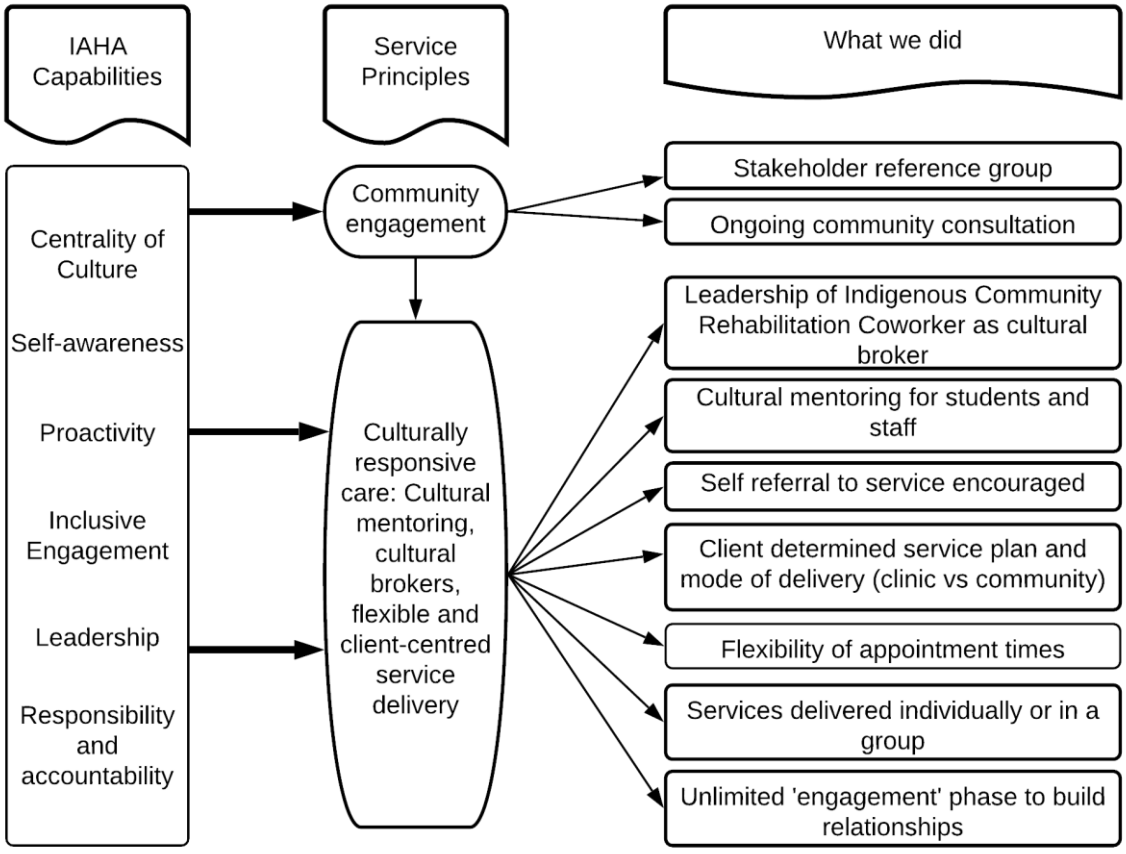
(1) Providing adequate clinical and cultural supervision.

(2) Adapting clinical processes to support culturally responsive care.

To provide adequate clinical and cultural supervision and support for the service, the stakeholder group recommended the appointment of a dedicated allied health rehabilitation supervisor, and a local Indigenous community rehabilitation co-worker (assistant). The role of the allied health rehabilitation supervisor was to provide overall management of service referrals and patient flow, supervision of students while they were working in the community rehabilitation and lifestyle service, development of clear documentation guidelines for students, facilitation of a weekly student multi-disciplinary team meeting and interprofessional education (IPE) sessions. All students also received discipline-specific supervision from local allied health staff. The role of the Indigenous community rehabilitation co-worker was to support the process of cultural brokerage for the students and allied health supervisor, formal weekly cultural mentoring within the student multi-disciplinary team meetings and IPE sessions, and informal cultural mentoring through role modelling communication styles, advising of any community or family barriers to clients accessing the service. It was anticipated that the Indigenous community rehabilitation co-worker would undertake a formal allied health assistant certificate or similar education to allow greater delivery and supervision of clinical practice as the service developed. Both of these positions were responsible for the continuation of the clinical service in between student placement blocks. This was to provide continuity of care for clients, families, other service providers and community organisations.

Application for funding for the new positions and supporting infrastructure (eg. mobile phones, therapy consumables, and vehicle) were made to the local Primary Health Network (PHN) to improve sustainability of the service. Once the application for funding and recruitment to both positions was successful, the stakeholder group confirmed their commitment to the service and reinforced the importance of culturally responsive care, and flexible service delivery in the local community (Figure 2). The newly appointed allied health rehabilitation supervisor and Indigenous community rehabilitation co-worker undertook considerable consultation and planning to ensure these principles alongside community engagement were upheld.

Figure 2: Application of IAHA Capabilities [45] to the service principles and service model.



The adaption of clinical processes to support culturally responsive care focused on promoting reciprocity between the students and the clients, their families and the wider community. This included adapting student communication with clients to a yarning approach and allowing for an extended client engagement phase. This approach reframed the initial assessment phase to a story-telling communication style where allied health professionals and students have equal responsibility to share stories about themselves and the service to build reciprocity within the relationship. Orientation of new students to the model was redesigned to focus on students developing their own stories and introduction to yarning. All three key elements of clinical yarning (social, diagnostic and management) [25, 54] were incorporated into this new process, aimed to build a trusting therapeutic relationship, explore client priorities for their therapy, identify students skills and knowledge that might be beneficial, and develop a collaborative, shared plan.

Honouring the philosophy of holistic and collective wellbeing, meant the service had to expand to incorporate a community wide approach. Consistent with the IAHA cultural responsiveness framework this involved members of the stakeholder reference group conducting multiple informal community meetings to discuss priorities for the community, and to identify barriers and facilitators for people experiencing frail age and/or disability participating in community activities. From this broad consultation, key community organisations worked with the community rehabilitation service to identify ways people with disability could engage with their service and ways the community organisations could support healthy aging. The process for each organisation was different depending on the organisation, the activities they undertook, and the needs of the clients or families.

Discussion

Rehabilitation is a fundamental health intervention for people living with conditions that are associated with disability. [3] There is considerable literature highlighting the need for innovative models of care for rehabilitation and disability services for remote communities in developed countries like Australia, where maldistribution of the health workforce and inadequate allied health service models for remote communities, create service inequity. [5, 6, 20, 24] While the complexity of providing responsive and timely health care to diverse, remote and sparsely populated regions of Australia has resulted in various models of service, there is limited documented evidence to support the impact of these services on the health and wellbeing of the clients and their families. [20, 24] Clearly, there is an undeniable need for evidence-informed, culturally safe rehabilitation services for remote communities. [24, 35, 55] Hence, this paper details the first cycle of an action-research process, for the development and evaluation of a community rehabilitation and lifestyle service in two remote communities in northern Australia.

The co-design of the service that is the subject of this paper emerged from an amalgamation of learnings from a range of sources (community consultation, government policy, scientific literature, local Indigenous knowledge, IAHA framework and student-assisted services) to develop a unique and culturally responsive service for the communities for which it has been designed. What emerged from the co-design community development process was the centrality of cultural responsiveness, with the Aboriginal view of health at the heart. This centrality of culture sits above any other professional ideology or evidence base. To achieve this, all six areas of the IAHA framework [45] were incorporated into the service design (Figure 2). In addition, through continuous informal consultation, the inclusivity of the community in the initial

design, reflection and redesign of the service was prioritized, elements are identified in competencies developed for CR practitioners [56]. This process was possible due to the stakeholder group living and working in the communities concerned, being able to connect with community members regularly about their experiences. Changes resulting from the service trial also led to further embedding of all elements of the IAHA framework [45] (brackets denote the main connection to the framework): yarning and reciprocity in relationships (respect for centrality of cultures); community-wide service philosophy and provision (inclusive engagement); and the employment of an Indigenous community rehabilitation co-worker as a cultural mentor and broker (leadership and self-awareness). This is unique in allied health (and most mainstream remote health services) where cultural safety is often an afterthought to the design or delivery of a service. [35]

The co-design process in this instance enabled the allied health professionals and students to reframe clinical processes (such as the initial assessment phase), to challenge the privileged discourse of the allied health professionals and students.[57] This introduced an Indigenous standpoint on disability [53] into the daily discourse of how, when and why a primarily Western-model for a community rehabilitation service could support inclusivity, and improve outcomes for Indigenous people experiencing disability. The importance of yarning and the equal responsibility of two parties (student or allied health professional and client and family) to share stories about themselves and the service to demonstrate reciprocity within the relationship is considered essential in the provision of culturally responsive health care and other community-organisation partnerships.[32, 54, 58] Sharing knowledge (*sharing together*) and developing mutual understanding is imperative to building strengths-based approaches to what living a good life means.[59] This requires much greater time with clients and their families

than typically afforded to allied health professionals working in remote communities. [60] This co-design process took two years, much longer than most project or research funding allows and short-term funding initiatives do not usually support the time required for this work. Considerable in-kind funding was provided in time and resources to develop the relationships needed to initiate and progress this genuine co-designed service. It is not difficult to anticipate the challenge this raises for the development and ongoing funding of a service such as this one.

Through an action research process, the innovative student-assisted allied health service design that has been generated has been supported with funding for a two year period. This funding will enable appropriate clinical and cultural supervision and continuity of service provision. Formal discipline-specific supervision, clinical and cultural mentorship and support as well as community and 'host organisation' support have all been recognised as essential to developing student services. [61, 62] Funding beyond the two year period will be dependent on a fit-for-purpose evaluation that is able to demonstrate the value of the service to the community, the students and to the funding bodies.

The unique evolution of this service poses a significant challenge. The collective and holistic approach taken to design and delivery of disability services stands in contrast to the NDIS, the individualized funding approach taken by the Australian Government and the primary funding source for remote disability and rehabilitation services.[63] Maintaining the philosophy of the service and the intentions of community capacity building, while ensuring Indigenous people can access and benefit from current funding structures such as the NDIS, will challenge local health services and funding bodies to consider their responsibility to support communities to determine the services that best fit their needs. [6]

Conclusion

The development of community rehabilitation service models that are feasible in remote communities is complex, particularly in Indigenous remote communities where cultural safety is essential. This work requires a flexible approach to support a continuous cycle of trialing ideas to gain consensus on what works for the community, the clients, their families and the health services and other agencies that support them. This service, based on the co-design described in this paper is currently being implemented and evaluated under the next action research cycle.

Terminology

The term 'Indigenous people' is used, respectfully, in places in this paper to refer to the Aboriginal and Torres Strait Islander peoples or First Nations people of Australia.

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Figure 1: Procedure and action-research steps described in this project.

Figure 2: Application of IAHA Capabilities [45] to the service principles and service model.

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