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Research

Exploring paramedic care for First Nations in Alberta: a qualitative study

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Abstract

Background: Prior work has shown that a greater proportion of First Nations patients than non–First Nations patients arrive by ambulance to emergency departments in Alberta. The objective of this study was to understand First Nations perspectives on transitions in care involving paramedics, and paramedic perspectives on serving First Nations communities.

Methods: Participants for this participatory qualitative study were selected by means of purposive sampling through author networks, established relationships and knowledge of the Alberta paramedicine system. First Nations research team members engaged First Nations community organizations to identify and invite First Nations participants. Four sharing circles were held virtually in July 2021 via Zoom by the Alberta First Nations Information Governance Centre. We analyzed the data from the sharing circles using a Western thematic approach. The data were reviewed by Indigenous researchers.

Results: Forty-four participants attended the 4 sharing circles (8–14 participants per circle), which ranged from 68 to 88 minutes long. We identified 3 major themes: racism, system barriers and solutions. First Nations participants described being stereotyped as misusing paramedic systems and substance using, which led to racial discrimination by paramedics and emergency department staff. Discrimination and lack of options to return home after care sometimes led First Nations patients to avoid paramedic care, and lack of alternative care options drove patients to access paramedic care. First Nations providers described facing racism from colleagues and completing additional work to act as cultural mentors to non–First Nations providers. Paramedics expressed moral distress when called on to handle issues outside their scope of practice and when they observed discrimination that interfered with patient care. Proposed solutions included First Nations self-determination in paramedic service design, cultural training and education for paramedics, and new paramedicine service models.

Interpretation: First Nations people face discrimination and systemic barriers when accessing paramedicine. Potential solutions include the integration of paramedics in expanded health care roles that incorporate First Nations perspectives and address local priorities, and First Nations should lead in the design of and priority setting for paramedic services in their communities.

Alberta is subject to treaties that were negotiated between First Nations and the Crown as the legal basis for coexistence among Indigenous and settler peoples in Canada.[1] The 3 main numbered treaty territories in Alberta are Treaty 6, in central Alberta, Treaty 7, in southern Alberta, and Treaty 8, in northern Alberta (Figure 1).[2] Indigenous interpretations of treaties posit them as the basis for evolving peaceful and life-affirming coexistence.[3] Paramedicine is one field where settlers and First Nations are negotiating relations today. The definition of paramedicine is evolving,[4] and paramedicine and paramedic services are undergoing extensive change.[5] However, for the purposes of this paper, we use these terms interchangeably with terms such as emergency medical services (EMS) to refer to the system in which paramedics work.[6] Paramedicine includes the conventional ambulance-based services provided by paramedics that involve responding to requests for emergency medical care, stabilization on the scene and transport to an emergency department (ED) for further care, as well as novel approaches to care that include integration of paramedics into the health care system.[7] Community paramedics in Alberta are advanced care paramedics with additional training to manage nonemergent conditions in the community in consultation with medical providers.[8] We use the term "providers" to refer to all health care providers and paramedics as a narrower term throughout this text.

Competing interests: See the end of the article.

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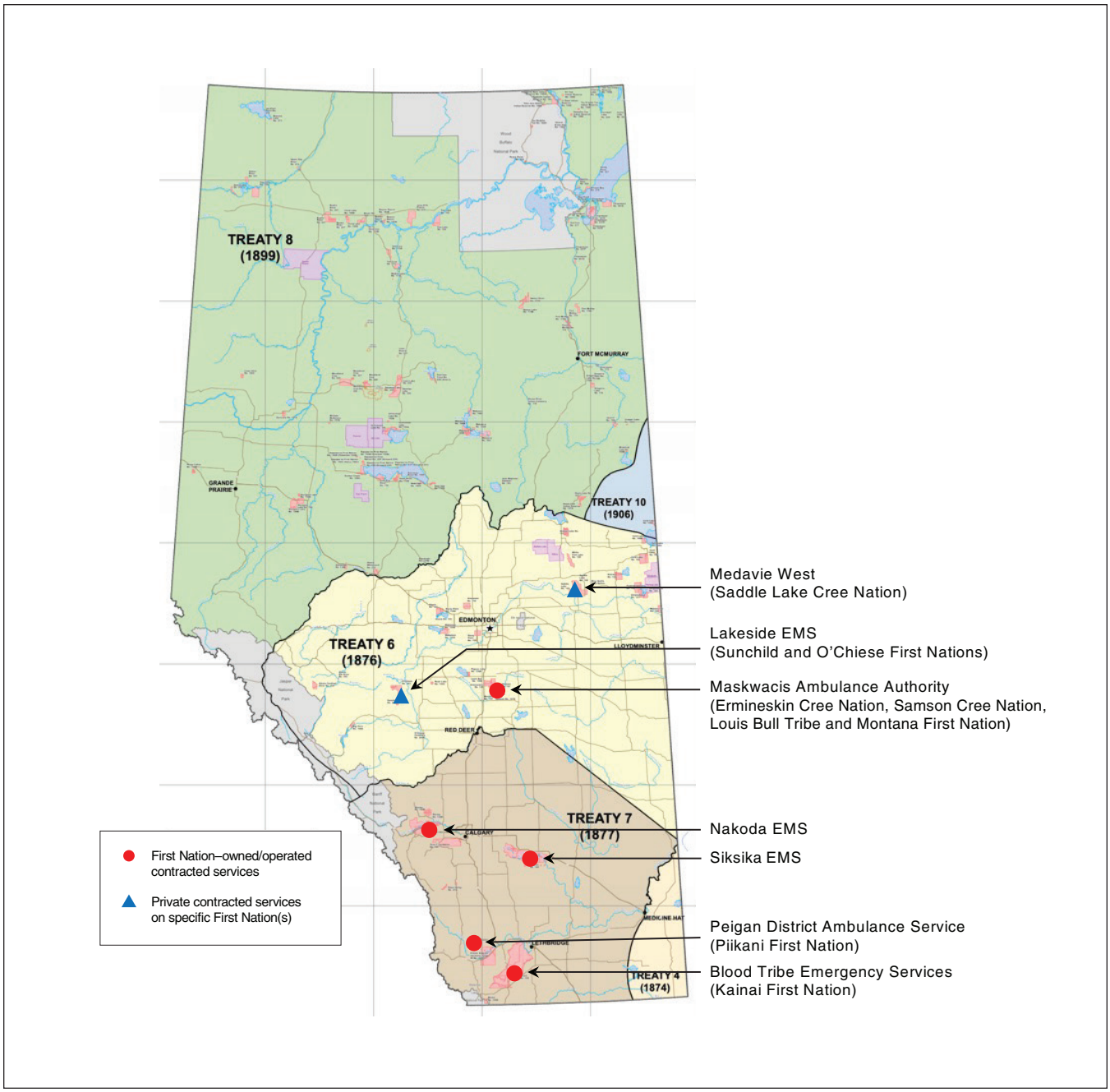

Figure 1: First Nations ambulance operators and treaty areas. Note: EMS = emergency medical services. Source: developed from the Government of Alberta First Nations reserves and Métis settlements map.[2]

A greater proportion of First Nations patients than non–First Nations patients arrive by ambulance to EDs in Alberta,[9] and First Nations people face inequities when accessing acute care.[10–12] In an institutional ethnographic work based in Calgary, Alberta, Corman[13] quotes a paramedic who is intolerant toward "Natives," and this racism is described as being learned on the job. The aim of the present study was to understand First Nations perspectives on transitions in care involving paramedics, and paramedic perspectives on serving First Nations communities.

Methods

Setting

The provincial health authority, Alberta Health Services (AHS), provides paramedic services in Alberta through direct delivery and contracted ambulance operators. There are 5 First Nations–operated ambulance services that provide services to specific First Nations (Figure 1). All other First Nations are serviced by AHS EMS direct delivery or private contracted services that respond from off-reserve.

Design

This was a participatory qualitative study guided by the concept of creating ethical space.[14] As a team, we value both Western and Indigenous research approaches and understandings, using a community-based participatory research approach. In keeping with Indigenous methods presented by Kovach,[15] we understand that our work is based in "a relational understanding of accountability to the world" and our communities. We co-constructed knowledge through interrelationships among our team members and an ethical engagement with participants. The Alberta First Nations Information Governance Centre (AFNIGC), a First Nations–led organization accountable to all First Nations in Alberta, was the lead organization for this study. The centre ensured adherence to the First Nations principles of Ownership, Control, Access and Possession (OCAP) of health data by securing qualitative and survey data on AFNIGC servers and performing all analyses in partnership with Western research team members.[16]

In October 2019, the research team met with Elders who had previously guided ED-related research. Consistent with previous studies, the Elders provided direction for the study conduct to ensure that researchers approached the study with respect and incorporated Indigenous values, knowledge and histories into the research design. We used the Consolidated Criteria for Reporting Qualitative Research checklist[17] to guide the reporting.

Participant recruitment

We selected study participants using purposive sampling through author networks, as well as established relationships from previous research and professional knowledge of the Alberta paramedicine system. Through their established relationships, First Nations research team members engaged First Nations community organizations to identify and invite First Nations participants. We aimed to recruit First Nations community members with experience accessing paramedic care, paramedics with experience serving First Nations communities (within AHS, private services and First Nations paramedic services) and health care system leaders. We sought to ensure participation of people from different parts of Alberta, and those of varying ages and genders.

Data collection

Four sharing circles were held virtually in July 2021 via Zoom videoconferencing software (version 5.7.1), which is a validated method for qualitative data collection.[18] Sharing circles are an Indigenous method whereby issues of common interest are discussed and all participants are viewed as equal in a supportive and healing environment that is respectful to Indigenous protocols.[19] Virtual sharing circles have been previously reported in a qualitative study of the experiences of Indigenous nursing students during the COVID-19

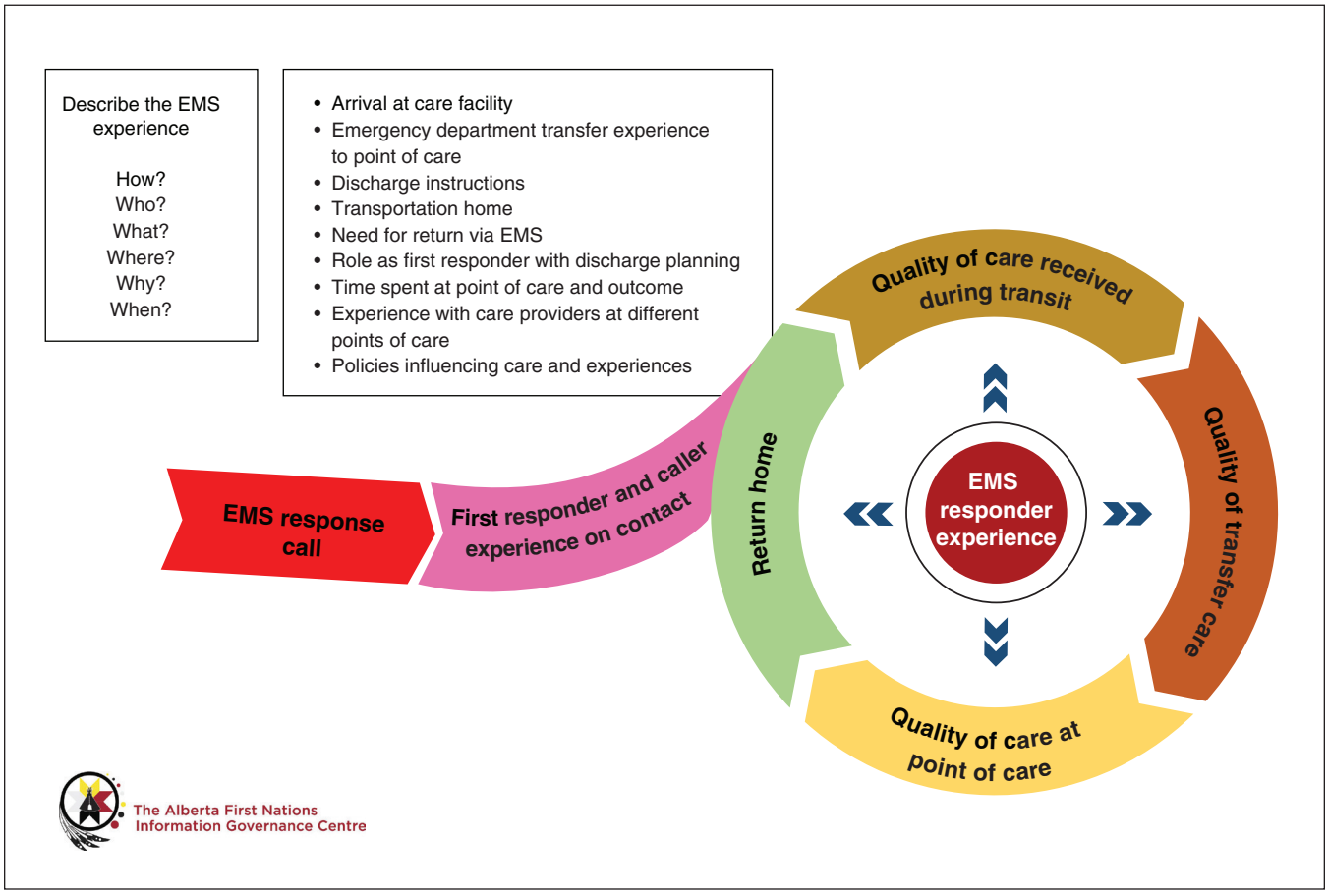

Figure 2: Transitions in care that patients experience during paramedic care. Note: EMS = emergency medical services.

pandemic in which the author adopted Indigenous and Western methods.[20] Before the sessions, participants completed online consent forms or provided verbal consent by telephone, and completed a demographics questionnaire. In the questionnaire, participants indicated whether they were attending as community members or as people involved in paramedic services. The data collection sessions began with Elders offering a prayer, followed by a discussion of voluntary participation and participant withdrawal procedures, as well as a description of the project objectives. L.B. and P.M. facilitated the sharing circles. They were positioned to facilitate dialogue using elements aligned with an Indigenous conversational methodology that was based on the tradition of knowledge sharing and oriented to Indigenous ways of knowing.[15]

To encourage dialogue and to prompt participant discussion in an unstructured and open way, L.B. created a graphic showing the transitions in care that patients experience during paramedic care that was presented to sharing circle participants (Figure 2). The experience is depicted as a circle because our team's prior experience is that patients often have multiple transports and encounters with EMS over the course of a health event.

Analysis

Recordings were transcribed verbatim, and AFNIGC staff verified the accuracy of anonymized transcripts. The data were de-identified by AFNIGC and held securely on AFNIGC servers. The anonymized data were shared with investigators for analysis. The primary analytic team included a settler paramedic researcher (J.G.T.), a settler paramedic research leader (I.E.B.), a First Nations researcher and knowledge holder (L.B.) and a settler sociologist with qualitative methods expertise (P.M.). Transcripts were coded thematically.[21] Coauthors contributing to the study design, data interpretation and critical revision of the manuscript included a First Nations registered nurse/trauma-trained ED nurse (B.H.), a settler emergency physician with senior leadership roles (B.R.H.) and a Métis specialist physician with expertise in Indigenous health research (C.M.B.).

J.G.T. coded transcripts in NVivo 11 (QSR International), informed by guidance from L.B. and a previous ED study led by P.M. and L.B.[10] Themes were developed in consultation with the research team and were revised during manuscript drafting. Results of the analysis were presented to 2 First Nation Elders and a health care technician identified by the research team in October 2022, and their feedback is reflected in the data interpretation. The Elders' perspectives guided us to consider the results in relation to First Nations values that did not originally form part of our interpretations.

Ethics approval

The study received ethics approval from the Health Research Ethics Board of Alberta Community Health Committee (HREBA.CHC-19–0074) and the University of Alberta Health Research Ethics Board (Pro00098744).

Results

Forty-four participants attended the 4 sharing circles (8–14 participants per circle), which ranged from 68 to 88 minutes long. The attendees included First Nations community members, paramedics and EMS managers from all treaty areas (Table 1) (additional demographics questionnaire responses are provided

Table 1: Participant characteristics

Characteristic	Representation; no. (%) of participants		
	Community member *n* = 16	Paramedic services *n* = 28	Total *n* = 44
Sex*			
Female	12 (75)	11 (39)	23 (52)
Male	4 (25)	17 (61)	21 (48)
Age, yr			
20–30	0 (0)	2 (7)	2 (4)
31–40	2 (12)	7 (25)	9 (20)
41–50	1 (6)	6 (21)	7 (16)
51–60	1 (6)	9 (32)	10 (23)
61–70	4 (25)	2 (7)	6 (14)
≥ 71	4 (25)	0 (0)	4 (9)
No response	4 (25)	2 (7)	6 (14)
Residence			
Rural†	10 (62)	6 (21)	16 (36)
Urban‡	2 (12)	20 (71)	22 (50)
No response	4 (25)	2 (7)	6 (14)
Reserve residence status			
On-reserve	11 (69)	0 (0)	11 (25)
Off-reserve	1 (6)	26 (93)	27 (61)
No response	4 (25)	2 (7)	6 (14)
Identifies as First Nations			
Yes	15 (94)	6 (21)	21 (48)
No	0 (0)	22 (79)	22 (50)
No response	1 (6)	0 (0)	1 (2)
Profession§			
Paramedic	–	9 (32)	9 (32)
Physician	–	3 (11)	3 (11)
Manager	–	6 (21)	6 (21)
Policy-maker	–	3 (11)	3 (11)
Other	–	4 (14)	4 (14)
No response	–	3 (11)	3 (11)

*Additional sex options (e.g., nonbinary) were enquired about but were not used by respondents.
†Defined as located 50–350 km from the nearest service centre with year-round road access.
‡Defined as within 50 km of the nearest service centre with year-round road access.
§Paramedic services only.

in Appendix 1, Supplementary Tables S1 and S2, available at www.cmajopen.ca/content/11/6/E1135/suppl/DC1). Experiences were predominantly from paramedics and others providing health care services on First Nations reserves (Appendix 1, Supplementary Tables S2 and S3). Three themes were identified: racism, system barriers and solutions. In addition, 20 subthemes (8 subthemes of racism, 6 subthemes of system barriers and 6 subthemes of solutions) were identified (Figure 3).

Racism

Participants described racism in terms of ideas about and actions toward First Nations members that limited their access to quality paramedic care (Table 2). In particular, racist stereotypes related to perceived misuse of EMS and substance use, race-based discriminatory treatment by paramedics and at EDs, and racism toward First Nations health care providers. Descriptions of stereotypes of ED misuse were complicated by participants' efforts to delineate what constitutes true misuse of EMS.

System barriers

In each sharing circle, community members, paramedics and health care system leaders identified a lack of primary care on-reserve as a major contributor to EMS use (Table 3). Health care system leaders included First Nations health care directors, and senior health care providers, administrators and managers

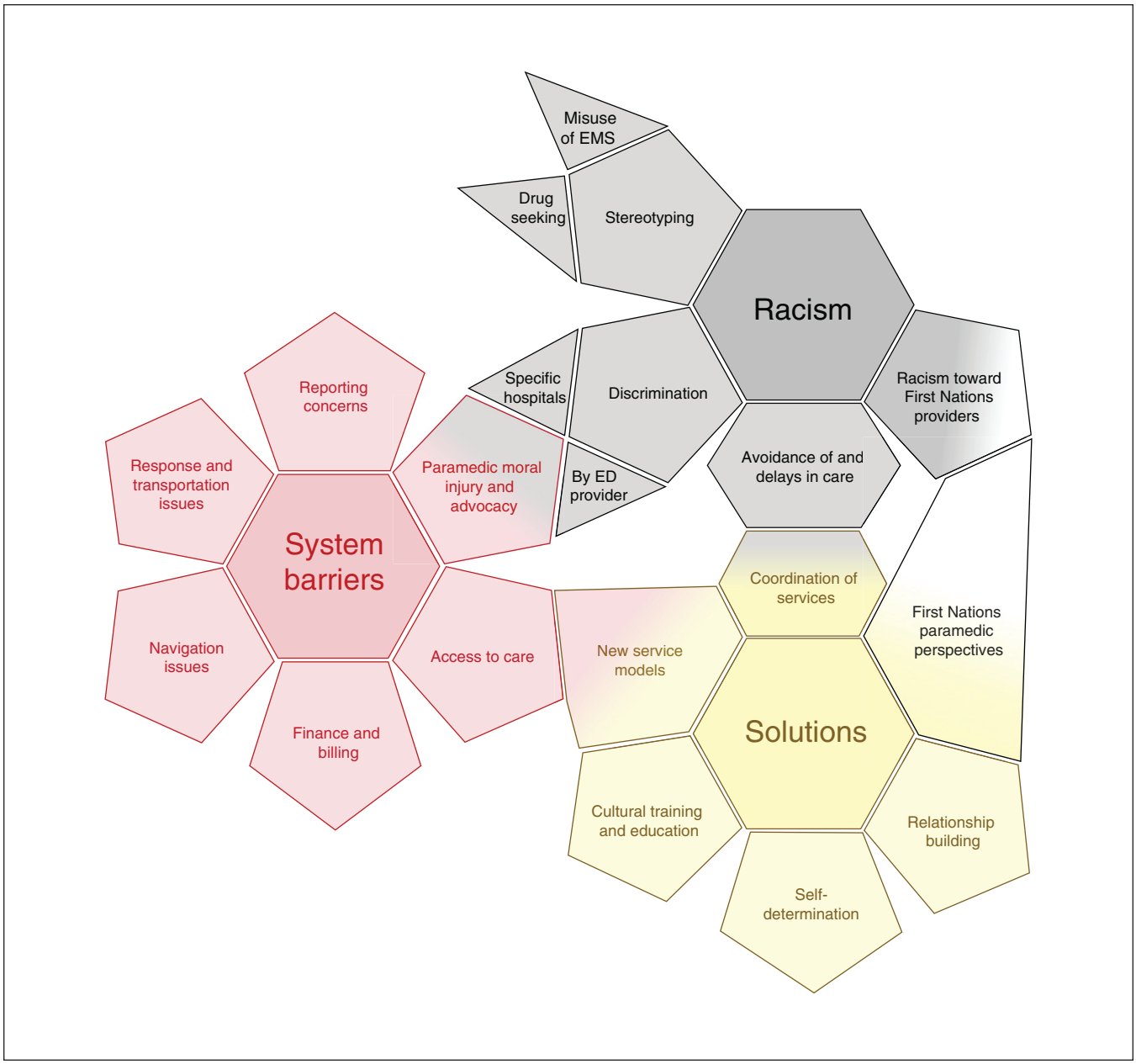

Figure 3: Themes and subthemes identified. Note: ED = emergency department, EMS = emergency medical services.

Table 2 (part 1 of 2): Racism subthemes, with illustrative quotations

Subtheme	Description	Illustrative quotation
Stereotyping		
Perceived misuse of EMS	Community members, health care leaders and paramedics identified a stereotype of First Nations community members' requesting 9-1-1 for nonhealth or nonemergent needs, and frequently described this as "misuse" of EMS	I think there is also a poor relationship with patients when they're viewed to have misused the system in the view of the paramedic. I don't think that's all that uncommon of an occurrence, unfortunately, and it's not necessarily just the bad practitioners that do that. — P14, community paramedic There are preconceived notions and there are shorter temperaments surrounding First Nations communities because of what some would view as an inappropriate use of an ambulance service, like going to get your prescription refilled. I know that can be frustrating for practitioners old and new. Ultimately, we can't deny you care. We can't tell you "No, you're not allowed to come in the ambulance," and I don't know that we are capable of always making that decision. — P19, paramedic It [utilizing paramedic services for access to primary care] is ultimately a misuse of the ambulance service because we are an emergency service. With them [First Nations community members] calling, they know somebody's going to come and somebody is going to check [their] blood pressure and somebody's going to talk to [them]. — P19, paramedic
Substance use	First Nations community members identified instances when paramedics and health care professionals held stereotypes of First Nations patients as substance-using, in ways that affect care	My children's father had to deal with the racist part of EMS and paramedics. This is a man who doesn't like to take medication whatsoever for anything. He was experiencing quite a bit of pain, enough that we had to phone the ambulance, and he was labelled as drug-seeking. The ambulance didn't take him, they left him. — P28, First Nation community member With my parents being elderly, there's those misconceptions of why they're at the health centre or in emergency — it's assumed they would just want opioids. No, both my parents don't take opioids, and that's the first thing they're offered. "Here. Okay. Here's your prescription. You can go." But it doesn't help the problem and get them to further medical treatment for their diagnosis or really find what's wrong with them. I find it's "push them out fast" kind of thing, but yet if it was anybody else, that next person down the road, they are talked to in a different way, they're treated in a different way. A lot of our people aren't going to look like some of the other society or what they [providers] want them to look like. But they're comfortable with themselves. Yet we're looked at as … poor bums or whatnot. We have a lot of those issues. When you come into the health care centres, the racism, there's no way around that. — P1, First Nation community member
Discrimination	Participants shared instances when First Nations experienced race-based negative treatment from paramedics when receiving care	I know sometimes I get treated really good by ambulance, and there's other times I don't get treated right because they [paramedics] are not talking to me right. I really feel confused or misunderstood in regard to what it is I'm wanting. Am I just somebody that's giving them money from Indian Affairs, and nobody gives a hoot about it? — P32, First Nation community member I think, unfortunately, there's overt racism where people, all they see is the assumptions that they came in with. They don't see the patient for who she is or who he is, and they're just filling in the blanks already; they're enforcing a narrative on them and they're acting accordingly. They're not listening. They're not taking in anything from the patient. … [They're] not seeing, or [they're] not listening to what [the patient] is telling you they need; [they're] not being responsive to that. [They're] replicating that imbalance in the system where [the patient] doesn't have access to care any other way at that moment, other than the 9-1-1 system. [They're] professionally acting in a way that reinforces that barrier, that [patients] are up against. — P14, community paramedic

from various disciplines that interface with paramedic services. Many participants described that lack of resources for after-hours care necessitates EMS and ED use for nonemergent medical conditions. Participants also described system issues that arise from a lack of coordination between First Nations and non–First Nations health care and transportation systems, including paramedics' difficulty navigating First Nations reserves, paramedic services bills' being sent to collection agencies (even when the patient is insured) and lack of effective mechanisms to report discrimination. Some participants also described the way system-driven response times negatively affect care interactions. Among the most striking results were descriptions of patient avoidance of care and attempts by paramedics to advocate for patients within the wider health care system.

Table 2 (part 2 of 2): Racism subthemes, with illustrative quotations

Subtheme	Description	Illustrative quotation
Discrimination at transition to ED care	Paramedics reported that, when First Nations community members are transported to hospital and care is transferred from paramedics to the ED, the patients often face discrimination by ED providers	[At] some of the hospitals in the south, the common comments were "Oh, [the patient] is drunk, how come you're bringing them here? They're just drunk." Well, how do you know they're just drunk? Did you just spend the last 40 minutes with them in the ambulance, do you know their history? Were they drinking? Do they drink? A lot of the Elders don't drink. Everything is always a preconceived notion in the south. — P4, EMS manager When I brought my patient in, I'm giving a report to the nurse, and I mentioned … alcohol was on board. They [emergency department providers] just chatter amongst us, not even caring who was around or where the patient is. And it's just "Oh yeah, I told you so," telling the other nurse. Like, why are you doing that in front of me, first of all, and the patient is right there. — P12, First Nation paramedic To say that we don't see a different treatment for the Indigenous population would be a lie. Bringing patients into hospitals and not being Indigenous, you would see the different reactions from the health care providers in the hospitals. It's very disturbing, because I was always taught that everyone's state of emergency is different, and we don't judge it. If [you] feel they need to go into the hospital, you bring them into the hospital. — P4, First Nation EMS manager
Racism toward First Nations providers	First Nations providers described experiencing racism and its impacts on them	I'm obviously First Nations, but walking down the hallways with EMS crews — doesn't matter which hospital it's at ... 95% of the time, the practitioners in the city will continue to see me as something at the bottom of their shoe. It was the same yesterday. It's going to be the same today. It's people's own personal perspectives, and racism is still rampant in the health care system. That's a struggle day by day. — P15, First Nation paramedic I'm even racist to myself almost. … You have that ingrained idea that you're probably not really that special anyway, so what the heck? … I'll just grin and bear it, and we'll just get along in this society. — P20, community member/ health care professional

Note: ED = emergency department, EMS = emergency medical services.

First Nations community members and paramedics identified that First Nations patients may be reluctant to be transported for care. Avoidance of care was predominantly expressed as being related to negative past experiences in EDs and system barriers that create difficulties returning home. Respondents indicated that, when deciding to seek care, First Nations people weigh the severity of their illness against their ability to access transport home after transport to and care in an ED.

Paramedics expressed distress associated with their inability to perform duties when patient avoidance of care is founded on previous experiences of discrimination. A paramedic leader described a case in which a patient died after refusing transport to hospital based on previous discrimination there. Paramedics also spoke about frustration with the lack of consistent care delivered in EDs and negative attitudes toward First Nations peoples. One paramedic (P27) described that it is emotionally difficult to be "the gateway between the bad experience you're currently having and another bad experience that you're going to have from people that are expected to help you." Some paramedics described themselves as advocates for patients within the wider health care system, in some cases citing their greater familiarity with particular patients.

Solutions

Participants described potential solutions to issues in paramedic care for First Nations people, including practitioner cultural training and education; building relationships and partnerships with First Nations communities and the organizations that serve them; developing new service models; First Nations self-determination in paramedic service design; and coordination of services (Table 4, Figure 4).

First Nations community members and EMS operators expressed the importance of First Nations self-determination in health care services, including EMS. Participants from First Nations communities stated that their priorities for EMS may be distinct from those of the provincial health authority.

One participant powerfully described that appropriate use of EMS is a contested matter:

> I think the definition of proper use of an ambulance is constructed within White communities that have access to hospitals quite readily. We need to work on redefining what the appropriate or proper use of ambulance services is in remote Indigenous communities [and] even in not so remote Indigenous communities. There needs to be a change in paradigm or just a redefinition of what exactly that means. — P22, EMS manager

Table 3 (part 1 of 2): System barriers subthemes, with illustrative quotations

Subtheme	Description	Illustrative quotation
Access to care	Participants described issues in availability of alternative care options as driving EMS use	The health care system as a whole needs to look at how they're providing that primary care. It is a really rational decision for patients to call for these low acuity complaints because EMS is there 24/7 and the emergency and urgent cares are there 24/7, so they are reaching out to the only care available. — P14, community paramedic
Navigation issues on First Nations	Participants described paramedics having difficulty finding locations on First Nations, particularly where First Nations lands do not follow road and address formulas that are used elsewhere in Alberta	There's been several times where they [paramedics] don't know where they're going because they don't know the reserve. They're not able to find houses; they've pulled into houses and asked, "Is this the place we're supposed to be at?" And they'll be way off route. These kinds of things are very concerning to a member on the Nation when it comes to life-and-death services. — P8, First Nation community member
Reporting concerns	Participants described a lack of effective mechanisms to report discriminatory behaviour or a lack of such mechanisms	A lot of our people won't go through that [complaints] process to make that person accountable or their health care team [accountable]. It doesn't matter what team, like, EMS, nurses, doctors. You call a 1-800 number and then you'll get a call back and then again, it's back and forth, just too overwhelming. — P1, First Nation community member
Response and transport issues	Participants described negative experiences related to ambulance response and barriers to transportation home	The people [First Nations community members] can be frustrated because it does take 45 minutes, 2 hours, maybe 4, if they [paramedics] are coming from another community, and people can meet immediately with frustration. "How come it took you guys so long?" And we've got to do our best to de-escalate that situation. — P19, paramedic I do know with Health Canada — they used to pay us to actually do a transport home by ambulance. Then they realized maybe that's too expensive. Hence that's how that medical transportation program kind of got born out of that, which is a great idea. But trouble is, a medical transportation tends to go from 8 to 5 type of thing, not so much after hours. — P6, First Nations EMS manager
Finance and billing	Participants described difficulties that arise for patients when they are billed for paramedic services that are covered by their Health Canada Non-Insured Health Benefits, and these bills are sometimes sent to collections	I'm seeing a lot of clients who have EMS bills. They're getting billed for their transport to the hospital, and a lot of these bills are already gone to collections for a nonpayment. There's a big lack of communication possibly with the paramedic team and the client. There's no questioning or indicating "Are you First Nation? Do you have a status number?" or anything like that. All they ask for is the Alberta Health Care [Insurance Plan number]. As a result, we have quite a [few] clients who are getting these invoices for ambulance services without being aware that it's covered by the Non-Insured Health program or Non-Insured Health Benefits program. With that being said, they [bills] are going unpaid, and then they're being submitted to collections. — P28, First Nation community member
Avoidance and delays in care		
Owing to discrimination	Participants described patients' declining paramedic care or hospital care owing to prior experiences of discrimination	I really don't like [name of hospital, about 60 km away] because they're so very difficult with our people. I wanted to go to [name of hospital, about 140 km away] or [name of hospital, about 100 km away], but they [the paramedics] said no. I said, "Okay, I want to stay here and die at home." — P33, First Nation community member The main reason the person [who declined transport a few hours before their death from a treatable condition] expressed that they did not want to be transported was because of the discrimination they had experienced in previous visits to the hospital. — P22, EMS manager
Owing to system barriers in returning home	Participants described patients' declining hospital transport owing to difficulty securing transport home following EMS transport to hospital	We find ourselves trying to convince sick [people] to come with us for medical attention, and that is the priority. Finding the way home is something that people should not be worried about. — P27, paramedic Just that aspect [return transport to community] alone unfortunately is a deterrent for some people. I know in the past, people have tried to walk home. That's a 50-kilometre walk from [name of hospital] back to the Nation, depending on where they live. Some people have tried to do [that] when it's 40 below outside, which is just insane, but yet that's what they're faced with for whatever reason. — P6, First Nations EMS manager

Table 3 (part 2 of 2): System barriers subthemes, with illustrative quotations

Subtheme	Description	Illustrative quotation
Paramedic moral injury and advocacy	Paramedics described negative impacts on them personally and professionally when issues of systemic discrimination affected patient care, and also described efforts they make to advocate for patients	Of course, we can't force people to come with us, unless we [have a mental health form for] them, and that's a very narrow window of opportunity. This patient did not come anywhere near the criteria for that to be able to happen. In the end, after about an hour and a half–long interaction, the crew signed the patient off and left him in the care of the family and returned back to the station … to be called back 5 hours later to find that the patient had taken their own life. It was a very traumatic experience for our crew. Of course, a lot of blaming themselves for not having transported that person. So, that was a very early introduction to the consequences of the systemic discrimination and racism that First Nations people face. — P22, EMS manager We're advocating for our patients relentlessly. What we're talking about earlier and what [name of participant] was talking about earlier — we'll go toe to toe with anybody. If we see our patients being mistreated, we'll gladly step in there. But it's still out there; it's every day. — P15, First Nation paramedic I vividly recall dropping off a male patient to one of the Northern hospitals, from one of the isolated First Nations communities. … I remember relaying that this patient was just quite ill, their presentation — it just, it was either leading toward sepsis or some sort of a gastrointestinal issue. [Then in the ED], to have it downplayed and disregarded … unfortunately, just referencing stereotypes, be it just addictive substances consumption or just self-neglect … it was really unfortunate being an experienced health care provider to have our experience written off when we're trying to do patient advocacy for the receiving facility. — P27, paramedic So, when I'm picking a shift up, my mindset is, "Am I going to have a good shift or a negative shift, because of my partner? Are people going to be rude to me at the hospital?" I want to go in with good intentions and to be a good advocate for my patient, but I want to enjoy my workday. — P12, First Nation paramedic

Note: ED = emergency department, EMS = emergency medical service.

When asked for solutions to the challenges of EMS on First Nations, some participants suggested patient navigation, wraparound services in collaboration with other health care services, and inclusion of Indigenous knowledge holders in design and delivery of health care services as key priorities. Participants also discussed the opportunity for community paramedic programs to address nonemergent conditions as part of a multidisciplinary care team. Community members recommended solutions for transport home from hospital that included after-hours transport.

In our meeting to discuss the results of the analysis with Elders, they reflected that the project was valuable and that they believed our results would drive positive change. They expressed a desire for community members to know that work is ongoing to improve paramedicine for First Nations in Alberta. They also emphasized the importance of First Nations values and principles (such as the Cree guiding principle for health of Kisêwâtisowin ["absolute compassion"][22]) for local paramedicine services and the fact that First Nations members have a treaty right to health, as expressed in Treaty 6.[23] Finally, the Elders noted that those in the health care system should think of future generations and recognize that, when they do harm, future generations will have to pay the price.

Interpretation

Our findings suggest that paramedic judgments of and behaviour toward First Nations community members in Alberta result in patient avoidance of care and contribute to negative health outcomes. In turn, paramedics themselves are negatively affected by witnessing the discrimination that First Nations patients encounter. Definitions of appropriate and inappropriate EMS use are at the core of conflicts observed in our study.

We found that stereotypes about First Nation members; experiences of discrimination by First Nations patients and paramedics and other care providers; patient avoidance of care; and system barriers to care all affect paramedicine in Alberta. We also found that paramedics are distressed when they are unable to provide care or ensure quality care by other health care professionals, and view themselves as patient advocates. Participants described potential ways to improve care of First Nations members, including First Nations–run health care services, coordination among services, support for culturally safe care through education, and new service models such as alternative care destinations, telehealth and community paramedics.

There are profound occurrences of discrimination and racism when First Nations people access ED care in Alberta.[9–11] Our findings show that many issues that First Nations members encounter in EDs, including discrimination related to stereotypes about "misuse" of health care services and about substance use, also affect paramedic care.[9–11]

Authors of previous sociological studies of emergency medicine have argued that ED care is not simply medical but also involves moral judgments of patients.[12,24,25] Our results show that this dynamic extends to paramedicine. Paramedics in our study were deeply invested in defining their role and describing which types of patients they should be seeing, although there was disagreement on definitions.

Table 4 (part 1 of 2): Solutions subthemes, with illustrative quotations

Subtheme	Description	Illustrative quotation
First Nations paramedic perspectives	First Nations paramedics described their unique ability to serve their communities in ways community members value, and the work they do acting as cultural mentors to non–First Nations paramedics	They know they're going to get the best treatment we can give, and from being down here, we know the language. We know the culture, we know the people, we know the families, the spirituality, and, for myself personally, I bring that on every call I go toward, and people are really open and receptive of that. — P15, First Nation paramedic The community is very supportive of what we're doing. They're glad to see one of their Nation members walk through the door. — P15, First Nation paramedic More people, maybe in regard to Calgary zone, need more education in regard to ... okay, we have a module out there for Indigenous awareness culture [training]. But I think there needs to be more, because you're going to get more experience by reaching out to community members, reaching out to our Elders and being like, "What is the right way to interact with First Nations?" I get a lot of questions. — P12, First Nation paramedic
Cultural training, paramedic education	Participants described a need for paramedics to better understand First Nations cultures and made suggestions for paramedic education	A recommendation would be to do a different cultural competency training for each territory, for services that are provided in that area. Just to help broaden the knowledge and support for our people when we have to access health care. — P1, First Nation community member We have a module out there for Indigenous awareness culture [training]. But I think there needs to be more, because you're going to get more experience by reaching out to community members, reaching out to our Elders and being like, "What is the right way to interact with First Nations? I get a lot of questions. — P12, First Nation paramedic The majority of the ambulance paramedics are White. No discrimination, but we do have a different way of treating our people, talking to our people, and delivering service to our people, by our people. — P33, First Nation community member
First Nations self-determination	Participants described the importance of First Nations' determining how their health care services are delivered	I think it goes back to having our own EMS services within our community, because we can have those members that are fluent in our language and even know our members. — P1, First Nation community member We [First Nations ambulance operators] try to align ourselves as closely as we can with Alberta Health Services protocols and guidelines, but, at the same time, we understand the uniqueness of the First Nations field and working on a First Nation where we have that ability to actually change things, to make it better for our clients, which is the people of our First Nations we serve. — P6, First Nations EMS manager
Coordination of services	Participants described a need for services to have resources to better coordinate with one another, to better serve First Nations patients and ensure patients receive the services they need	We definitely need more wraparound care, more human resources when it does come to some of these collaborations with resources. Making it stronger because it might sound really cool, really good in a perfect world, but how many people still fall through those gaps in finding those resources? Because you might make that call, but, at the same time, cellphone service. … There are so many different services. Is that like an 8 to 4 kind of thing, too? The hours of services? There needs to be more navigation within those systems, is what I'm trying to say. Which would be beneficial for both health care professionals and the members themselves and our client liaisons; something like that would be really good to see. — P1, First Nation community member We've got to do better to make sure that incentives are provided, and that services are at [a given] site so that appropriate services should be delivered. Why should somebody be evacuated via ambulance to get a prescription refill or to get a respiratory issue addressed or a cut addressed or impetigo addressed? — P20, First Nation community member/health care professional

Table 4 (part 2 of 2): Solutions subthemes, with illustrative quotations

Subtheme	Description	Illustrative quotation
New service models	Participants described the possibility of developing new ways of delivering care to improve health care for First Nations members	I know that [the new service model] is something that's unique for us and that we're working on, and we've done some other really unique stuff for traditional healing. Maybe even a whole different health care model, it could even be that. Trying to change and move those mountains and thinking nothing's too big. It is lip service from the government. But who's going to start making these moves? If it is us younger people collaborating with our knowledge holders and other people that provide services, all of those things just streamline the process. It is a heavy, daunting process when you navigate the health system, no doubt about that. It doesn't matter what it is. Our people are vulnerable at that state when they are sick, and there's so many different things that come into play when it comes to health care, health determinants, all of those things. — P1, First Nations community member That was one of the things, actually, I was trying to work on there, was to look at a community paramedic being paired with me, and then we could be working on call after hours to deal with those situations [nonemergent cases] … most of those were not emergency situations where the client had to be evacuated. A lot of those were … a sore throat, prescription refill, probably a chest infection. Some of those, they're not minor, but they need to be addressed. — P20, First Nations community member/ health care professional [One possibility is] the new community paramedic program that we're bringing out here on the Nation, which is going to help take some of that pressure off of the emerg[ency] side of it so that they [paramedics] can handle some of these acute care issues and what have you and, again, free up my EMS units, those truly required units, that I may need to actually do those particular types of calls. …That goes back to running our own type of service. We try to align ourselves, I guess, as closely as we can with Alberta Health Services protocols and guidelines, but at the same time we understand the uniqueness of the First Nation field and working on a First Nation where we have the ability to actually change things, to make it better for our clients, which is the people of the First Nations we serve. — P6, First Nations EMS manager I think [a care model] needs to be very specific to the community and the types of services that are available there. We operate in some communities where there's a robust public health division or home care service that's offered as well as emergency services. What is an appropriate access to EMS in that community will be different from a community that has less service. I agree with the comments made … I think it needs to be defined in the context of the community that is relying on the service. — P23, paramedic manager
Relationship building	Participants recommended that relationships be developed among First Nations communities and the organizations serving these communities, to facilitate coordination of services and improve patient care	We [First Nations ambulance operators] are grateful to work with people in [name of First Nation health service] and have a strong relationship with home care and with the health centre, and I think that's important to foster and grow that connection, that EMS is part of a continuum of care, and it's not simply a transport to the hospital. Our goal is to do a better job of connecting to other services as well. We want to be that conduit to the health centre, to the physicians here in [name of Nation]. — P40, paramedic manager I think a lot of these models out there, when it comes to providing services and care to our members — [name of participant] was saying that being equipped and educated, like, what kind of training is being practised right now? What are the competencies that are lacking within these services? Even if it's starting there with that kind of work and going out to your closest First Nation territories and working alongside with them and trying to develop something that's unique. So we can start building that relationship and better the health care in those areas. … That's where you start to close those gaps and elevate on different resources and supporting those members that are accessing those services to make their experience a lot better and effective for their health outcomes. — P1, First Nation community member

Note: EMS = emergency medical services.

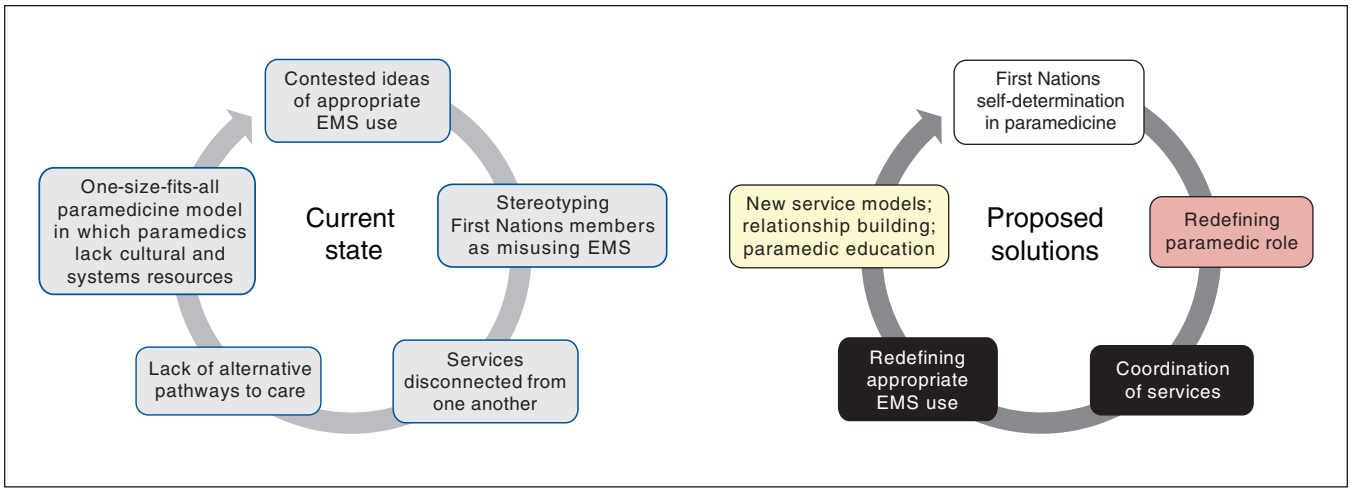

Figure 4: Current state of and proposed solutions to barriers First Nations people encounter when accessing emergency medical services (EMS) in Alberta.

Corman[26] performed an institutional ethnographic work similar to our study and reported that paramedics in Calgary classified ambulance events as "shit" when these were not viewed as legitimate or "true" emergencies. He argued that paramedics construct what they define as a "good" or "bad" call based on a variety of factors, including social categories. Likewise, in his ethnographic work in urban California, Seim[27] reported that paramedics prefer "legit" over "bullshit" cases. "Legit" cases are defined by a need for relatively urgent medical intervention (e.g., related to serious vehicular trauma or diabetic episodes), whereas "bullshit" calls are related to social ills (e.g., lack of access to primary care, need for shelter). The latter require little medical care and potentially lead to unnecessary transport. As in our study, in which paramedics often understood that patients called for EMS because no other options were available, Seim[27] described paramedics as sometimes sympathizing with patients while defining many ambulance calls as "bullshit." He argued that paramedicine is more than a job for many who do it; instead, it is a vocation or calling involving socially valuable work through which paramedics often define their core self-identities. We observed similar investment in paramedicine in our study when paramedics describe their role in advocacy for patients and the distress they experience when they are unable to provide or ensure needed care.

The problems identified in this study are predominantly systemic and thus require expansive, principle-based solutions. As each First Nation is sovereign and unique, we propose deliberately broad solutions amenable to adaptation to address local contexts and First Nations' priorities. Further research could entail engaging policy-makers to identify and evaluate specific actions and resource allocation that promotes self-determination and addresses inequities, such as the development and implementation of community-led initiatives and advancing culturally safe practices. Furthermore, to ensure that all patients are safe when accessing paramedic services, organizations must focus on redefining appropriate emergency care use to be responsive to patient needs in the context of health care systems that do not serve all patients equitably. As one of our participants noted, the definition of appropriate access to EMS has been "constructed within White communities" and for patients with ready access to comprehensive health care services. Redefining how paramedics view their role could improve care interactions and promote referrals to necessary services, including primary care.

Alongside redefining definitions of their role, paramedic services must combat racism toward First Nations people by implementing cultural safety training[28] that attends to the way care systems have been defined to privilege White communities and patients. This training should be led and evaluated in partnership with First Nations patients and community members.

However, respecting First Nations teachings through action and change in behaviours is the responsibility of settlers, who must focus on recognizing the value that First Nations ways and providers bring to their organizations. For instance, our results suggest that First Nations paramedics face the additional burden of acting as informal cultural mentors to non–First Nations providers, and this should be recognized and compensated.

Moreover, care locations to which paramedics transition patients (primarily EDs) must become culturally safe for First Nations patients in order for paramedics to fulfill their duty of care. At the same time, secure, sustained and equitable funding for First Nations primary care and other services will be essential in reducing mismatches between patient need and paramedics' professional sense of themselves. A more robust care system can support the changes to paramedic definitions of their professional role and greater integration of paramedicine with the health care system, if supported by investment in paramedic training, community partnerships and program development.

The changes we recommend reflect the evolving practice of many paramedic services that incorporate paramedic care as part of an interdisciplinary team.[5,29–31] Perhaps more important, recognizing First Nations self-determination in paramedicine aligns with the United Nations Declaration on the Rights of Indigenous Peoples.[32] First Nations service providers can be key leaders in health care system transformation if they are supported and compensated to do this work, and if the paramedic profession is made safe for them.

It is reasonable to regard the solutions we recommend as the basis of a model for serving First Nations communities.

Limitations

First Nations participants who do not have experience working in the health care system are underrepresented in our study. First Nations people without health care backgrounds may have perspectives and experiences different from those presented in this study. Youth are also underrepresented in our sample, with the majority of participants being older than 40 years.

Conclusion

First Nations peoples face discrimination and systemic barriers when accessing paramedic care. The integration of paramedics in expanded health care roles that incorporate First Nations perspectives and address local priorities and principles has the potential to alleviate many of the negative experiences that First Nations members face when accessing health care services. First Nations should lead in the design of and priority setting for paramedic services in their communities.

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