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Health care providers' perspectives on medical travel in northwestern British Columbia

If effort is not made to support rural patients who have to travel to receive medical attention, gaps in care between rural and urban patients will widen.

ABSTRACT

Background: Rural patients frequently travel long distances to receive medical care. Our objective was to explore their challenges with medical travel.

Methods: In this qualitative study, we interviewed 10 health care providers in northwestern BC about the experiences of rural patients when undertaking medical travel. We used thematic analysis and patient partners to identify key themes, challenges, and ways to improve patients' experiences.

Results: Health care providers' insights on the challenges with medical travel were based on the cumulative stories of patients' experiences. Six key themes were identified: travel delays, financial impact, travel logistics, uncertainty about urban environments, family impact, and inability to travel.

Conclusions: Rural patients' experiences with medical travel could be improved by providing more support for travel costs, making travel arrangements for patients, considering the patient's personal context when booking appointments and planning discharges, and increasing telehealth services and visiting specialist services.

At the time this research was conducted, Dr Massel was a medical student at the University of British Columbia. Ms Jawanda was a research assistant at the University of Northern British Columbia. Dr Sohi was a clinical assistant professor at UBC. Ms McMillan was a patient partner. Dr Jaworsky was a clinical assistant professor at UBC and an affiliate clinical assistant professor at UNBC.

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Background

Each year, more than 7300 patients are transported to hospitals by air ambulance within BC, and countless others travel privately to urban centres for outpatient care.[1] Northern BC is particularly remote, and reaching tertiary-level specialist services requires expensive flights and long drives. Understanding the challenges patients face with medical travel is vital to better address health equity and access issues in BC.

Previous studies have identified many challenges rural patients and families experience in undertaking medical travel, including financial burdens, unfamiliarity in urban environments, lack of continuity of care, and isolation.[2-8] However, most studies have focused on rural Australia and the United States. Data from northwestern BC are needed to better understand the local context, which can be influenced by geography, weather, and the health care system's structure.[9-10]

Health care providers offer valuable perspectives on medical travel. As active participants in the patient's medical care, they witness challenges many patients experience in navigating medical travel and understand the complexity of the BC health care system. We interviewed health care providers in northwestern BC to identify patient challenges and successes in undertaking medical travel and areas for improvement.

Methods

Study design

The study was guided by the Northern Patient Travel Improvement Committee, which includes patient partners, health researchers, and health care providers. We used a qualitative research design (semi-structured one-on-one telephone interviews) to record health care provider perspectives. Participants were asked about their role in caring for patients who have to travel to receive medical care and the challenges and successes in undertaking medical travel; suggestions for improvement were also requested.

Study area

This study focused on northwestern BC, a geographically and culturally diverse area populated by several Indigenous nations (including the Gitxsan, Haisla, Haida, Nisga'a, and Tahltan Nations; Tsimshian First Nations; Taku River Tlingit First Nation; and Wet'suwet'en First Nation) and ethnically diverse settler populations.[11] Transit is complicated by long drives, mountain weather,

and lengthy ferry commutes from island communities. Commercial flights service only a few communities in the area. Health care facilities in this region range from small nursing stations to larger hospitals with general internal medicine and surgical specialists.

Study participants

Health care providers were invited via local email lists to participate in short interviews to obtain their opinions on medical travel. Sampling was aimed at including diverse health care providers in family medicine, emergency medicine, inpatient medicine, transport paramedicine, and social work. Effort was made to recruit health care providers from remote communities to reflect the additional pressures of remote medical travel. Participants were recruited until data saturation was reached.

Data analysis

Thematic analysis was conducted on transcribed interviews that were coded using NVivo v12 software.[12] Data were analyzed based on the explicit meanings of participants' statements. Initial themes were developed both deductively from previous studies and inductively based on interview content. The research team, including patient partners, then reviewed the coded data and provided input on which themes were most important based on the data and their experiences. Final themes were selected based on how frequently they occurred in interviews and on patient partner contextualization of the data. All suggestions for improving patient experiences were documented and linked to the relevant medical travel challenge based on sequence in the interview and related content.

Ethics approval

Ethics approval was obtained from the University of Northern British Columbia Research Ethics Board (file number H18-02178). Participants provided informed consent.

Results

Ten health care providers were interviewed, including family physicians, specialist physicians, a social worker, and a transport paramedic **[Table 1]**. Six key themes were selected for discussion: travel delays, financial impact, travel logistics, uncertainty about urban environments, family impact, and inability to travel. A summary of recommendations for improvement is provided in **Table 2**.

TABLE 1. Demographics of study participants.

Occupation	**No. (%)**
Family physician	5 (50)
Specialist physician	3 (30)
Transport paramedic	1 (10)
Social worker	1 (10)
Identified gender	**No. (%)**
Male	7 (70)
Female	3 (30)
Age	**No. (%)**
30–39	6 (60)
40–49	1 (10)
50–59	2 (20)
60 and older	1 (10)
Years worked in northwestern BC	Mean: 12 Median: 6

TABLE 2. Patient challenges with medical travel and potential improvements.

Challenge	Suggested improvements
Travel delays	• Increase the number of air ambulances. • Place advanced care paramedics in rural communities. • Streamline bed allocation in tertiary care and at repatriation sites.
Financial impact	• Provide additional financial supports and subsidies, especially for low-income families. • Provide funding for return travel after acute care transfer. • Provide subsidized accommodations near tertiary care centres.
Travel logistics	• Provide care coordinators to help out-of-region patients coordinate tests and appointments. • Group multiple appointments into a single visit to an urban centre. • Provide shared care between local and tertiary care providers to arrange for testing (e.g., lab tests, imaging) to be done locally before the patient's appointment at a tertiary care centre. • Improve communication between tertiary care centres and local providers at the time of patient discharge. • Increase the number of medical trainees in rural sites to improve awareness of rural resource limitations.
Uncertainty about urban environments	• Increase communication between tertiary care and local providers prior to patient travel. • Provide support from social workers and Indigenous liaisons in tertiary care centres.
Family impact	• Increase funding for family members to escort patients. • Create more inclusive criteria regarding necessary patient escorts.
Inability to travel	• Provide virtual care, including telehealth clinics and RACE (Rapid Access to Consultative Expertise). • Expand visiting specialist services to more rural communities.

Travel delays

The problem of travel delays was ubiquitous, and acutely ill patients often waited days while medical travel was arranged. It was trying for rural patients to know that their urban counterparts received care for a similar condition in a timely manner while their care was postponed due to travel delays. One interviewee said, "Some of them have the experience of the plane coming and being turned around. Or being told [urban hospital] has a bed, day one . . . get them here by 12 o'clock. No plane. Then day three, no more bed. . . . And then they wait until day eight."

Recommendations

Increase the number of air ambulances and strategically place advanced care paramedics in rural communities. Additionally, streamline bed allocations to help optimize existing transportation resources by ensuring patients can be efficiently transferred to and from hospital by air ambulance.

Financial impact

Most medical travel expenses were borne by patients. When traveling for ambulatory care, patients needed airfare and hotels, often for multiple trips. Patients who were transported by air ambulance for a medical emergency were usually responsible for their return transportation home once they were stabilized. It was especially difficult for patients with limited financial means to come up with large sums on short notice.

Recommendations

Provide additional financial subsidies to ease the financial challenge patients face. Health care providers commended WorkSafeBC, local Indigenous communities, and the First Nations Health Authority Medical Transportation Benefit program for supporting members' travel expenses; however, more supports for low-income persons are needed, as are programs such as funded travel home following emergency hospitalization. Subsidized accommodations (such as BC Cancer lodges and Ronald McDonald Houses) are helpful in relieving the burden of accommodation costs, but they are available only to certain patient populations; more are required to support rural patients' travel.

Travel logistics

Health care providers recalled stories of patients transported emergently by air ambulance who were then discharged without shoes or wallets from an urban centre hundreds of kilometres away from their community. One interviewee said, "Once they get their problem dealt with down there, they're booted out the door and they have to make their own way back. They may not have even brought any clothes with them . . . so it often seems like there's very little attention brought to the fact that it's going to be difficult for a patient from a small centre to get back . . . on their own."

Patients who were transported by air ambulance for a medical emergency were usually responsible for their return transportation home once they were stabilized.

Travel logistics were also challenging for ambulatory care travel. Visiting a specialist often took 1 to 2 days of travel, and dangerous winter travel conditions often caused delays. While away for many days, patients had to plan for responsibilities at home, such as care of dependants. Cancelation or rescheduling of appointments also created a considerable burden for patients who had already booked travel arrangements.

Recommendations

A considerate, patient-centred approach to booking appointments and arranging discharges is needed for rural patients. Support in making travel arrangements, such as out-of-region care coordinators, should also be provided. Additionally, consulting specialists could ask for testing or imaging to be arranged in advance of medical travel in order to minimize the need for return trips, and multiple appointments could be grouped into one visit to an urban centre. Also, medical trainees should be exposed to rural placements to foster understanding of the logistical challenges rural communities face in accessing medical care.

Uncertainly about urban environments

Traveling to an urban environment could be intimidating and anxiety provoking for rural patients. Often, patients were isolated from family and social support, and some held cultural or societal beliefs that were unfamiliar to the urban care team. Patients who were undertaking medical travel had many questions that their health care providers were not able to answer, such as the nature of care in the city and the length of travel required, whether family would be able to accompany them, and how they would return home. One interviewee said, "They have this fear of going to a bigger centre where they don't know their way around, they're leaving their family . . . they don't know for how long, they don't know where they are staying . . . not to mention they have to travel with this medical condition. . . . All the additive questions and additive fears . . . are pretty distressing for people."

Recommendations

Health care providers need information about what services are available in urban centres in order to support patients with their medical travel and help alleviate their anxiety. More detailed communication from providers in urban centres is also needed. Additionally, social workers and Indigenous liaisons should be available in tertiary care centres to support rural patients who have to undertake travel for medical reasons.

Family impact

Due to financial limitations, travel logistics, or responsibilities at home, family members were often unable to accompany their loved one on medical travel. If separated, family

members felt guilt for not being present to support their loved one. It was also difficult for them to receive updates and advocate for their loved one from afar. If family members did travel with their loved one, they often did so at a considerable cost.

Recommendations

Increase funding for family members to escort their loved ones to medical care, and ensure affordable accommodation is available. In addition, requirements for escorts need to be broadened beyond physical need to also encompass the overall wellness needs of patients.

Inability to travel

For some rural patients, the barriers were such that they were unable to undertake medical travel, even at risk to their health. Reasons for declining medical travel were multifactorial and included many of the themes described above, as well as previous negative experiences with medical travel. One interviewee said, "I have a lot of patients who, even though I think they have cancer and should probably have a PET [positron emission tomography] scan, they're not going to get their PET scan until the spring. That's just their choice. . . . They'll delay because of weather, and they'll decline entirely because of finances."

Recommendations

Virtual care, including telehealth clinics and the RACE (Rapid Access to Consultative Expertise) telephone line, allows patients to be cared for locally, which reduces the need to travel. Expanding visiting specialist services to more rural communities would reduce the need for patients to travel for ambulatory care and would help local primary care providers gain expertise through shared care approaches.

Discussion

Equal access to health care is an underpinning principle of the Canadian health care system.[13,14] Our study highlights the many challenges of medical travel, which makes it difficult for rural patients to access the same standard of care that is available to urban patients. As medical care increases in complexity, there is a trend toward centralizing services in urban centres that have specialized imaging and therapeutics.[15,16] This increases the need for rural patients to undertake medical travel. If proportional effort is not made to support rural patients who have to undertake medical travel, care gaps between rural and urban patients will widen. Local, regional, and provincial strategies are needed to ensure equitable access to care across BC.

Expanding visiting specialist services to more rural communities would reduce the need for patients to travel for ambulatory care and would help local primary care providers gain expertise through shared care approaches.

Due to the diversity of rural communities in BC, unique approaches to medical care are required, which should be tailored to the communities' geographic, infrastructure, and cultural aspects, and providers working in rural communities need to be engaged in policy development.[17] In our small study, rural health care providers identified many opportunities for improving the experience of patients who must travel for medical care. The study participants provided insights into system-level processes and reflections on the experiences of patients in their practice. Selecting participants from a variety of professions and experiences ensured that diverse opinions were obtained, which strengthened the data. With a small sample size, there is, nevertheless, a risk of ascertainment bias, and participants who are stronger advocates for rural health equity may have been more likely to participate in this study. In total, eight physicians participated in this study, which represents between 5% and 10% of the physicians who are actively practising in northwestern BC. The mean years of practice in northwestern BC was 12, which suggests that the study participants could reflect on their experiences in providing care to a large number of rural residents. However, their perceptions may not have reflected all patient experiences. Previous studies have noted discrepancies between patients' experiences and providers' perceptions of their experiences.[4,18,19] Thus, for a more complete understanding of the diversity of experiences with medical travel in northwestern BC, patients' personal opinions must also be sought (work is in progress).

Conclusions

Rural patients demonstrate resourcefulness and resilience when facing the challenges of medical travel. Nevertheless, significant barriers exist, which causes frustrations for patients and contributes to health inequities. Travel delays, financial impact, logistical challenges, uncertainty about urban environments, family impact, and inability to travel affect rural patients who have to travel to receive medical care. Health care providers suggested that patients' experiences could be improved by providing more support for travel costs, making travel arrangements for patients, and considering the patient's context when booking appointments and planning discharges. The study participants also felt that more patients could be spared from having to travel to receive medical care by increasing telehealth services and visiting specialist services. The findings of this study may be useful for informing future policies that are directed at improving rural patients' experiences with medical travel.

Competing interests

None declared.

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