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Returning childbirth to Inuit communities in the Canadian Arctic

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ABSTRACT

While Inuit living in Nunavut have been advocating for decades for the return of birthing to their own communities, over two-third of births continue to occur outside of the territory. We conducted a literature review to answer the question, why has birthplace choice not been given back to Inuit yet. Based on our review we identified a number of factors impacting birthplace choice, including the organisation of the Nunavut medical system that is focused on primary health care and that cannot easily accommodate the potential clinical risks Western health care associates with birthing, often in isolation from socio-cultural risks; staffing vacancies and turn over in Nunavut, which creates challenges in continuity of care and in maintaining trust; and trends in Canada towards the medicalisation of birthing, which resulted in the displacement of traditional midwifery, and lately in the professionalisation of midwifery with training centres mostly located outside of Nunavut. We recognise that providing more options to birth in the north is complex. While birthing in the north as an option is a given objective, operationalising this objective in a consistent manner is likely going to be a challenge for years to come.

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Introduction

When a pregnant person living in rural and remote Manitoba reaches 36–38 weeks gestation, current practice mandates travelling to another community, usually with caesarean capabilities, to give birth. Referrals are made sooner if a high-risk pregnancy is identified [1]. For some, accessing care may require a short drive to the next town, but for people living in the Kivalliq region, an administrative region of Nunavut, travel means long plane rides to Manitoba-based hospitals. In 2009, 64.5% of all births in Nunavut were evacuated to southern parts of Canada [2]. A more recent study suggests that this is now closer to 80% [3]. According to a survey from the Public Health Agency of Canada, out of all the provinces and territories, Nunavut and the Northwest Territories had the highest proportion of people travelling over 100 kilometres to give birth, which in this study, was associated with more negative experiences [2].

Childbirth in the Canadian Arctic has changed drastically in the past 50 years. Previously, birthing was at the centre of Inuit life and was performed on the land with the assistance of an *ikajurti* (translate as the helper and used for Inuit midwives) [4]. In the 1970–1980s when air travel became normalised, evacuation of pregnancies became the new gold standard in an attempt to reconcile high perinatal mortality[1] as well as to further medicalise birth and to displace midwifery as a legitimate practice [5–7]. It took decades for midwifery programmes to emerge again. Evacuation remains standard practice in most parts of Canada. It should be noted that the high perinatal and infant mortality rate has been linked to a complex myriad of factors including: high health provider turnover rate in northern communities, lack of Indigenous health professionals and resources, limited infrastructure, poor housing and crowding, and long-standing socio-economic colonialism-related disparities affecting Indigenous families [8,9]. Furthermore, birthing away from home interferes with overall community supports for expectant people.[2] Since family members cannot attend the birth, the birthing person-to-be can experience isolation and

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[1]Defined as late foetal deaths and early neonatal deaths which can be prevented by access to care. We looked for comparative analyses of perinatal mortality published at the time, but could not locate such study.

[2]We use the term "people" and "birthing person" to reflect inclusiveness of birthing people that do not necessarily identify as female or mothers.

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loneliness in the city, and it disrupts the role of *ikajurti* and cultural naming practices [10].

With increasing dissatisfaction from Inuit with the current model and the need for reconciliation of colonial harms, this begs the question – why has birthplace choice not available to Inuit yet? This paper explores the medical, financial, and cultural risks associated with the current maternal evacuation system in Kivalliq. We also examine the current midwifery programme at the Inuulitsivik Health Centre in Nunavik, Quebec, and the Rankin Inlet Birthing Centre in Rankin Inlet, Nunavut. We conclude with recommendations.

Methods

We conducted a literature review related to childbirth in Inuit communities was conducted through Scopus, Google Scholar and the Neal John Maclean (NJM) Health Sciences Library (University of Manitoba). Table 1 lists the specific search strings. Generally, keywords included INUIT, NORTHERN, CIRCUMPOLAR, ARCTIC, RURAL, BIRTH, BIRTHING PRACTICES, MATERNAL, PERINATAL OUTCOMES as well as keywords specific to geography and institution including NUNAVUT BIRTHING, INUULISIVIK, RANKIN INLET. Additional resources were found in consultation with the Indigenous health librarian at the University of Manitoba, and with the Director of Ongomiizwin Research. Resources included published papers, books or book chapters, dissertations, government websites, and news articles. Resources were excluded if not from circumpolar area or if generalised to Indigenous people rather than focusing on Inuit.

Table 1. Search string used in Scopus to identify articles specific to childbirth and evacuation among Inuit in Nunavut.

Category	Terms
People and Place	(“first nations” OR aboriginal OR indigenous OR cree OR ojibw* OR dene OR inuit* OR nunavut OR Kivalliq OR “rankin inlet” OR baffin OR iqaluit OR kitikmeot OR yellowknife OR “northwest territories” OR nwt OR circumpolar OR arctic OR canad* OR winnipeg* OR manitoba* OR toronto* OR ontario* OR edmonton* OR alberta*OR quebec* OR montreal OR ottawa*) *AND*
Maternal Health	(birth* OR childbirth OR pregnan* OR perinatal OR (labour W/4 delivery) OR (labour W/4 delivery) OR prenatal OR postnatal OR perinatal) *AND*
Transfer	(travel* OR evacuation OR medevac OR medical AND evac* OR transfer) *AND*
Outcomes/ Methods	(outcome* OR risk* OR indicator* OR cultur* OR qualitative OR “focus group*” OR interview* OR mental* OR psychology* OR depression) *AND NOT*
Excluded	(diabetes OR smoking OR FASD OR alcohol)

Our search yielded 37 papers. We did a secondary search in areas where selected papers did not provide sufficient context (staff attrition, for example). Thus, although our initial approach was that of a scoping review, our final method can better be described as a literature review [11]. We report our findings accordingly.

Results

Medical system and organisation

Local delivery of health services to northern Canada has long been a complex issue with few solutions. As stated by American feminist Carol Hanisch, “the personal is political”, thus understanding the systematic medicalisation of Inuit reproductive health requires context through Canada’s colonial history [12]. Healthcare in Nunavut began with 19th century medical Christian missionaries, traders, and military doctors as a part the religious conversion and spiritual suppression of Inuit. Inuit were forced to adjust their traditional nomadic way of life to live in permanent settlements. Christian medical outposts were replaced by federally run nursing stations around the 1950s, which evolved into the community health centres established today.

Healthcare in Nunavut is serviced out of 3 main administrative regions: Qikiqtaaluk, Kivalliq and Kitikmeot. The only hospital, the Qitiqtani General Hospital, is located in the capital of Iqaluit, Qikiqtaaluk. In other regions, regional hubs are served by health centres supported by resident physicians in Iqaluit, Rankin Inlet (servicing the southwest Kivalliq region), and Cambridge Bay (servicing the northwest Kitikmeot region) [5]. In smaller communities, community-based health centres are staffed by registered nurses, nurse practitioners, community health representatives, and are visited by fly-in physicians and specialists, a few days monthly [13,14]. These health centres provide basic primary care, and any service beyond this scope requires transportation to an arranged tertiary hospital, the location of which depends on the administrative region [13]. In Kivalliq, medically evacuated services are provided in Manitoba.

The year 1999 marked the creation of Nunavut by splitting Northwest Territories, a move which allowed Inuit, now 85% of Nunavut’s population, to promote self-governance and adopt policies better aligned with Inuit priorities and values [15,16]. However, the medical model Nunavut inherited still heavily relies on southern hospitals and southern-trained providers for a majority of services [13].

Staffing northern health centres at optimal levels are complex. To begin, workloads ebb and flow depending

on the season and unforeseen issues: lower workload can occur during the spring and summer when families travel to their summer camps for hunting and fishing, whereas flu seasons, accidents or a family crisis can increase workload abruptly. Unlike urban environments, small, isolated communities do not have a surplus trained nursing workforce to draw from to help with workload surges. Medical evacuations at times occur when workload surges cannot be accommodated. In addition, nursing staff shortages documented across Canada have resulted in vacancies, and have been filled by short-term contract nurses (known as agency nurses). However, these short-term fixes are not sustainable long term.

For professionals recruited outside of Nunavut, recruitment and retention remain challenges for a variety of reasons including the high cost of living, expensive travel, limited job opportunities for spouses, professional isolation, and missing home [17].

An analysis of Nunavut workforce reports (Table 2) shows that the number of health professional positions in Nunavut has grown from 202 in 2001 to 389 in 2021. Vacancies have remained sizeable, since on average 54% of positions being filled with a trend towards less positions being filled over time (46% in 2021). Only 12% of filled positions are by Inuit. Paraprofessional positions have grown from 164 in 2001 to 215 in 2021, with on average 57% being filled and 54% on average by Inuit. Trends over time shows that as the number of positions grow, the capacity for Inuit to fill these positions is not keeping up.

Table 2. Analysis of Nunavut's health professional and paraprofessional workforce [18]

	Professional positions			Paraprofessional positions		
	Total positions	% positions filled	Inuit %	Total positions	% positions filled	Inuit %
Sep-01	202	66%	5%	164	60%	43%
Sep-02	171	77%	8%	133	77%	50%
Sep-03	222	68%	14%	108	73%	70%
Sep-04	269	72%	13%	156	82%	76%
Sep-05	279	62%	16%	169	76%	62%
Jun-06	196	57%	25%	175	74%	57%
Sep-07	353	59%	19%	234	62%	72%
Sep-08	393	48%	22%	300	60%	75%
Sep-09	321	57%	22%	237	64%	73%
Sep-10	327	66%	12%	286	70%	81%
Sep-11	337	55%	13%	305	68%	81%
Sep-12	350	55%	11%	305	67%	81%
Sep-13	328	59%	9%	303	67%	83%
Sep-14	342	59%	7%	368	62%	84%
Sep-15	312	44%	7%	170	36%	28%
Sep-16	344	43%	9%	171	43%	30%
Sep-17	355	48%	5%	190	41%	27%
Sep-18	359	46%	8%	209	40%	28%
Sep-19	369	48%	11%	228	38%	24%
Sep-20	397	45%	9%	204	47%	31%
Sep-21	389	46%	10%	215	39%	27%
Average		54%	12%		57%	54%

Considerable efforts have been made to train and hire Inuit in professional and paraprofessional jobs. Dalhousie University has been offering a Bachelor of Nursing programme in Iqaluit, in partnership with Arctic College, since 2000. As of 2016, 48 nurses have been trained, of which 17 were Inuit [19]. Nunavut's Arctic College offered a midwifery programme between 2006 and 2014 that graduated four students over that period [20]. Unlike the Inuulitsivik Midwifery programme which has operated in Puvirnituq Nunavik since 1986 [21], Nunavut opted not to draw on *ikajurti* and on-the-job training, to pursue training through a formal school-based programme, where instructors are likely southern-trained non-Inuit. The Government of Nunavut continues to monitor vacancies and explore opportunities to grow the training and retention of Inuit in professional and paraprofessional positions [22].

Historical context

Most births up until the 1970s occurred on the land in the traditional sense. When the federal government began introducing southern nursing and midwifery to the north, traditional midwifery began to give way to Western medical professionals [23]. Nurses were first encouraging, and then insisting that Inuit deliver in the newly constructed health centres (dispensaries). For some Inuit at least, compliance with these pressures was motivated by curiosity [21]. Since Canada did not have midwifery training up until the late 20th century, northern Canadian birthing at the beginning of 1970 relied on UK-trained nurse-midwives, with high-risk cases evacuated to southern hospitals [5]. The inclusion of *ikajurti* were not considered.

In the mid-1970s, midwives working in health centres were decreasing as new Canadian-trained nursing students were not equipped with midwifery skills, and UK-trained midwives were no longer able to enter the country due to new immigration regulations. By the late 1970s, professional competition and a concerted effort to lower perinatal/neonatal mortality saw physicians asserting absolute competence over prenatal care and birthing. It was actually considered illegal to practice midwifery if a physician was available nearby [7,23,24]. At the time, the practice in the Kivalliq (then known as the Keewatin district) was for birth to occur at health centres, with higher risk births being flow to Churchill or Winnipeg, an additional 1,000 km away from Churchill [7]. The advent of frequent airplane travel and vested airline financial interests resulted in

centralisation of medical services to larger health centres in Canada [23]. These myriads of factors culminated in strong encouragement to evacuate birthing people weeks before their due date. By the 1980s, the evacuation for birthing became fully integrated into Western biomedicine as a policy [6].

This shift in responsibility for obstetrical care coupled with increasing medicalisation of birth made it extremely difficult for *ikajurti* to maintain and pass on their skills. Colonial attitudes towards the safest place to give birth forced birth to move from home to hospitals and shifted northern obstetrical care from Inuit families to Western-trained midwives, and then to physicians [4,25]. Efforts to train Inuit midwives in Nunavut was not accompanied by a return to *ikajurti*-based practice.

Cultural desirability

Although Canadian Inuit birthing practices vary depending on regions and situations, childbirth was and remains central to life in the Arctic and a natural part of the connection to the world. Health, including childbirth, is all encompassing for the individual's mental, physical, and spiritual wellbeing, in addition to family and community involvement [10]. Prior to European contact, births were traditionally family-centred and assisted by a combination of birth attendants, Elders, *ikajurti*, husbands, or even done alone [4,26]. The skills of birthing were shared amongst the community instead of limited to one particular member who held privileged expertise. It made sense to share knowledge in this setting since labour occurred unpredictably and anyone in close proximity might be needed as a birth attendant. Ideally, an experienced *ikajurti* or assistant would be present; however, births often occurred while travelling [27]. Pregnant or nursing persons were encouraged to eat traditional country foods that are high in protein and nutrients. They were encouraged to remain active but not to over-exert themselves and given advice for maximising the success of birth. The health of the birthing parent and child was highly cared for by community members [26].

Traditional midwifery was taught informally and experientially, much like other aspects of Inuit life. People learned by watching other *ikajurti* assist with birthing positions, cutting the umbilical cord, being a calming presence to birthing parents, and directly being involved in birthing of their relatives. More experienced *ikajurti* would be called to flip breeched presentations and remove retained placental tissue [26].

Dissatisfaction with the evacuation policy has been ongoing after its introduction in the 1970s. Many Inuit objected to evacuation to hospitals thousands of kilometres away and pushed for return of birth in the community for many years. According to the Kivalliq Childbirth Experience Survey in 1988 and the Maternal Experiences Survey in 2009, many felt evacuation was stressful to the individual and the family, damaging to Inuit culture, and promoted the medicalisation of birth [2,10,28].

The Inuit worldview stands in contrast to the dominant system of thought in the south, where a division of interests exists between the environment and humans [5]. Removing births from community created a literal and metaphorical divide between generations. Some felt the newborns birthed in the south lived different lifestyles due to their origin of birth [26]. Others even feared that their children born off the land were less Inuit than their children born on the land in terms of self-actualisation as well as political land claim benefits [4,5]. Over time, travelling for birth became the norm. Choosing other options became difficult for birthing parents, who were feeling pressure from health professionals to give birth in a tertiary hospital for the health of their baby, to the point where some birthing parents were afraid to give birth locally [29,30]. While the majority of people complied with the changes, a few birthing parents took matters into their own hands by handling their own prenatal care, misrepresenting the date of their last period and presenting to nursing stations in labour, too late to be evacuated [5,31].

Increased grassroots advocacy by Inuit communities saw the birth of the Inuulitsivik Health Centre in northern Quebec and an Inuit midwifery revival in the 1980s [32,33]. The Inuulitsivik Health Centre was staffed by Inuit and Western-trained midwives, trusted as a safe place for birth due to the hybrid risk assessment model used as a decision tool for community birth versus evacuation [34]. At the centre of decision-making was the patient as well as their family. The success of the Inuulitsivik Health Centre has been attributed to the free-flowing exchange of knowledge between traditional Inuit midwifery and western midwife training [32].

Attempts at mirroring the success of the Inuulitsivik Health Centre were made during the creation of the Rankin Inlet Birthing Centre in 1993 [5]. At the time, the perinatal committee consisted of the Rankin Inlet physician, the nurse in charge of the health centre, a nurse-midwife, the maternity worker, and the programme coordinator [35]. In its first annual report in the early 1990s the Rankin Inlet Birthing Centre review committee found that the risk scoring method to be obstructive, rigid and subversive of the social risks of travelling for birth [35]. The rigid risk score made it difficult for the

community to embrace the centre, and per an audit from 1993 to 2005 [36], less than half of the births in Rankin Inlet took place at the birthing centre, the rest occurred after evacuation to larger centres [37]. The Government of Nunavut reported 289 births to Kivalliq residents in 2011 [38]. A study conducted by Lavoie and colleagues showed an average of 232 births (80%) to Kivalliq persons occurring in Manitoba during the same period [3].

Recently, the Rankin Inlet Birthing Centre suspended its birthing services as the previous two permanent midwife staff, Inuit graduates of the Nunavut Arctic College midwifery programme, left the centre in 2020 [20,39,40]. Limited funding and lack of permanent local physicians placed a great deal of pressure and responsibility on the only two midwives [41]. These challenges were amplified by years of racism, microaggressions and overall lack of support [40]. Instead, birthing parents must now either travel to Iqaluit or to Winnipeg, leaving many birthing parents without the support of their families and without the choice to birth in or near their home community [42].

Medical safety

Amongst the political tools used in colonisation, control over healthcare has had pivotal role in stripping self-governance from the Inuit. Maternal and infant health has long been an indicator for population health, so when the Canadian government turned their interests towards the north, attempts were made to address the higher perinatal mortality rates amongst the Inuit.

Medical policy, including the maternal evacuation policy, has been heavily influenced by biomedical research that historically excluded Inuit culture, practices, epistemology [6]. Research questions were often not formulated in consultation with local stakeholders and privileged outcomes primarily from a biomedical perspective rather than balancing these objectives with the respect of Inuit priorities and values – which for Inuit includes family involvement and birth location. The narrative of high obstetrical risk in northern communities has been used by policymakers to justify maternal evacuation. For example, Ruderman and Weller state "detailed figures for early periods are not available, but it is estimated that in 1955 there were 250 infant deaths per thousand live births while the figure for 1977 was 18.3" [43]. The reasons for this drop were multiple, including improvement in non-medical determinants of health, and thus cannot simply be linked to the medicalisation and westernisation of birth associated with the medical evacuation policy.

Attempts have been made in the past to quantify the safety of evacuation, however these studies generally had smaller sample sizes, missing data, and could not provide convincing evidence that evacuation significantly decreased infant mortality [10,27,44,45]. In addition, perinatal mortality rates are inherently skewed in a region with a sample size as small as Kivalliq and have a larger margin of error. It is difficult to generalise these numbers enough to compare to general Canadian perinatal mortality statistics. Finally, attributing decreased perinatal mortality and morbidity rates to maternal evacuation completely erases the social, political, and historical contexts that shaped health policy and cooptation of Inuit self-governance in Kivalliq [7].

Other studies have shown evidence that birthing in the north is a viable option for low-risk births. A 1978 study, controversial for its time, concluded that while it may be difficult to defend birthing in northern Canadian communities while Western cultural pressures exist, maternal and perinatal outcomes supported the safety of low-risk community births. At the time, at least one of the three nurses in each health centre had to have midwifery experience. The author attributed the success to experienced midwives, evacuation of high-risk births, and collaboration with general practitioners [46].

Although Lessard and Kinloch found a reduction in the rates of perinatal infant death following the widespread implementation of the evacuation policy in the 1980s, they do not attribute the change due to evacuation [24]. Rather, a common thread amongst studies pointed towards socio-economic status being the greatest factor in improving perinatal improved health [44]. The contributing variable is therefore not the location of birth, but the multiple layers of social determinants that place Indigenous people at higher risk for complicated pregnancies [24,47]. More recently in 2009, Simonet and colleagues found that in Nunavik, Canada, the risks of perinatal death were not significantly higher in Hudson Bay (midwife-led) communities versus Ungava Bay (physician-led) communities [48]. Additionally, a 2016 Cochrane review suggests that birthing parents who received midwife-led continuity models of care were less likely to experience intervention (i.e. instrumentation, regional anaesthesia) and more likely to be satisfied with their care. Adverse outcomes for birthing parents who received other models of care were comparable to midwife-led care [49].

In addition to equivocal outcomes between evacuation versus community birthing [33], the current risk evaluation established by southern ideologies and imposed on Inuit is restrictive and one dimensional.

Pregnancy and birth are part of normal life, and that includes perinatal mortality within the limits of remote healthcare [5,33]. While a culture of blame and liability may be common in southern Canada, and thus there is this constant quest for perfect outcomes, this is not necessarily common to Inuit values [33]. When assessing risk, it is within the scope of Inuit's epistemology of health to consider psychological, social and cultural factors as well [32].

Furthermore, the evacuation strategy that is currently so ubiquitous is not without its own associated risks. One consequence of the evacuation strategy is a lack of continuity of prenatal community care. Increased dependency on southern hospitals for medical care and birthing can lead to declining quality of community health services, including prenatal/postnatal services, in northern communities [10]. Evacuation is associated with removing Indigenous individuals from their family and community, which even for routine evacuation, carries the potential for triggering trauma associated with the former residential school policy [33,50]. It has also been associated with decreased feelings of autonomy, poor diet – and in particular a lack of access to country (traditional) food – as well as family stress, including for partners and children [30,33]. A recent study by Phillips-Beck showed that for First Nation birthing parents, the policy of evacuation for birthing resulted in increased odds of inadequate prenatal care, decreased odds of initiating breastfeeding, increased odds of maternal distress, and increased odds of having a small for gestational age baby [51]. Whether these results are generalisable to Inuit is unknown.

Therefore, there is no medical evidence supporting the current policy and in fact there is growing evidence that it is harmful to Inuit. However, unfortunately over years of practice, the maternal evacuation policy has become the highest medical standard, making it very difficult to show that birthing in communities can be safe.

Economics

From a public health system perspective, maternal evacuation does not make economic sense. While centralisation of resources is a common tactic governments take when faced with fiscal, logistic, and efficiency limitations, this approach comes at the cost of patients who live far from dense urban centres [52]. Furthermore, the evacuation policy is more expensive for a public health system than birthing in communities. It was estimated in 2014 by Fuad Maliha, Director of the Kivalliq Regional Health Centre in Rankin Inlet, that having babies delivered in Winnipeg costs the Nunavut government approximately $14,000, not including the cost of flights [41]. A medevac or emergency flight from Rankin Inlet to Winnipeg at that time cost the Nunavut government around $15,000, with the scheduled return flight costing another $2,000, meaning the Nunavut government often pay over $30,000 per baby born outside of the Kivalliq region at a tertiary centre [41].

In addition to the psychosocial and associated costs, there are multiple financial costs incurred by Inuit families due to evacuation for birth. Birthing parents are often evacuated 2–8 weeks prior to delivery, most commonly at 36–38 weeks gestation [1,27]. Preparing to leave their home communities requires organising numerous arrangements. Often childcare needs to be arranged for an indeterminate amount of time for children left at home [30,53]. Birthing parents have to take advanced leave from employment and prepare financial supports, especially those who rely on social assistance as there can be obstacles accessing supports while outside of the territory. Some birthing parents have had to wait for their cheques before leaving home as this was the only financial support they would have while in Winnipeg [30].

Supports are in place for travel, accommodations, and meal expenses, however it is important to recognise the limitations of these services and how some rely on a claim-reimbursement system [30,54]. To be eligible for government medical travel assistance, an individual must meet certain criteria including: approval by a health care professional within the individual's home community prior to travel, it must be medically necessary and be needed before the individual is travelling for other reasons, and the individual must have used up all other third-party and employer insurance options or have no insurance plan [55]. Once approved, there are three programmes that help pay the cost of medical travel: 1) Nunavut Health Care Plan (NHCP), where individuals pay a $250 co-payment airfare fee for return airfare; 2) Non-Insured Health Benefits (NIHB), for Land Claim Beneficiaries, which covers the $250 co-payment fee not covered by NHCP, ground travel, accommodations, assistance with meals and authorised escorts; and 3) Extended Health Benefits (EHB), which includes flight co-payment, ground transportation between person's accommodations, health facilities and the airport, stay in private ($50) or commercial accommodations ($125), meals for stay in commercial accommodations ($50), though "select conditions may apply" [55].

As previously mentioned, the NIHB Medical Transportation Policy also includes coverage of travel, and assistance for accommodations and meals for

medical or non-medical escorts for individuals travelling to access medically required health services, though specific amounts are not listed [54,56]. Escorts must be preauthorized by the federal First Nations and Inuit Health Branch (FNIHB) or an Inuit health authority or organisation and meet certain criteria [54]. Although long overdue, non-medical escorts were finally approved for pregnant First Nation and Inuit persons giving birth away from their home community in 2017 [57,58]. The issue is that those who qualify, both the birthing parent and their escorts, are not always aware of what is covered and what is not, and often find that allowance is insufficient for adequate accommodation and nutrition [30]. Thus, birthing parents often spend weeks isolated in inner city temporary motel or boarding house accommodations with a single escort as support and limited access to country food [25,28].

While the ability to have a companion, whether it is another family member, friend or the non-birthing parent, has many benefits, it is not without potential consequences. Escorts may include hunters and individuals who contribute income for the family: if they are also away for extended periods of time while a birthing parent is evacuated for pregnancy, this can worsen economic and food security present within Nunavut families and communities [10]. Traditional food is not only beneficial for cultural and diet preference purposes but also for food security. The same weekly food basket purchased in Nunavut costs at least double that of the same food basket in a southern capital city [59].

One argument against birthing in communities is that evacuation could be seen as a preventative health strategy. By putting money into planned flights to Winnipeg for birth for example, money is saved by preventing emergency flights which might be required should complicate during community births arise [60]. However, patient transportation in general accounts for a substantial part of medical care costs in northern Canada. In the 2014–2015 Canada Health Act Annual Report, the Nunavut Department of Health's Maintenance and Operations budget associated a third of their $332 M budget to transportation and treatment provided in out-of-territory facilities [61]. While this number is not specific to pregnancy and birthing, the fact that transport makes up a significant portion is unsurprising with medevacs costing between $1,500 and $22,000 per transport [14], and regular airfare still very expensive at around $2,000 one way [41]. Furthermore, medevacs make up less than 10% of medical travel, so the evacuation process, whether emergent or planned, is still very costly [60].

Discussion

Northern concerns about the evacuation policy are not new: discussions have been underway since the 1980s, with some key developments and some setbacks [10,62]. Evacuation for birthing was initially "rationalized" by governments and decision-makers as a response to the high infant mortality rates in Nunavut compared to the general Canadian population. Based on our and other analyses, it appears to have been more readily rooted in professional competition over birthing, and possibly in the misplaced perception that evacuation for birthing extended to Inuit the benefits of Canadian society available to southern-based populations [5]. Furthermore, what has been shown is that evacuation is not inherently better and, more importantly, that birthing in the community is not inherently riskier [7,34,46,49,51]. The centralisation of birthing and other medical services as well as the medicalisation of the body are founded within Western colonial culture, the desire to have a sense of control of the unpredictability of pathology. Therefore, the uncertainty of giving birth in a resource limited, high-risk environment in the north is seemingly resolved by moving births to a lower-risk environment in the south. This perspective stands in contrast to the worldview of Inuit where birth is intimately linked with the land [4,10].

The discourse surrounding global maternal and child health has shifted as contemporary research has become patient and community-based. In 2016, following the Millennium Development Goals campaign, the World Health Organization (WHO) launched Sustainable Development Goals (SDG) aimed at improving health worldwide. SDG Goal 5.6 seeks to "ensure universal access to sexual and reproductive health and reproductive rights" with indicators of improvements being an "increase in the proportion of birthing parents aged 15–49 years who make their own informed decisions regarding sexual relations, contraceptive use and reproductive health care" [63(pp6)]. The Society of Obstetricians and Gynaecologists of Canada (SOGC), realising the importance of returning birthing to Indigenous communities and the improved outcomes that accompanies this, released a policy statement in 2010 in favour of birthing close to home with the support of midwifery and community [64].

In addition, and after a delay of 11 years, Canada gave Royal Assent to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) adopted by the United Nations' General Assembly in 2007. UNDRIP aims to provide a document safeguarding the rights of Indigenous peoples worldwide, including Article 11 – "Indigenous people have the right to practise and revitalize their cultural traditions and customs" as well as

Article 23 – "Indigenous peoples have the right to determine and develop priorities and strategies for exercising their right to development" including "developing and determining health" [65]. Having the choice to birth in an individual's community arguably falls within WHO goals, in accordance with UNDRIP [66].

Maternal evacuation and the risk assessment model currently in use in Nunavut are not working. Culturally, it undermines the connection many Inuit people have with the land and is even disrespectful of the importance and value of traditional birthing knowledge and practices [4]. Psychosocially and emotionally, evacuation is restrictive, isolating, financially burdensome, and stressful for Inuit birthing parents and their families [30]. In opposition of the current model, Barclay and Kornelsen propose a comprehensive maternity service risk analysis from the midwife perspective, and in particular in response to closures of small maternity units in rural and remote communities. Inspired by movements in British Columbia, Canada and Australia, the authors rebut the existing risk assessment model that has prompted governments to shut down smaller centres and undermine the role of midwives due to fear of the clinical risk of birth in centres without caesarean capabilities. The risk analysis includes cultural, emotional, financial risks to rural families and communities [67]. The Inuulitsivik Health Centre is a potent example of how a culturally grounded multifactorial risk model can lead to equal if not better outcomes with reduced intervention, while also providing a more positive and satisfactory birthing experiences overall [34,49].

Operationalising this right to choose to birth within the community, however, can be challenging because of staffing issues. There are difficulties recruiting and retaining southern-trained staff, due to the increased demands of working in the north, often with little to no backup, a lack of sufficient supplies, and isolation from family and friends [68]. Efforts have been made to train and hire Inuit health care providers, primarily nurses and midwives. As of 2021, only 9% of these positions are held by Inuit professionals. Unfortunately, midwifery courses at Nunavut Arctic College, who also work with traditional midwives and Elders, are on hold [4,41]. This means that there are limited options for Inuit who want to pursue a career in midwifery that respects and utilises cultural values and knowledge while also meeting Canadian maternity care standards [4].

Alternative models have been implemented elsewhere to facilitate the entry of Indigenous providers into midwifery work. For examples, an Indigenous doula programme has been successfully implemented in Manitoba [69,70]. This approach might be considered as a lower threshold entry point into midwifery work for Inuit.

In general, individuals have the right to autonomy over one's health and the right to be offered reasonable and safe healthcare. Maternal evacuation exists because of colonial attempts to exert power over Indigenous people and therefore only works within the biomedical model. The policy is, however, maintained by structural issues. The importance of having the option for birthing close to home is apparent from public opinion as well as the existence of the Inuulitsivik Health Centre and Rankin Inlet Birthing Centre. Inuit birthing parents deserve to be in control of their own perinatal care centred in Inuit culture. Inuit traditional knowledge to be preserved and reaffirmed, midwives/birth attendants should be chosen by the community and training should be held in the hands of Inuit midwives.

Conclusions

The personal, cultural and financial strains that evacuation put on both Inuit birthing parents and their families as well as the public health care system further justifies change to the current evacuation policy and practices. Providing more options to birth in the north, however, is complex, rooted in history, context, and recruitment and retention issues, which are being addressed slowly. While birthing in the north as an option is a given objective, operationalising this objective in a consistent manner is likely going to be a challenge for years to come.

While efforts in reduction of adverse perinatal outcomes in northern communities are obviously worthwhile, these efforts should be directed towards the causes of pregnancy complications (i.e. diabetes, hypertension, premature rupture of membranes due to poor primary healthcare, nutrition and housing, poverty, racism) and building up the strengths of the community and traditional midwifery by giving birthing parents choice in place of birth.

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