

Indigenous Community-Directed Needs Assessment for Rehabilitation Therapy Services

Matthew Reichert, Rebecca Sawatsky, Rick Favel, Gail Boehme, Lorna Breitzkreuz, Kristal Dickie & Stacey Lovo

To cite this article: Matthew Reichert, Rebecca Sawatsky, Rick Favel, Gail Boehme, Lorna Breitzkreuz, Kristal Dickie & Stacey Lovo (2023) Indigenous Community-Directed Needs Assessment for Rehabilitation Therapy Services, International Journal of Circumpolar Health, 82:1, 2183586, DOI: [10.1080/22423982.2023.2183586](https://doi.org/10.1080/22423982.2023.2183586)

To link to this article: <https://doi.org/10.1080/22423982.2023.2183586>



© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 27 Feb 2023.



Submit your article to this journal [↗](#)



Article views: 1079



View related articles [↗](#)



View Crossmark data [↗](#)

Indigenous Community-Directed Needs Assessment for Rehabilitation Therapy Services

Matthew Reichert^a, Rebecca Sawatsky^a, Rick Favel^b, Gail Boehme^b, Lorna Breitzkreuz^b, Kristal Dickie^b and Stacey Lovo^a

^aSchool of Rehabilitation Science, University of Saskatchewan, Saskatoon, SK Canada; ^bAll Nations Healing Hospital & File Hills Qu'Appelle Tribal Council Health Services, Fort Qu'Appelle, SK Canada

ABSTRACT

The eleven Indigenous communities served by the File Hills Qu'Appelle Tribal Council (FHQTC) in Saskatchewan, Canada have experienced a progressive reduction in access to physical and occupational therapy services. A community-directed needs assessment facilitated by FHQTC Health Services was undertaken in the summer of 2021 to identify experiences and barriers of community members in accessing rehabilitation services. Sharing circles were conducted according to FHQTC COVID-19 policies; researchers connected to community members via Webex virtual conferencing software. Community stories and experiences were collected via sharing circles and semi-structured interviews. Data was analysed using an iterative thematic analysis approach with NVIVO qualitative analysis software. An overarching theme of culture contextualised five primary themes: 1) Barriers to Rehabilitation Care, 2) Impacts on Family and Quality of Life, 3) Calls for Services, 4) Strength Based Supports, and 5) What Care Should Look Like. Each theme is comprised of numerous subthemes amassed by stories from community members. Five recommendations were developed to enhance culturally responsive access to local services in FHQTC communities: 1) Rehabilitation Staffing Requirements, 2) Integration with Cultural Care, 3) Practitioner Education and Awareness, 4) Patient and Community-Centered Care, and 5) Feedback and Ongoing Evaluation.

ARTICLE HISTORY

Received 5 December 2022
Revised 2 February 2023
Accepted 17 February 2023

KEYWORDS



Indigenous; rehabilitation; needs assessment; physical therapy; occupational therapy

Introduction

Indigenous Canadians have a right to health and wellness, as established in the signing of the Numbered Treaties [1]. In Canada, the social and health inequities borne by Indigenous Peoples are deeply rooted in the nation's colonial context [2]. The cultural genocide spawned from European colonisation, facilitated by systems like residential schools and perpetuated by policies like the Indian Act have had long-lasting impacts on traditional Indigenous health systems [2,3]. Race-based legislation such as the Indian Act has allowed the entrenchment of racism into government institutions including healthcare systems, which has profoundly impacted the health and wellbeing of Indigenous Peoples across Canada [2]. The health disparities experienced by Indigenous Canadians are also inextricably linked to social and political determinants of health including racism, discrepancies in rates of poverty, suicide, substance abuse, employment, level of education, physical activity, and access to clean

drinking water between Indigenous and non-Indigenous Canadians [2,4,5].

Indigenous Peoples make up 16.7% of the population in the province of Saskatchewan, Canada [6]. The population of Indigenous Peoples is expected to grow drastically across the country in the coming decades [7]. In a historical context characterised by the stripping away of cultural practices by colonial forces, the research clearly indicates that Indigenous culture, tradition, and ways of knowing have profound benefits to health and wellness both at individual and community levels [4,8,9]. Indigenous Peoples have known this for centuries. The notion of "culture is good medicine" is also congruent with the principle of health sovereignty, inherent to Indigenous Peoples and granted by the Creator. This was recognised in the signing of the treaties, that the Crown and First Nations "agreed that their citizens would not only survive but prosper ... " [3,10]. Indigenous culture is the primary framework

CONTACT Stacey Lovo  stacey.lovo@usask.ca  School of Rehabilitation Science, University of Saskatchewan, Saskatoon, SK Canada
This article has been republished with minor changes. These changes do not impact the academic content of the article.

© 2023 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited. The terms on which this article has been published allow the posting of the Accepted Manuscript in a repository by the author(s) or with their consent.

for community and individual wellness, whereas Western health systems prioritise illness [11].

In the year 2015, the Truth and Reconciliation Commission of Canada (TRC) released 94 Calls to Action intended to guide the process of reconciliation within Canada in a post-residential school era [1,12]. The report is grounded in the truth that the Canadian Government sought to assimilate Indigenous Peoples and their culture so that they would no longer exist as a legal, social, religious, or racial entities within the country. This is now best described as “cultural genocide”. The TRC defines reconciliation as an ongoing process of developing respectful relationships with Indigenous and non-Indigenous peoples. It involves acknowledgement of the past and the harms inflicted, atonement for the causes, and action to incite real societal change [1].

The File Hills Qu’Appelle Tribal Council (FHQTC) serves 11 First Nations in the Treaty Four Territory of Saskatchewan, Canada. All Nations Healing Hospital (ANHH) is a multi-stakeholder agency which offers integrated primary, acute and outpatient care services to their communities. FHQTC and ANHH follow a community directed and engaged approach to health delivery, based on a cultural care framework. Ceremonial processes guided by a Traditional Knowledge Keeper are the foundation for health systems and all major events. The cultural care philosophy of health services is based on honouring the Treaty Right to Health ensured in the signing of Treaty 6 [10]. The communities which FHQTC and ANHH support have experienced a steady decline in access to physical (PT) and occupational therapy (OT) services in recent years. The region’s therapy services are currently provided by Saskatchewan Health Authority (SHA) PTs and OTs that travel to rural areas. In Saskatchewan, 33% of the total population live in rural regions such as these communities [5]. Meanwhile, as of 2020, only 5.8% of Saskatchewan’s PTs and 8.0% of OTs identify as working in rural or remote settings [13,14]. As a result of the shortage of therapies, most of the outpatient care in the 11 FHQTC communities is accessed from the urban centre of Regina [15].

Physical therapists are autonomous, primary care practitioners whose practice is underpinned by holistic and evidence-based assessment and treatment. PT treatment considers an individual’s entire health, living, and mobility context and aims to promote physical independence in a patient’s day-to-day functioning. PT services are beneficial to clients of all ages in a variety of specialised settings, such as paediatrics, geriatrics, oncology, women’s health, pain, critical care, wound care, occupational health, and sports medicine [16].

Occupational therapists practice healthcare which specialises in solving problems related to function. This is commonly pertaining to daily self-care, productivity, and leisure. OTs practice in a variety of settings, including home care, community clinics, hospitals, long-term care facilities, among many others. They are also highly specialised in holistically understanding and treating the psychosocial factors related to disability [17,18]. FHQTC and ANHH identified a need for increased PT and OT services in their region to address numerous health inequities experienced by the Indigenous Community members that they serve. The purpose of this needs assessment is to summarise the impacts of health inequities collaboratively with the Indigenous community members of FHQTC in order to inform needs for rehabilitation including PT and OT services in the All Nations Healing Hospital and surrounding communities to ensure a locally informed, culturally responsive practice.

Materials & Methods

In 2021, FHQTC Health Services and ANHH collaborated with the University of Saskatchewan’s School of Rehabilitation Science (SRS) to conduct a community-directed needs assessment for PT and OT services in the FHQTC Health Services portfolio. FHQTC Executive Council and the Board of Directors of ANHH provided community approval to proceed with the assessment. Knowledge Keeper guidance was critical throughout the process. Ethics exemption was received from the University of Saskatchewan Behavioural Ethics Board (Letter of Exemption E174, April 2021). Principles of Ownership, Control, Access and Possession (OCAP) were followed throughout this process [19]. This ensured that personal and community information collected, analysed, and discussed from this project was under direction of the community partners. The project team, including researchers, All Nations Healing Hospital (ANHH) and File Hills Qu’Appelle Tribal Council (FHQTC) Health Services, signed a contract confirming this intent. Sharing circles were the primary method of data collection and were held in the summer of 2021. Due to public gathering restrictions imposed during the COVID-19 pandemic, sharing circles were held within communities, using social distancing and with participants wearing masks, in accordance with FHQTC COVID-19 policies. The sharing circle format was held as per the communities’ cultural protocols. This method allowed a conversational format with participants, who were connected within their communities in FHQTC and connected with the ANHH [20,21]. In keeping with the community and health board

protocols for community-directed needs assessments, consent was discussed openly with all participants prior to sharing circles and interviews, to ensure time for participation and inquiry about the process. The SRS research team members (MR, SL) joined remotely using Webex virtual technology in keeping with University requirements for research during Covid-19 [22].

Recruitment of sharing circle participants was managed by FHQTC Health Services, Elders/Knowledge Keepers, and local community Health Directors. Circles within communities and ANHH were in person and managed by FHQTC/ANHH. FHQTC Health Services senior staff and an information technologist attended each circle to support the virtual connection to the researchers. Elders were gifted tobacco prior to sharing circles and began each circle with prayer. Sharing circle questions were co-created by the project team and vetted through the Executive Director of FHQTC Health Services and ANHH. Recruitment posters were utilised in community health facilities and the ANHH. Inclusion criteria were: 1) any community members who had accessed or needed rehabilitation services in the past or were presently seeking or having rehabilitation services, 2) family or other caregivers of people needing rehabilitation, 3) interprofessional health staff within FHQTC Health Services. There were no excluded participants, all who volunteered were able to participate. Due to Covid-19 and the need to ensure safety of participants, 3 semi-structured interviews were offered to ensure all who were interested had an opportunity to participate through assurance of social distancing. Sharing circles and semi structured interviews followed the same interview guide (Appendix A). Facilitators followed the lead of participant discussions. Seven sharing circles were held with members of the FHQTC communities and one sharing circle was held with health services staff from ANHH. Three key informant semi-structured interviews including a recipient of care and allied health professionals were also conducted. Interviewers (MR, SL) were trained in the same manner for conducting interviews. In total there were 38 participants.

Approximately 19 hours of recorded audio was captured and transcribed. Researchers (MR, RS and SL) utilised NVIVO qualitative analysis software with an iterative thematic analysis approach using open and axial coding to identify themes and connections between stories and experiences from sharing circles and semi-structured interviews [23]. Steps for analysis proceeded accordingly with those by Vasmoraidi et al, and Braun and Clark and began with familiarisation with the data [24,25]. Three researchers (MR, SL, RS) developed a coding scheme and conducted open

coding independently to identify codes in the transcripts and created nodes in NVIVO for the open codes. Themes and subthemes were identified in the codes and NVIVO nodes were generated in keeping with the themes and subthemes. The researchers then met with the community research team (RF, LB, GB) for two collaborative analysis working meetings and reviewed all theme and subtheme material. Axial coding allowed more clarification of themes [26]. Decision making for final themes as well as subthemes occurred using consensus and with Knowledge Keeper teaching. Rigour and validity were ensured via researcher training and use of consistent coding, multiple meetings with research and community team for consensus building [27]. The final themes that emerged are provided here.

Results

Culture formed the foundation for the five main themes: 1) Barriers to Rehabilitation Care, 2) Impacts of Family and Quality of Life, 3) Calls for Services, 4) Strength Based Supports, 5) What Care Should Look Like (Figure 1 and Figure 2).

Culture

In Treaty Four FHQTC communities, all important events begin with traditional processes such as gifting of tobacco and cloth, as well as prayer. Traditional Knowledge Keepers advise on all ceremonial processes in communities and are guided in their knowledge by the Creator. One Knowledge Keeper shared:

“With our traditional ceremonies, we know that they work with contemporary healing practices that didn't necessarily exist. And that's why this hospital was built, is these old men knew back in early 90's that you could make it work, could make it work with both contemporary and traditional healing practices. And the structures that govern us for millions of years called ceremonies, and we have our medicine institute, all these different institutes that we still practice, that they're available out there for the people ...”

It was clear from the stories shared by participants that trust in the health care setting is dependent upon relationship building. The importance of patience and listening to culture was apparent, as was emphasised by this healthcare provider:

“And listen to the stories too. We're [health providers] all busy and you go out to communities and you have to see x number or people and whatever, you think this isn't good time management if I'm not seeing [more numbers of patients], you know. But just sitting and listening and visiting, they're sharing for a reason. If someone's sharing

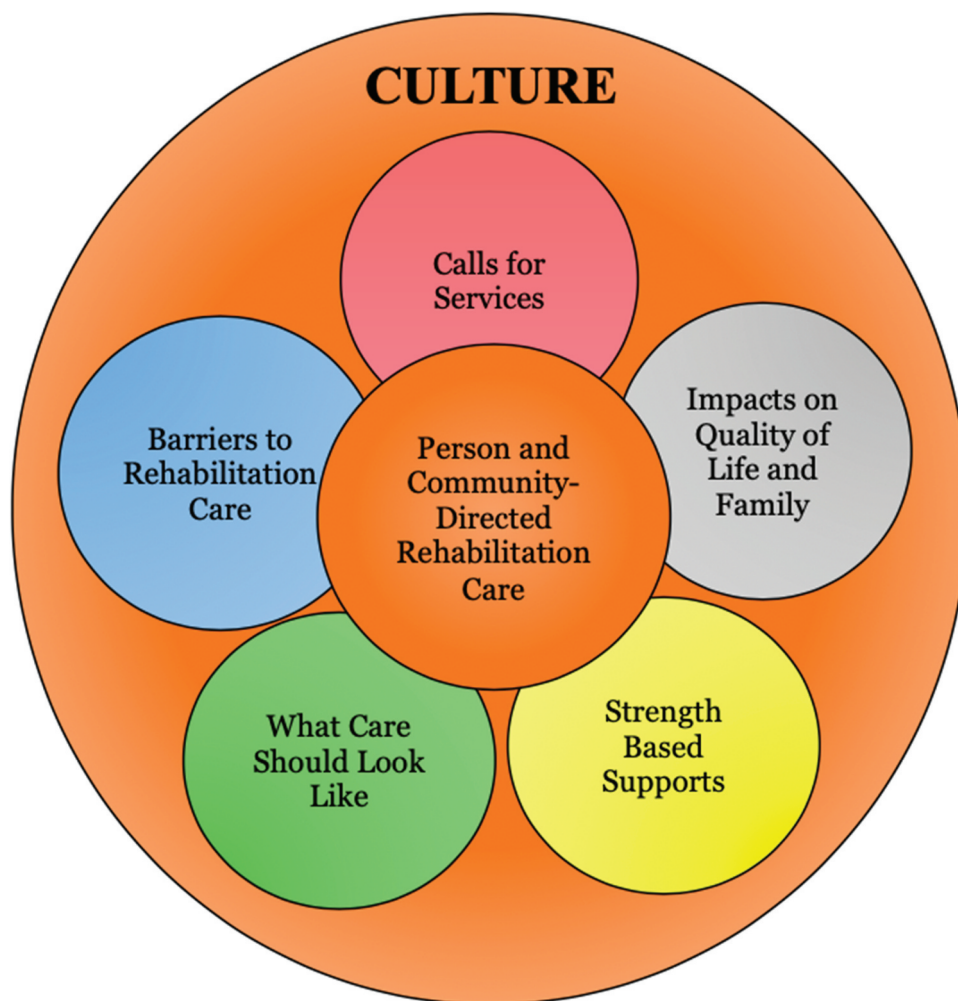


Figure 1. Culture, Themes and Person and Community-Directed Rehabilitation Care.

with you, it's because they think you need to learn that or need to know that and that's important in communities."

Culture is the foundation for the five other primary themes identified in the stories of community members and is woven throughout the remaining themes. Culture also forms the basis for the recommendations in moving towards culturally responsive person and community-directed care.

Barriers to Care

The theme **Barriers to Care** describes the many health system processes and issues which impair the ability of Indigenous community members to access appropriate, culturally responsive, high quality rehabilitation care. Public policy deficits and jurisdictional issues for Indigenous Peoples result in barriers to rehabilitation care. The subthemes that create barriers to rehabilitation care include: 1) Access to Healthcare Services, 2)

Communication and judgment, 3) Jurisdiction and Finance, and 4) Racism.

Members of FHQTC communities reported reduced **Access to Healthcare Services**, including long wait times and travel difficulties as well as time away from family, community, and home that is necessary when seeking care outside of community. Travel issues included distance and time, appropriateness of vehicles and equipment available, impact of travel on health conditions, fearfulness of driving, availability of medical taxis, road conditions, and family considerations.

Community members told many stories of barriers due to time and distance associated with travel: *"That's the trip I had. An hour and a half to Regina. That trip used to tire me out. Lay me right out. That's about a day to get rejuvenated"*. Health practitioners also reported travel difficulties for patients, noting that even for the limited number of SHA covered outpatient orthopaedic sessions in Regina, *"getting them [patients] there [to a city with adequate services] is the hardest thing"*. In addition to travel time, there is also difficulty with road and

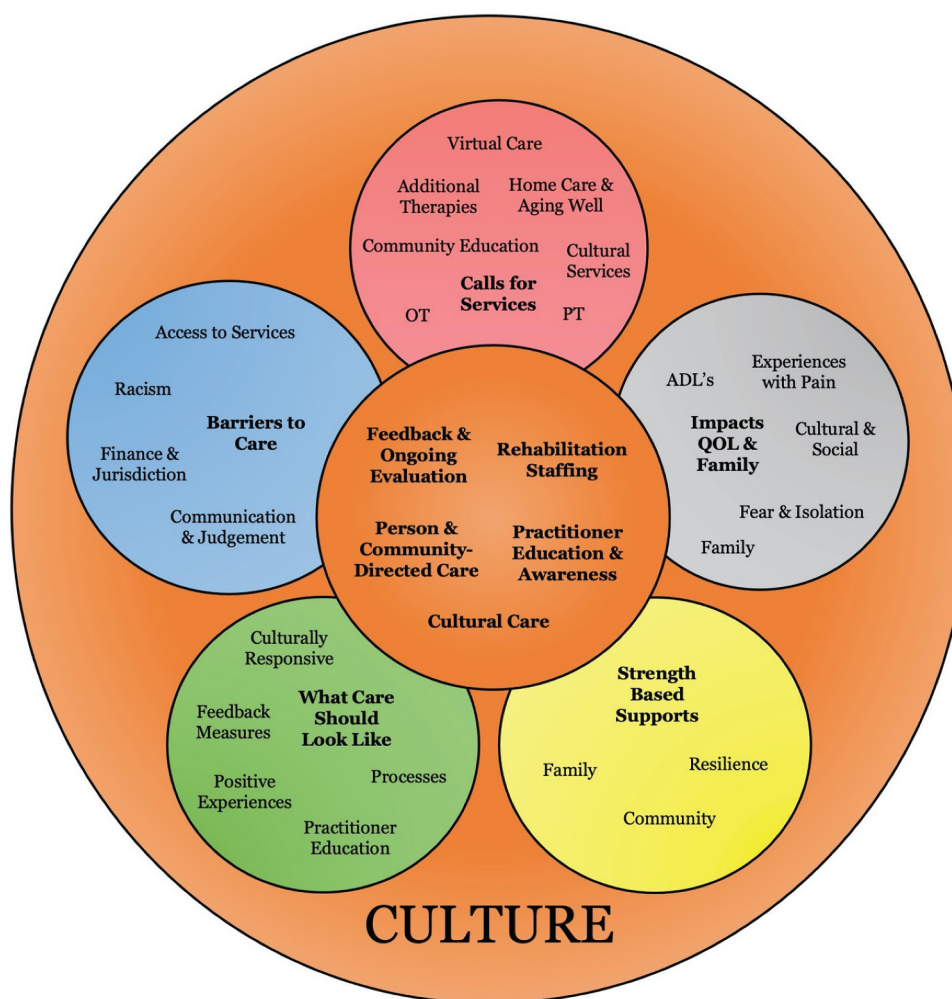


Figure 2. Culture, Themes, Subthemes, and Recommendations.

weather conditions and time of year. Furthermore, many residents do not have vehicles. Depending on an individual's situation and context, medical taxis can be an option. However, for the service to be offered, sufficient patient numbers are often a pre-requisite. One community member reported: *"there is no transportation out here. I remember they were trying to get medical transfer out here but they couldn't because ... there wasn't enough numbers"*. Family needs are a special consideration. The stories highlight the inequity of care available to First Nations children. Travel for a parent often means finding assistance to care for other children being left at home. One other community member shared: *"if you've got a parent that has five children and they have to take one child to an appointment, what do they do with their other children?"* Another parent living in-community described their experiences travelling for paediatric care:

"He's supposed to be wearing insoles in his shoes made for himself but [we] just haven't been able to get to [city] and get them done and just get to all the

appointments we're supposed to, so today he still has a hard time to walk and carry himself. But I guess if it was closer to home we would access things a lot easier".

For families living in-community seeking specialised care, time away from home may be several days. *"There's times we have to travel to [city] overnight or two or three nights at a time to go see specialists for him"*.

Wait times are particularly worrisome for community members with children who need rehabilitation services: *"with the injury or with chronic conditions or whatever, with kids with disability, time is of the essence. If they're not seen in a timely manner, you won't get the mobility back ... their development is so delayed in that point"*. Parents of children requiring rehabilitation indicated that once children were in school, wait times worsened, since there was less ability for families to travel during the weekdays. One community member noted about their child: *"but once he got to school time, waiting for him for services was really long, especially for being on reserve school, it had to be like it was months*

and months of setting up appointments". Participants also noted that it was not uncommon to register for a wait list, wait months or a year and not hear back at all. Health practitioners reported "several month" wait times even for on-reserve appointments due to the size of their caseloads and limited times available in each area.

The second subtheme of **Barriers to Care** is **Communication and judgment**. Communication includes verbal or written information related to health-care services. When communication becomes difficult due to language or cultural differences, community members reported fear of being judged, which would result in an absence of cultural safety.

"I can't imagine for a person who can't articulate that, or can't complain, or can't really rationalize how they feel. And so you just would give up. You would just not bother, right? You would just rather drag your leg" and "I think that they're afraid to see anybody cause they don't wanna be judged. They're afraid to be judged".

Jurisdiction and Finance is the third subtheme in **Barriers to Care**. Federal, provincial, local council, and individual organisation jurisdictions are difficult to sort through for patients and practitioners alike. As a result, bureaucratic delays often hamper the delivery of services to Indigenous Peoples. As one community member described:

"If our wheelchair's breaking down and we bring it to the health center, they look at it and they can phone in or one of the nurses can phone in and say this wheelchair's not suitable anymore, to get a new one. But no, they said we can get the parts, but you're not due for a new wheelchair for five years."

First Nations Peoples in Canada have a Treaty Right to healthcare. The lack of access to these critical rehabilitation therapies is the denial of an inherent Treaty right and this was explained by one provider:

"Direct billing is one of those things that really irk us because it really undermines our right to healthcare. Our Treaty Right to Health. It's one of those things that really irk us because from our perspective, what it feels like is that the whole healthcare system is designed to prevent us from accessing services and you get this over and over and over again".

Racism is a known experience in healthcare systems in Canada, and Saskatchewan is no exception. Community members shared numerous difficult and painful stories about experiences with racism that impacted their experience, safety, and access to PT and OT services: "We've always known that we're always gonna be put at the back of the line, that we're not gonna be a priority". These important and difficult stories highlight a critical

component of the healthcare access disparities for Indigenous people that must be addressed to ensure culturally responsive, safe, respectful and appropriate rehabilitation care. Health practitioners reported that colleagues' lack of awareness of Indigenous health disparities, and unfortunate beliefs in stigmas prevented those colleagues from participating in the care of Indigenous peoples. These ongoing racist attitudes and behaviours are a major cause of ongoing systemic racism in our health systems today. One community member explained:

"Myself, I experience this with my husband and my daughter, they're darker than me. Like really darker than me. And the health people didn't know I was with them. They thought we were separate. So they gave them a really hard time and they didn't give me such a rough time".

Participants explained that they feel their culture is not respected, not understood, and in some cases, providers who travel into communities exhibit an attitude that makes healthcare experiences inappropriate and unsafe. Examples of racism that were bravely shared provide insight into the experiences of these community members in Saskatchewan healthcare settings: "I know better than to ask for a pain med at the emergency ward because I'm Native and if I do, I get ushered right out the door, right away! They'll just deny my service". Systemic racism such as this is an ongoing problem experienced by Indigenous Peoples in many Western healthcare facilities across Canada. This can be attributed to the colonial context in which Western healthcare systems were developed. In contrast, Indigenous community members would most benefit from rehabilitation services embedded formally within a structure of Indigenous health process and self-determined care, which have been built in a decolonised in a community-directed manner. Principles of respect, trust, and culturally appropriate care led by and in collaboration with Indigenous community members is necessary to build a foundation of reconciliation in healthcare.

Impacts on Quality of Life and Family

The inability to access appropriate and responsive rehabilitation care has inevitable impacts on the family unit, the quality of life experienced by patients and their families, and the wellbeing of the individual, including: 1) Cultural and Social Lives, 2) Activities of Daily Living, 3) Experiences with Pain, 4) Fear and Isolation, and 5) Family Living.

Many stories of the importance of dancing were shared when discussing people's **Cultural and Social Lives** including the importance of traditional dancing and powwow, as well as social dancing. Stories were shared by community members on their inability to access cultural events due to their situations:

"My sister wants to take me to ceremonies, but I don't wanna give her the trouble of getting the wheelchair out and pushing me through. They have the culture activities on the ground and it's really hard to get there, so I kinda just opt out and don't give them the trouble of taking me there. I choose to just not be a part of it. It's not that I don't believe in it, but I believe in it."

The impact of participants' longstanding issues of mobility on **Activities of Daily Living (ADLs)** was described. Difficulties with ADLs can impact one's ability to work, sleep, maintain hygiene, nutrition, and overall wellness. Specifically, reaching up to cupboards, climbing stairs, getting in and out of homes in wheelchairs, reaching to the floor, getting groceries, cleaning the house, walking, caring for children, and the ability to rest comfortably were frequently mentioned activities which can be problematic for those who do not have access to rehabilitation care. One community member shared:

"When I do laundry, I have to stay downstairs till I'm done my laundry because I have two flights of stairs, so I have a hard time getting up and down the stairs with my hip, so I just stay downstairs till I'm done all my laundry. If I'm hungry, I go without because I'm not gonna go all the way up, come all the way down again, have to go up. I just stay down and do it all"

The absence of appropriate and timely management of people's **Experiences with Pain** result in prolonged difficulties with pain management for chronic illness or injury. This can also result in increased need for medication to manage pain as described by a health care provider: *"We had to try different types of pain relief with people who were already on morphine because we couldn't get access to therapy services"*. Community members explained that lack of available options for pain management can have long standing impacts on mental health as well: *"Before I was on meds, before I got this, I was like didn't want to live. I'll be honest. I couldn't walk, I was crawling. I didn't tell my family for three days I was in bed"*.

One of the goals of the TRC's Executive Report is to recognise and begin the process of reconciling the **Fear and Isolation** which resulted from the trauma of residential schools [1]. Fear is often linked to experiences of *Racism*, as was described previously. There are additional reasons that fear can occur within the health system; some individuals are fearful of institutions that

may resemble residential schools. One community member explained:

"So I think for them coming into the homes too that there is a lot of fear for individuals who are living independently that they'll be judged. And taken away to an institution. Like I think sometimes long-term care is representative of residential school in a way. It's like you're removed from your home into an institution, so it brings back those fears."

Pain and fear can quickly lead to isolation, which can lead to more pain and functional decline, which in turn can create mental health risks. Another community member noted:

"There's a lot of appointments that we had to skip on account of his health and there's days he doesn't even want to move out of bed. It would help if we had someone that can talk to people, that can understand what they're going through. I don't know, I'd say a psychiatrist or a mental health worker cause there's thoughts that we discuss at times. Not nice ones."

Indigenous culture values **Family Living**, nurturing and participation. When children are limited in function due to lack of available rehabilitation services, the family unit is impacted. One community member shared about their family:

"Because he required the distance and travel with all his care, that his siblings missed out on a lot of that stuff that we could be doing with the family and they accepted that role, that he was born special, and but because of that one of us as the parent always had to stay home with him and the others could go off".

Intergenerational family participation is also affected, as described by a grandparent from community: *"I actually just had two grandchildren and I can't even hold them. I can kind of feed them, but I'm like you have to take them. I can't do anything yet with this one"*. Families who care for loved ones with complex mobility and rehabilitation needs endure risks to their own health. One family member from community noted:

"He's got a deck, he's got a ramp that we wheel down, so if he needs to go to the doctor, I got about 40 feet of ramp to clean. When it snows hard, that's a big job for me. I went through three hard surgeries where I'm not supposed to be doing that kind of work, but it's because he's my son that I do that."

Calls for Services

Community members described rehabilitation services they would like to see and feel they would benefit from if available in community: 1) PT and Exercise Therapy, 2) OT and Assistive Devices, 3) Community Education, 4)

Cultural Services, 5) Home Care and Ageing in Community, 6) Virtual Care, and 7) Additional Therapies.

PT and Exercise Therapy provided in a way that integrates the family unit is required. Community members noted PT was needed in homes, in communities as outpatients, as well as within schools:

"I would love it if a PT was able to come home with him you know to help, to show me, even though he's [present age] now, better ways to get him motivated or to do more or to keep, cause we're at the point now where I haven't seen a PT and OT in so long that we kind of stopped pushing for more goals to keep learning and to keep benefitting, and I think if he had access like that to come into the home and help me there, instead of telling them at the office and not understanding what I am going through, and as well as at school."

Participants mentioned the following conditions that would benefit from PT: orthopaedics, arthritis, foot care, diabetes, amputations, post-surgical conditions, respiratory PT, neurological conditions, older adult programming, and functional conditioning. PT is needed in community for acute care, home care, outpatients, and long-term care. Interprofessional pain management services delivered through cultural care was a reported need. One rehabilitation professional interviewed articulated that the frequency of their attendance in FHQTC communities is insufficient. They noted the danger of suboptimal rehabilitation frequency in the overall goal of returning patients to their own homes:

"And typically the purpose of convalescent is to have a little bit more time to be able to improve their mobility, to be able to get back into their home environment to build their strength. So if they're not getting specific, direct instruction, how is that time they're spending in convalescent actually achieving those goals?"

OT and Assistive Devices are needed for acute inpatient, home care, long-term care, paediatric, orthopaedic, neurological, cardiopulmonary, diabetic, health promotion and dialysis patients. The complex needs for equipment and assistive devices in community and the expertise of the OT needed for that service provision was discussed by community members:

"I have a son in law that just had an operation and it's difficult for him to walk up the stairs and he has 14 steps climb, to go up so I asked him what would a chair lift, how would that help. You know so I think that would really help him cause they have like an upstairs where the bedroom and all that is up there, and the bathroom and all that."

In addition to mechanical lifts, wheelchairs, and walkers, other assistive devices called for by community members included bathtub equipment, raised toilet seats, Saskapoles, ramps, outdoor lifts for wheelchairs,

accommodations in vehicles to ensure safe wheelchair support, home renovations and specialised supports, fences, bikes, beds, mattresses, and sensory products. One provider stressed the importance of OT in the home to further the goal of ageing well: *"they really, really benefit from someone being in their home, on reserve. Not only from their ease of access to services, but us as seeing their home environment and understanding what they live in so we know what's gonna work for them equipment wise"*.

Many community members shared that they felt more **Community Education** should be available to them on how OT and PT could be engaged with a person's healthcare team. They also commented on health promotion and prevention information that could come from rehabilitation services, and how cultural care could be integrated:

"I know this First Nation would really benefit from a nice, educated therapist, a physical therapist, a nice educated occupational therapist just fresh from school and they could even teach them how the muscles are, the muscle reactions. How to keep yourself from getting injured" and "I think that there's probably a role for preventative services from a healthy aging perspective, from a fall prevention perspective, that sort of thing that probably builds community well and suits the style of family centric, kind of an Elder support in those areas; that probably holds some value."

Home Care and Ageing in Community are vital considerations for older Indigenous adults, which are among the most vulnerable in our healthcare system. Access to rehabilitation services to enhance safe movement and functioning is a primary healthcare need. Community members want to remain at home, in their own communities, and want access to the services needed to achieve these goals:

"I want to stay here, born and raised here and I want to stay in my community 'cause I've been here for 73 years now. I feel at home, and I know other people out there would like to come home, so that is a priority in our community. We could tap into these resources from the medical side of it and see what we could get, see what kind of people we could get, trained, qualified people to assist our members cause there's things I need that would make it easier for my son."

Some community members also recognised the value of **Virtual Care** in accessing team-based rehabilitation services: *"it would be so easy to have him go through a doctor to have him get like a referral and all this stuff like right, if you had someone you could access over online or a zoom meeting, whatever you want to do"*. The desire for **Additional Therapies** to include services such as Speech Language Pathology (SLP) and massage therapy were also raised by community members:

"A lot of our First Nations children, they can access a speech language up to kindergarten through Sask Health Authority, but after that, then their family would have to go either private or [not] access it. Most often, what happens is they may get it up to kindergarten. That's if their family has transportation to get into the city for it, right? And then after that, it's kind of like a non-issue – it's still an issue, but it's not happening. So we often see kids that maybe nine years old, for example and they're non-verbal or they have very limited speech."

Strength Based Supports

Cultural practices and norms provide a base of strength from which community members develop successful coping strategies and maintain quality of life in the face of functional impairments and deficits. Three sub-themes were identified: 1) Family Support, 2) Community Support, 3) Resilience.

Family Support including the intergenerational family unit is of utmost importance to Indigenous ways of life and health. A parent in-community described the importance of inclusion of his other children in the wellness of their sibling:

"With my son, his sisters were his motivation to do more, to learn, to walk, to crawl. And during those physical times where they weren't allowed to be in the rooms. I don't know, maybe them being there it would've speeded up his physio or his learning more, cause his sister is only a year older and they were, they are very, very close. And they motivated him so much to do stuff. And without, I think they could've asked us, can you, do you, the way to bring the family involvement I guess, is there an option for that? I don't know, they could've brought that question up or asked us more to bring besides just one parent or two parents."

Family support extends into the **Community**. When immediate family support is not available, care is often provided by one's community members. One community member shared: *"That's just totally different but you need support people there. Sorry, but First Nations always have support people whether it be a friend, whether it be your mother – well my mother's passed – but I mean a sister, a brother, people, support group"*.

Numerous testimonies to Indigenous **Resilience** were heard from community members that had adapted to adversity such as pain, impairment, disability, and functional loss. We heard examples of the strategies, beliefs, and philosophies used by individuals and families to ensure strength through difficulties, such as in this case from a community member:

"For that, I stayed positive and I said I'm gonna walk again. This is not gonna keep me down. So yeah, I stayed

positive. Always stayed positive." and *"Everybody just deals with their problems after the fact. There's nothing, no therapy or anything that anybody takes so they're just like, deal with it. Everybody deals on a personal note, I just deal with it. Just something that you have to do."*

What Care Should Look Like

Messages were shared by community members about the vision that the people have for care that feels right, respectful, appropriate, and safe. The five subthemes identified included: 1) Positive Experiences, 2) Feedback Measures, 3) Practitioner Education 4) Processes, and 5) Culturally Responsive Care.

Positive Experiences with PT and OT occurred when treatment was directed at functional goals like falls prevention and community ambulation, as well as when finances were not an added stressor. Community members emphasised that the ability to access rehabilitation when needed, without lengthy wait lists, results in better experiences: *"With my injury with my left arm, I got in right away. I didn't have much of a waiting period at all. I was fortunate"*.

When asked about how new services should be evaluated, community members felt the following **Feedback Measures** would be useful: 1) utilisation of services; 2) handwritten options at the end of sessions so patients could put their thoughts down immediately; 3) being asked for feedback verbally at the end of every session; 4) questionnaires (perceived efficacy was mixed). Community members want practitioners to be accountable when feedback is provided, and to demonstrate that changes are going to be made when requested.

Community members explained that **Practitioner Education** on Indigenous history and intergenerational trauma, trauma informed care, and how to build relationships is invaluable for health providers working with Indigenous populations. They recommended that new practitioners should read patient testimonials, learn about cultural humility and *"be willing to keep learning and keep asking questions"*.

Suggestions for **Processes** that would facilitate access to rehabilitation care from community members and practitioners included:

- (1) Fast access to rehabilitation service, including person-directed referrals.
- (2) Prioritisation of service needs and regular evaluation to ensure efficiencies, including the use of electronic patient records.
- (3) Close operational examination of inpatient versus outpatient needs, outpatient service

locations, travel requirements, space, and support staff requirements.

- (4) Process development for engaging new staff and mentoring them into the strong existing team environment.

Health providers expressed that it is important for healthcare students to have **Culturally Responsive** experiences and the opportunity to work in collaboration with Indigenous Peoples during training. Community members expect practitioners to be culturally aware, non-judgemental, and culturally sensitive. They repeatedly shared that health providers need to understand patience as a virtue and key to communication: *“First Nations people, the way they communicate with non-First Nation, you gotta give them time. You gotta give them time to, say you give them time to decide what – cause they’re not at the snap of a finger to decide”*. Another community member explained that practitioners should take a humble approach and learn from the Indigenous patients they work with:

You gotta know the people, you gotta know the culture, the traditions, you gotta be able to mingle with the people. To go and knock on their door and visit them. You gotta learn how our people live before you go stepping in and telling them how you want them to live. You don’t tell them how you want them. They’re gonna tell you how they feel they should live.

Finally, the virtue of respect, the first traditional Indigenous teaching, is critical for successful, patient and community-directed rehabilitation care. This is best explained by the following community member:

“When we go see a healer cause really, in our traditional practice, when we go see a healer, there’s a set of protocols that come with it, right? And so when you go see a non-First Nations healer, there are no protocols, but the respect has to be there. Respect is the first teaching that we teach each other. Without respect there is no love, there is no truth, there is no honesty, there is no courage, there is no wisdom. Respect has to come first. That’s why it’s the first teaching. So when you walk through a physiotherapist’s door, you automatically expect it as a First Nations person because when you walk through an Elder’s door, that’s the first thing that you’re hit with. It is a two-way street and so usually the people are respectful. There are people who are angry through pain. We understand that, we are all very aware of that. But for us, we would like and appreciate the respect because it is our first teaching. But we don’t expect anybody to pull out sage or sweet grass or cedar and smudge us up and pray with us and do the healing. We don’t expect that, but we expect respect.”

Rehabilitation patients want traditional knowledge to complement their care. Community members

expressed that they want practitioners to do their work and be able to see both worldviews, Indigenous and Western: *“What I would have them do is just some research on their own on decolonize practice. Look at all their forms, all of their practices, and how can they adapt those so they’re not like settler – they’re blended. Two-eyed seeing”*. The ability to experience culture is a critical component for healthcare workers who provide care to Indigenous Peoples to be immersed in, to understand, to appreciate, and to respect. One community member shared:

“If I was to advise someone who wanted to work in the First Nations community what they needed to do, my first request of them would be I want you to go participate. Go sit in their structures that governed them for millions of years, ceremonies. These stuff are for real. These stuff, these structures are still out there. They’re still being the core of every First Nations person in that community. And that’s what makes us tick. That’s what makes us so hard to understand. Cause how many generations have we lived in Canada, and you still don’t know that much about First Nations people? That’s where people need to go, not First Nations people need to go. And here, at the treaty sign, Euro Canadians came with their treaties to bring their people into our country and say we want to live with you here. They said yes. We have our pipe there, our ceremonies, our sweat lodges, we were waiting for them. Our structures that govern our people. That’s where they didn’t go. That’s why we’re in such a turmoil right now. First Nations people are still not understood. First Nations people are still falling through the systems. Health institutes like this, they still fall through. It’s because there was so many veils that Euro Canadians had when they arrived here and they still do. And if this person needs to understand First Nations people, then he should go and remove these veils to be able to see with an open mind, and understand what makes this First Nations person click, what makes them tick. What help will I be able to help, will I be able to work with. What institute of that First Nations community will I be able to work with to make them a better person, to make them a healthier person.”

Discussion

Many important teachings were received from the community sharing circles and interviews. An overarching theme of culture was identified, with five additional primary themes including barriers to care, impacts on quality of life and family, calls for services, strength-based care, and what care should look like. The overarching finding was that rehabilitation services need to be delivered by the FHQTC Health Services and ANHH in a person and community-directed manner and within the established cultural care framework. Comprehensive rehabilitation services to serve communities need to be a core service within FHQTC Health

Services, provided in a fully funded and culturally responsive manner. Major recommendations arising from the community needs assessment for rehabilitation services included:

- (1) **Rehabilitation Staffing Requirements:** FHQTC community members require committed, full time rehabilitation staff who are employees of FHQTC Health Services. This includes PT, OT, SLP, exercise therapy, massage therapy, and PT/OT assistants. This would ensure availability of both clinical services in ANHH and in communities. It would also facilitate timely coverage for service delivery, reduce wait times and out of community travel, allow appropriate prioritisation of patient care, and enhance the health care team member capacity in community. The supportive team environment of FHQTC Health Services, which is committed to a cultural care process under guidance and knowledge of Traditional Knowledge Keepers and Elders, is the necessary support structure for rehabilitation professionals who are caring for Indigenous community members in FHQTC. Employment directly within this unique cultural care system based on ceremony and tradition is the environment needed for mentorship and integration of rehabilitation staff into the team and community. This model would ensure best success for access to services in a culturally caring and appropriate manner.
- (2) **Integration with Cultural Care:** Rehabilitation staff should be working closely with Traditional Knowledge Keepers and fully integrate and embed cultural care into rehabilitation care programming. The guidance of Knowledge Keepers in rehabilitation care processes will promote optimal uptake and success of rehabilitation programming.
- (3) **Practitioner Education and Awareness:** Rehabilitation providers require education and experience in community to ensure understanding of historical processes and ongoing present-day issues such as systemic racism, discrimination and health inequities that impact the health and wellbeing of Indigenous people. Practitioner Education should also include community experiences with community members as guided by Traditional Knowledge Keepers. Learning should include, but is not limited to, history of colonisation in Canada, residential schools, intergenerational trauma, legislative and jurisdictional impacts on health and wellbeing, systemic

racism in health, trauma-informed care, and the important strengths within these communities including family and community relationships, personal resilience, and cultural care. Rehabilitation staff should be located within FHQTC Health Services on a full-time basis to be fully integrated and immersed in this process.

- (4) **Person and Community-Directed Care:** Rehabilitation processes should ensure patient, community, and family-directed programming in all aspects, to deliver a cultural care model focused on the unique strengths of the Indigenous communities, their people, and FHQTC Health Services. For example, patients would benefit from a family engaged assessment and treatment process to ensure optimal strength-based supports are available for healing. Community based health promotion and wellness programming should be provided with collaborative teaching by community-based knowledge experts.
- (5) **Feedback and Ongoing Evaluation:** Feedback mechanisms to ensure Indigenous patients can report back to therapists and administrators through various channels in a timely manner will be essential to success of a rehabilitation programme. Patients should be engaged when services are provided to comment on their experiences, thoughts, and suggestions. An accountability framework for processing feedback and ensuring action will be important to ensure trust and longstanding relationships can be built and nurtured. Patients want to know their concerns have been heard, acknowledged, and acted upon. Clear communication about these processes from rehabilitation staff will be required for the development of long-term trust.

These recommendations largely compliment the findings of literature in this area although there is a paucity of literature with this specific focus. Achtemichuk et al. described that in Nunavut, Canada, limited resources and a large geographic catchment increases travel and wait times for those in need of health services [28]. Ouellet et al. identified that therapist turnover is high in Canadian northern communities, which diminishes the ability of therapists to provide culturally safe care due to a lack of expertise [29]. These challenges may also be faced by professionals working in rural Saskatchewan, and the need for education in culturally responsive care was repeatedly noted by participants. In recognition of these barriers, we suggested hiring and training a variety of therapy specialists in

a cultural care framework led by local Knowledge Keepers from the onset of service delivery.

Hunter and Pride also acknowledged the importance of recognising the incongruencies between scientific and Indigenous cultural care models [30]. Through collaboration with Knowledge Keepers, rehabilitation practitioners would be able to provide culturally responsive care in a manner that is in keeping with the established cultural care framework. Milligan et al. recommended a methodology of conscious self-reflection into personal bias and institutional racism by professionals working in-community. We recommended a collaborative component to reflection led by Knowledge Keepers in addition to a self-led approach [31]. Gibson et al. also advocated against a deficit-based approach to health and wellness, instead focusing on the promotion of social and emotional wellbeing among individuals and communities in care [32]. The findings of the present needs assessment also advocated for a strengths-based approach to care founded on values such as family and community support, and resilience. Gibson et al. reported that community members desired an adequate method of providing feedback for therapy services. The agency to make complaints and the ability to follow-up on them were identified in our study, as well as theirs as necessary processes in keeping services accountable to a collaborative care framework [32].

The present model of rehabilitation care available to the members of FHQTC was determined to be insufficient to meet community and ANHH needs. The recommendation made as a result of the community needs assessment was a new, sovereign, innovative model of care with core funding, available within FHQTC Health Services on a full-time basis, and developed from the stories and experiences shared by community members and health providers. A community-directed service would improve access to rehabilitation care embedded in culture which includes health prevention and promotion strategies in community. This new rehabilitative service model coincides with the Truth and Reconciliation Commission of Canada's 21st Call to Action: for healthcare service delivery to address the harms caused by residential schools sustainably and holistically [1]. This will improve the capacity of the local healthcare system by mentoring home-grown future professionals. It is widely understood that appropriate access to rehabilitation services enhances health outcomes across populations and conditions [33–37]. The present recommendations will also enhance the experience of community members with rehabilitation services and the quality of their lives. Health prevention and promotion, as well as access to high quality rehabilitation would enhance the management of chronic

conditions and have potential for cost savings in communities.

Limitations

This project was developed in a collaborative and community-directed manner. The cultural care framework referred to is specific to FHQTC and ANHH, and may not be directly applicable to other Indigenous community worldviews, although the process and findings may provide relevant learnings. Researchers were not permitted to join community in person due to Covid-19 restrictions at the University, therefore they joined community using virtual software. It is not possible to know how that would affect relationship and trust development, although the presence of the strong and trusted FHQTC staff on site with participants provided the most important support for participants, so we were satisfied that these careful discussions were being held in the best possible manner.

Conclusion

This manuscript adds a novel and important contribution to existing literature on rehabilitation needs in Indigenous communities. We are not aware of other descriptions or evaluations of a collaborative community-directed needs assessment process that will lead to a sovereign and culturally responsive rehabilitation unit. Participants including community members, health care practitioners and Knowledge Keepers provided critical insight into culturally responsive rehabilitation needs. The experiences, strengths, and recommendations of participants were heard primarily in sharing circles, as well as in private interviews for those who needed to socially isolate due to risk of Covid-19. The development of a research question, methodology planning, implementation, analysis, and manuscript writing were completed entirely in collaboration with FHQTC Health Services and ANHH; OCAP principles were closely honoured. Enhancing equitable access to rehabilitation care in a way that is directed by community and within a cultural care framework will improve health outcomes and experiences for Indigenous Peoples who require this type of care. This is a process that could benefit many other Indigenous communities who are seeking to enhance rehabilitation care, healthcare experiences and health outcomes for their members.

Acknowledgments

The authors wish to thank the community members, Elders, healthcare practitioners, and Knowledge Keepers who

participated, for their kind and generous sharing of experiences and knowledge. In addition, the authors wish to acknowledge the late Rick Favel, Traditional Knowledge Keeper, ANHH for his wisdom and teachings from the inception of the project, and guiding the work for the development of a culturally responsive model of rehabilitation therapy services. Rick's gentle and thoughtful way of teaching about cultural care and community needs had a lasting impact on the team and the project. We are forever grateful to have been able to develop a relationship with Rick and to learn from him.

Disclosure Statement

The authors report no perceived conflicts of interest. Funding for student researchers was provided by the FHQTC Health Services.

Funding

This work was supported by the File Hills Qu'Appelle Tribal Council Health Services - graduate and undergraduate student research stipends.

References

- [1] Truth and Reconciliation Commission of Canada. Truth and Reconciliation Commission of Canada Calls to Action. Montreal: McGill-Queen's University Press. 2015.
- [2] Richmond CAM, Cook C. Creating conditions for Canadian aboriginal health equity: the promise of healthy public policy. *Public Health Rev.* 2016;37(1):2.
- [3] Federation of Saskatchewan Indian Nations. Cultural Responsiveness Framework. Saskatoon: Federation of Sovereign Indigenous Nations. 2013. p. Indian Governments of Saskatchewan.
- [4] Sasakamoose J, Bellegarde T, Sutherland W, et al. Miyo-pimātsiwin Developing Indigenous Cultural Responsiveness Theory (ICRT): improving Indigenous Health and Well-Being. *Int Indig Policy J.* 2017;8. Accessed 18 Oct 2021. <https://ojs.lib.uwo.ca/index.php/iipj/article/view/7527>.
- [5] Lovo Grona S. Advancing Interprofessional Primary Health Care Services in Rural Settings for People with Chronic Low Back Disorders: a Team and Technology Approach [Thesis]. [Saskatoon]: University of Saskatchewan; 2018.
- [6] Statistics Canada. Aboriginal Population Profile. 2018.
- [7] Statistics Canada. Aboriginal peoples in Canada: key results from the 2016 Census. authority of the Ministry responsible for Statistics Canada. 2017.
- [8] Verbunt E, Luke J, Paradies Y, et al. Cultural determinants of health for Aboriginal and Torres Strait Islander people – a narrative overview of reviews. *Int J Equity Health.* 2021;20(1):181.
- [9] Okpalauwaekwe U, Ballantyne C, Tunison S, et al. Enhancing health and wellness by, for and with Indigenous youth in Canada: a scoping review. *BMC Public Health.* 2022;22(1):1630.
- [10] Federation of Sovereign Indigenous Nations. Health and Social Development [Internet]. 2022. Accessed 18 October 2021. Available from: <https://www.fsin.ca/hasd/>.
- [11] Shea JM, Poudrier J, Chad K, et al. In their Own Words: first Nations Girls' Resilience as Reflected through their Understandings of Health. *Pimatisiwin J Aborig Indig Community Health.* 2013; 11. 17.
- [12] Crown-Indigenous Relations and Northern Affairs Canada. Truth and Reconciliation Commission of Canada [Internet]. 2015. Accessed 18 October 2021. Available from: <https://www.rcaanc-cirnac.gc.ca/eng/1450124405592/1529106060525>.
- [13] Canadian Institute for Health Information. Physiotherapists in Canada. 2021.
- [14] Canadian Institute for Health Information. Occupational Therapists in Canada. 2021.
- [15] Saskatchewan Health Authority Employee. Personal Conversation. 2021.
- [16] Canadian Physiotherapy Association. Description of Physiotherapy in Canada. 2012.
- [17] Canadian Association of Occupational Therapists. How does Occupational Therapy help? 2021. Accessed 16 January 2023. Available from: <https://www.caot.ca/site/aboutot/howOThelp?nav=sidebar>.
- [18] Canadian Association of Occupational Therapists. What is Occupational Therapy? 2021. Accessed 16 January 2023. Available from: <https://www.caot.ca/site/aboutot/whatsot?nav=sidebar>.
- [19] First Nations Information Governance Centre. Barriers and Levers for the Implementation of OCAP. 2014;
- [20] Lavallée L. Practical Application of an Indigenous Research Framework and Two Qualitative Indigenous Research Methods: sharing Circles and Anishnaabe Symbol-Based Reflection. *Int J Qual Methods.* 2009;8 (1):21–40.
- [21] Umaefulam VO, Premkumar K. Sharing Circle Versus Focus Group in the Development of Diabetic Retinopathy Mobile Health (mhealth) Intervention for Aboriginal Women: a Literature Review. *Can J Native Stud.* 2017.
- [22] Webex. Video Conferencing, Cloud Calling & Screen Sharing | webex by Cisco. Webex. 2021. Accessed 18 October 2021. Available from: <https://www.webex.com/>.
- [23] QSR International Pty Ltd. NVivo. 2020. Accessed 05 August 2021. Available from: <https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>.
- [24] Vaismoradi M, Turunen H, Bondas T. Content Analysis and Thematic Analysis: implications for Conducting a Qualitative Descriptive Study. *Nurs Health Sci.* 2013;15 (3):398–405.
- [25] Braun V, Clarke V. Using thematic analysis in psychology. *Qual Res Psychol.* 2006;3(2):77–101.
- [26] Williams M, Moser T. The Art of Coding and Thematic Exploration in Qualitative Research. *Int Manag Rev.* 2019.
- [27] Morse J. Critical Analysis of Strategies for Determining Rigor in Qualitative Inquiry. *Qual Health Res.* 2015;25 (9):1212–1222.
- [28] Achtemichuk M, McKenzie B, Fricke M, et al. Community based physiotherapy services in the Kivalliq Region of Nunavut, Canada. *Int J Circumpolar Health.* 2004;63 (sup2):98–100.

- [29] Ouellet L, Grandisson M, Fletcher C. Development of rehabilitation services in an Inuit sociocultural context: challenges, strategies and considerations for the future. *Int J Circumpolar Health*. 2022;81(1). DOI:[10.1080/22423982.2022.2058694](https://doi.org/10.1080/22423982.2022.2058694)
- [30] Hunter C, Pride T. Critiquing the Canadian Model of Client-Centered Enablement (CMCE) for Indigenous Contexts. *Can J Occup Ther*. 2021;88(4):329–339.
- [31] Milligan E, West R, Saunders V, et al. Achieving cultural safety for Australia's First Peoples: a review of the Australian Health Practitioner Regulation Agency-registered health practitioners' Codes of Conduct and Codes of Ethics. *Aust Health Rev*. 2021;45(4):398.
- [32] Gibson C, Crockett J, Dudgeon P, et al. Sharing and valuing older Aboriginal people's voices about social and emotional wellbeing services: a strength-based approach for service providers. *Aging Ment Health*. 2020;24(3):481–488.
- [33] Tepas JJ, Leaphart CL, Pieper P, et al. The effect of delay in rehabilitation on outcome of severe traumatic brain injury. *J Pediatr Surg*. 2009;44(2):368–372.
- [34] Greenwood ML, de Leeuw SN. Social determinants of health and the future well-being of Aboriginal children in Canada. *Paediatr Child Health*. 2012;17(7):381–384.
- [35] Frogner BK, Hardwood K, CHollyA A, et al. Physical Therapy as the First Point of Care to Treat Low Back Pain: an Instrumental Variables Approach to Estimate Impact on Opioid Prescription, Health Care Utilization, and Costs. *Health Serv Res*. 2018;53(6):4629–4646.
- [36] Nordeman L, Nilsson B, Moller M, et al. Early access to physical therapy treatment for subacute low back pain in primary health care: a prospective randomized clinical trial. *Clin J Pain*. 2006;22(6):505–511.
- [37] Phillips TD, Shoemaker MJ. Early Access to Physical Therapy and Specialty Care Management for American Workers With Musculoskeletal Injuries. *J Occup Environ Med*. 2017;59(4):402–411.

Appendix A. Sharing Circle and Semi-Structured Interview Guiding Questions and Prompts

1. Are you aware of all of the reasons physical and occupational therapy might be useful? (Prompts included orthopaedics, neurological conditions, diabetes, pre and post amputation, breathing and endurance problems, paediatric needs, functioning around the home, strengthening, cancer rehabilitation, women's health needs, pain management)

2. Have you had injuries or illness that required or may require physical or occupational therapy? Can you tell me/ us a bit about it? (Prompts included length of time experiencing this difficulty, impact of this difficulty on their life including physical abilities, social activities, emotional issues, ability to practice culture and spiritual activities, and opportunity for open ended response).

3. Have you had physical therapy or occupational therapy services? Do you mind telling us a bit about that experience? Where did you receive those services? (Prompts included hospital, longterm care facility, home, community clinic)

4. What other types of supports/ services have you, or loved ones that you provide support to, used for managing an illness, condition or disability and what was that experience like? (Prompts included other health care services, community supports, local/traditional healing practices, and opportunity for additional response).

5. Can you tell us about any challenges you have had in trying to access physical therapy or occupational therapy for these problems? (Prompts included travel, wait times, financial/ costs, cultural, comfort interacting with health care pro-

fessionals, usefulness of education resources, and opportunity for additional response.)

6. What types of services and/ or supports do you think would help to support you in better treating and managing your concerns and overall abilities to do the things you want to do? (Prompts included different types of rehabilitation, uses of technology).

7. What might be some important ways to ensure that your culture and perspectives are respected and honoured through rehabilitation services? (Prompts included: is there anything you would like to see *more* of from professionals/ services, and is there anything you would like to see *less* of from professionals/ services?)

8. How would we know if rehabilitation services were relevant and useful for people in your community? (Prompts included: do you have some ideas on what types of measures would help capture the usefulness of increased access to physical therapy and occupational therapy – patient experiences/ stories, less pain/measuring pain levels, better quality of life, clarifying what types of activities they would now be able to participate in, better movement/ mobility/function in their home, more able to participate in social/ community activities, less use of prescription medicines, less travel from the community, and an opportunity to add additional comments.)

9. Is there anything else you would like to share with us about either your experiences with accessing rehabilitation services, health care access/ use or anything you would like File Hills Qu'Appelle Tribal Council Health Services to know about your rehabilitation needs?