

Feasibility and ethical issues: experiences and concerns of healthcare workers regarding a new RSV prophylaxis programme in Nunavik, Quebec

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ABSTRACT

Background: The respiratory syncytial virus (RSV) is a major cause of hospitalisation in young Inuit children. Prophylaxis with palivizumab is routinely recommended for premature infants and those with severe pulmonary or cardiac diseases. In the fall 2016, the Quebec Ministry of Health expanded the criteria to include healthy full-term (HFT) newborns from Nunavik based on their high RSV hospitalisation rates.

Objectives: The aim of this study was to describe the impact of this programme on Nunavik health services during the first RSV season after its implementation (2016–2017) by studying challenges, concerns and needs of healthcare workers (HCWs).

Methods: An ethnographic approach was used. Semi-structured interviews focusing on HCWs experiences, and opinions to improve the new programme were conducted with 20 HCWs involved in its implementation.

Results: Main reported challenges and concerns were: additional work(over)load, lack of information and evidence about the need and efficacy of palivizumab in HFT newborns, communication issues between stakeholders, and ethical issues regarding the Inuit population.

Conclusion: The study revealed significant feasibility and acceptability issues. The programme was highly resource consuming. To address HCWs' concerns, evidence-based data regarding palivizumab effectiveness in HFT infants, as well as consultation and involvement of Inuit population are warranted.

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Introduction

The respiratory syncytial virus (RSV) is a major cause of hospital admissions for respiratory infections in young children [1]. Rates of RSV hospitalisation in children from different circumpolar regions including Nunavik (northern Quebec, Canada) [2–4] are significantly higher than in the general population of infants from the USA and other industrialised countries [1,5].

The only product currently available for the prevention of severe RSV disease, palivizumab (PVZ) (Synagis®), is a monoclonal antibody approved for children considered to be at higher risk for serious respiratory illness (premature infants, children with a chronic respiratory disease or a congenital heart disease). A 55% reduction in RSV hospitalisations in high-risk children was reported in the original randomised clinical trial IMPact-RSV [6]. Subsequent studies supported a protective effect of PVZ against RSV hospitalisations in high-risk children [7,8], however it was inconclusive in some subgroups such as infants with cystic

fibrosis [9,10]. The only data on the effectiveness of PVZ in high-risk infants from circumpolar regions was obtained in observational and ecological studies with important methodological limits [11,12]. To our knowledge, there is no published empirical data about the effectiveness of PVZ in healthy full-term (HFT) infants.

In the province of Quebec, Canada, prior to 2016 only high-risk infants were eligible to PVZ immunoprophylaxis, similar to other jurisdictions. In fall 2016 provincial eligibility criteria were expanded to include HFT infants residing in the circumpolar region of Nunavik and aged <3 months at the start of the RSV season or born during the RSV season [13]. This unique in the world recommendation for HFT infants was made by the Institut national d'excellence en santé et services sociaux (INESSS) [14]. After a systematic review of scientific literature, INESSS concluded that the limited available evidence for infants from circumpolar regions was of poor methodological quality [14]. Therefore, their decision relied on contextual and

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experiential data provided by a paediatrician with expertise in Northern communities, as well as consultations with paediatricians of different subspecialties. In these experts' opinion hospitalisation rates for RSV were very high in this population and caused substantial costs associated with airborne medical evacuation to regional and tertiary care hospitals. Although no data were available on PVZ effectiveness in HFT infants, the efficacy of PVZ to prevent RSV hospitalisation in these infants was expected to be similar to that found in premature children, and this intervention was judged to be both feasible for the healthcare system and well accepted by the population. The recommendation was issued by INESSS in July 2016 without consultation with the Nunavik Regional Board of Health and Social Services (NRBHSS), Nunavik public health authorities, the Nunavik HCWs and the Inuit population. Quebec Ministry of Health and Social Services approved INESSS recommendation in fall 2016. INESSS recommendations are often considered "standard of care" if the Quebec Ministry of Health approves the inclusion of a new subgroup to eligibility criteria for a new drug. For PVZ, a collective prescription for Nunavik HFT infants was made by the two Nunavik hospitals and Nunavik public health authorities had to respect the prescription. The new recommendation had to be implemented on a very short notice by the NRBHSS for the 2016–2017 RSV season. Following Quebec Ministry of Health mandate to evaluate this intervention, the Institut national de santé publique du Québec (INSPQ) conducted a quantitative and a qualitative evaluation. This paper presents the results of the qualitative evaluation.

The population of the Nunavik region of Quebec, Canada ($\approx 13,000$) is mostly Inuit. They live in 14 villages scattered along the Hudson (hospital in Puvirnituq) and Ungava (hospital in Kuujuaq) coasts, connected only by air and water. Health services are provided by two hospitals including each a pharmacy (one per coast), nursing stations in every other village, and four maternity wards (three on the Hudson coast: one in Puvirnituq and two in villages outside Puvirnituq where natal care is performed by a midwife; one on the Ungava coast in Kuujuaq). PVZ is managed and distributed by the two pharmacies and is administered by nurses in the nursing station of each village. Midwives informed parents or caregivers about the PVZ recommendation before delivery and nurses administered the required doses.

This qualitative study describes the experience and opinions of HCWs at the end of the first RSV season after the implementation of the new programme.

Methodology

This qualitative study was carried out in the broader context of an interdisciplinary work involving medical

anthropologists (AL, ED), and epidemiologists (RG, GDS) in charge of the quantitative analysis of the impact of the new recommendation, in collaboration with the Nunavik public health authorities (director: MR) and the NRBHSS coordinators. Three phone meetings were organised in spring 2017 with the Nunavik public health director and NRBHSS coordinators, and the HCWs involved in the programme in the two main villages Puvirnituq and Kuujuaq, in order to better understand the context and HCWs' concerns, and organise data collection on site. The coordinators in charge of programme implementation provided AL with the contact information of the HCWs in different positions involved in different stages of the programme. INESSS recommendations are often considered in different villages. Most participating HCWs worked in the two villages where the regional hospitals are located, and the others worked in two other villages. Because there are differences in health system organisation in Hudson Bay and Ungava Bay, as well as in villages with and without maternity services, HCWs from these different sites were included in recruitment criteria. They were then contacted via email by AL to present the approach, validate their interest to participate in the study and their availability during team fieldwork in Nunavik. Once on site, interviewed HCWs ($n = 12$) recommended to contact eight more professionals, according to the snowball method.

Data were collected by a medical anthropologist (AL) using semi-structured interviews of HCWs involved in the implementation of the new programme in Nunavik health services. Participation was voluntary. Each respondent had to provide oral consent before being interviewed and recorded. Data and interview recordings were processed confidentially. Twenty HCWs with different backgrounds and positions were contacted to provide a diversity of perspectives and broader insights into their experience with the implementation of this preventive programme, including physicians, pharmacists, nurses (vaccination nurse, child health nurse, infection prevention and control nurse, director of nursing and public health nurse), midwives, professional coordinator, family education worker, and laboratory professionals. Eight HCWs had worked in their position for less than two years, eight HCWs for three to ten years, and four for more than ten years (12 to 32 years). The average employment duration of the participants in their position in Nunavik was around 6 years. Among the 20 participants, 3 were Inuit and 17 non-Inuit professionals.

Interviews were conducted between July and September 2017 in French ($n = 16$) or English ($n = 3$), mostly in Nunavik ($n = 16$) and face-to-face ($n = 17$).

One interview was conducted with two professionals. Three HCWs were interviewed by phone, video conference or face-to-face in Quebec City according to their availabilities. A thematic content analysis of interview transcripts in their original language was performed using the software N'Vivo.

The interviews explored the participants overall experience with the new programme, the PVZ administration process, their perceptions and opinions about the new recommendation and its implementation. The interviews were conducted in a flexible way to maintain an inductive approach: the main issues described above were used as a starting point to prompt discussion, to investigate participants' experience and opinions and to address other issues if needed.

Ethics

This evaluation of a public health intervention was legally mandated by the Nunavik director of public health and did not require research ethics committee review [15: article 2.5]. All interviewed HCWs gave oral consent to participate.

Results

The impact of the new programme implementation on professionals and their work was analysed taking into account the whole process (including decision-making) but focusing on the organisational and implementation phases where participants were more involved. Participants identified three main concerns and challenges regarding the new programme implementation: the additional workload for them or for other HCWs, communication issues and lack of information, and ethical issues regarding the Inuit population.

The programme implementation required the involvement of several HCWs at different steps. At the very beginning, some nurses and pharmacists attended numerous meetings in order to plan and prepare for programme implementation. When the programme started (1 January 2017), the nurses had first to contact the parents of infants born at the end of 2016 and eligible for palivizumab. Starting January 2017 and before delivery, midwives provided parents or caregivers with information about RSV and PVZ and obtained their consent. Pharmacists followed-up on all the birth lists from the villages and ordered PVZ for distribution. Nurses administered PVZ monthly (up to three visits the first season), scheduled subsequent visits and provided additional information about RSV and PVZ. They also completed all necessary documentation such as PVZ consent and administration forms and

faxed them to the pharmacy. In the villages with maternity services, if a baby was born during the day, the midwife informed a nurse who could administer the first dose at birth. In the main villages, Puvirnituaq and Kuujuaq, the organisation was the same day or night, seven days a week. In the villages with maternity services (Salluit and Inukjuak) outside Puvirnituaq and Kuujuaq, when a baby was born at night or on the weekend, after the nurses' official hours, the parents were invited to come back with their infant as soon as possible to the nursing station to administer the first dose after birth. In the villages with and without maternity services, a nurse was always required to be present at PVZ administration visits at one and two months after birth in the nursing station.

An additional workload in a challenging healthcare context

Nunavik hospitals, NRBHSS and Nunavik public health authorities were informed about the new programme at the end of September 2016, which left little time to prepare for the upcoming RSV season. The new programme increased the number of infants eligible for palivizumab from ~30 high-risk infants per year for all Nunavik to more than 200 - per year, causing an additional workload for the HCWs. According to a pharmacist, significant and expeditious changes in the organisational structure were required in order to involve more HCWs to perform new tasks while maintaining the usual services. However, many HCWs interviewed lamented that insufficient time was allocated for training and the development of appropriate tools, which probably caused some communication issues and work overload. The additional workload was greatest for pharmacists and nurses involved in the organisational and implementation phases, who considered it as "excessive". It was perceived as "acceptable" by other interviewed professionals, including the few nurses only involved in the implementation phase.

According to the HCWs involved in the planning and preparation of the programme implementation, they had numerous meetings requiring considerable time. The HCWs involved in the actual implementation of the programme in the nursing centres of the 14 villages also had multiple tasks to undertake. The nurses explained that identifying and contacting parents of infants eligible for PVZ was very challenging and time-consuming in the Inuit context (i.e. hunting and fishing seasons, trips outside the village, children name changes, traditional adoption, frequent foster placements by the Nunavik Director of Youth Protection

(DYP)). The Inuit interpreters and family education workers helped a lot with this task. The nurses considered that they played a key role, working at the interface between the health services and the population.

The work overload was explained by three reasons: the Nunavik health context, the health service organisation, and the PVZ context (see Table 1). In Nunavik, HCWs are generally very busy with numerous health problems and priorities such as sexually transmitted infections (STI), tuberculosis, mental health, food insecurity, cancer, etc. According to many HCWs, staff turnover in Nunavik health services is very high (*i.e.* a large proportion of new staff) which caused communication problems. According to the Human resources of the Nunavik Hospitals via the NRBHSS, Nunavik HCWs typically work two months followed by one month off, which results in an average of 7 to 9 months at the workplace per year. In addition, 19% to 52% permanent

job positions (nurses, midwives and pharmacists) have been vacant for the last five years (2015–2020); these positions are held by temporary HCWs. This was particularly problematic for the PVZ programme which depended on key permanent professionals (vaccination nurses, child health and public health nurses, and pharmacists). The short delay between the decision and the implementation of the new programme and the absence of additional resources (financial, human and material) to support it contributed to work overload.

According to the interviewed HCWs, some temporary practical problems may have contributed to work overload. The respondents reported PVZ shortage, faxing problems, and the time to mix the PVZ powder and solvent at the beginning of the programme (replaced later by a pre-filled syringe) resulting in impatience from some parents. Most of these problems were resolved over time.

Table 1. Experience, main opinions and concerns reported by HCWs regarding the implementation of the new palivizumab recommendation in Nunavik.

Experience & main opinions	Details	Verbatim
Additional workload	Implementation of a new organisation with many stakeholders, high staff turnover, communication issues	<i>This year, the programme has been a very heavy and tedious task that has required a lot of time because we had to invent a new way of working. Our way of working of the past years was no longer applicable because that was too complicated to deal with the volume [of infants] we had. It would have taken forever. So we have invented a new organisation. Then, in this new organisation, there are many more stakeholders than before. As in the North, there is an unbelievable high turnover rate [...] there is always somebody unaware of how it works, and who doesn't have the information. So that creates a problem and everybody suffer from it.</i> (Pharmacist)
Communication issues & lack of information	No communication between public health authorities and Nunavik HCWs	<i>We wanted to have a more complete discussion with public health, just to find out you know, just to explore issues that were not being taken into consideration.</i> (Midwife)
Ethical issues regarding Inuit	No involvement of Inuit in the programme implementation	<i>One of my deep regrets, well what I would like to see more in this kind of consultation is the involvement at the Inuit level. Because aside from the paediatricians [...], the public health and us [...], I would have liked to see more Inuit involved.</i> (Physician)
	Full-term healthy Inuit babies used as experimentation subjects	<i>And again, and in all of these studies and I expressed that they don't know what the effect would be on term kids. So in effect, if they're giving it to term babies, they're doing experimentation on these babies.</i> (Midwife)
	Inuit parents: Misunderstandings, confusion & fear of judgement	<i>I've seen confusion with vaccines, regular vaccination, and the injection of Synagis. [...] I could call for regular vaccination, and the child had received an injection of Synagis three weeks ago. Then the parent told me: "No need, no need to come, he has just received his vaccine" ... I am not sure the whole population has understood that it was a passive immunity, which it is not a vaccine, and that mainly they have a yes or no choice. [...] The population does not feel comfortable refusing, is afraid of being judged.</i> (Nurse)
	Inuit parents: Misunderstandings & distrust	<i>Distrust is when you give education and then [the parent] has to sign the consent form. But he is not quite sure he understands, and he signs it.</i> (Nurse)
	Inuit parents: Fear of the DYP	<i>Parents complaining, like sometimes they say: "What if I refuse and then the DYP (Direction of Youth Protection) comes to my place and says: "Your child needs a vaccine and whatever?" (Midwife) And when these parents say that they are afraid because the DYP will go after them, it is not ok.</i> (Midwife)
Benefits of Palivizumab (Synagis)	Palivizumab: protection of Inuit children	<i>X and I we have become convinced that it was very important to protect Inuit children. We saw them in the villages, in the hospital in the North and in the South. We have heard over and over Y say that [...] Synagis should be provided to all Inuit children. [...] For us, that was something important to do.</i> (Physician) <i>To avoid air medevacs and sick infants ... Look, I will do it, I have no problem with that.</i> (Nurse)

Communication issues & lack of information

Communication issues happened during the implementation process. The respondents reported a lack of clarity of instructions to HCWs at the beginning of the implementation regarding the logistics and the communication strategies with the population. Instructions were not always properly shared between HCWs, misunderstandings occurred, some readjustments were needed, and these impacted the workload for key permanent workers.

Before the new recommendation, only a few HCWs (pharmacists, some permanent nurses) previously involved in palivizumab immunoprophylaxis of high-risk infants were aware of this product. Therefore, information was provided more broadly in the hospitals just before the implementation of the new programme. In October 2016, two paediatricians with a long experience in Nunavik made a presentation targeting doctors, nurses, pharmacists and midwives working in the two main villages, Puvirnituk and Kuujuaq. Inuit family education workers and interpreters were not invited to the presentation because at the beginning, they were not considered as having a role in the programme. During the presentation, the paediatricians gave information on RSV such as symptoms, modes of transmission, burden of illness and prevention. HCWs were informed of the reasoning behind the new programme. The nurses were also trained by a NRBHSS coordinator in December 2016 to learn how to administrate PVZ (provided also with a memory aid and an administration schedule). Meanwhile, several representatives of the two hospitals took part in an implementation committee, where the rationale of the programme had been explained. However, because of workload, high rate of staff turnover, temporary staff and intermittent working periods, there were problems in the transmission of information. The information did not reach all the HCWs involved in the programme and/or was considered inadequate (too little, lack of evidence). The nurses and midwives stated that they did not have enough relevant information (knowledge about RSV and the (INESSS) recommendation, administration of PVZ) to do their work properly. Physicians had more accurate knowledge (more aware of prior studies and data) on RSV than the nurses and midwives interviewed. The average length of experience of the nurses interviewed was around 6 years. Some of the nurses and midwives had been working in Nunavik for more than three years (up to 32 years), had a general idea of the RSV situation in Nunavik, but insisted that they had to look for more information and evidences online. Even if they had a general picture of RSV, many of them did not understand why PVZ had been chosen over other

strategies such as counselling and campaigns to reduce RSV risk factors (tobacco smoke) or promote protective factors (hand washing, breastfeeding, etc.).

Furthermore, many HCWs had questions and concerns about the new programme and would have liked to discuss with the decision-makers and the experts. Although two physicians interviewed were in favour of the new programme, and a few nurses trusted the decision made by the Quebec Ministry of health and thought that it could help decrease the number of infants' hospitalisations (Table 1), other HCWs expressed distrust regarding the new programme. More specifically, some nurses and the midwives have expressed concerns about the safety of PVZ in HFT infants, the poor evidence justifying the need for PVZ for HFT newborns, the lack of consideration regarding social and environmental risks (i.e. tobacco smoke in the household) and protection factors (i.e. breastfeeding) and the impact of shifting to PVZ their working time used for other health priorities (e.g. tuberculosis).

Ethical issues regarding Inuit

The implementation of the palivizumab programme raised concerns among different HCWs regarding Inuit (see Table 1). Physicians, nurses and midwives mentioned that the Inuit population was not included in the decision-making process and did not contribute to discussions about its implementation.

Nurses and midwives had the perception that HFT Inuit babies were used as experimental subjects because this programme had never been implemented anywhere else.

HCWs raised ethical concerns regarding the consent process. According to HCWs in close contact with the population, some parents did not make an informed and free decision. The midwives and some nurses reported that the information given to the Inuit parents or caregivers was insufficient and that the pamphlets and the consent form were not clear enough. The information was not systematically given in Inuktitut (Inuit language). This may be explained by several reasons. Some midwives in Nunavik are Inuit. They work mainly in the villages of the Hudson Bay and could give information in Inuktitut to the parents. Non-Inuit midwives and nurses generally spoke in English with the Inuit parents. According to some nurses, when Inuit interpreters, midwives or family education workers were available, they could help them translate the information in Inuktitut. Midwives and nurses provided two printed fact sheets to parents: a pamphlet about RSV in English and Inuktitut (prepared by the organisation Pauktutit (Inuit Women of Canada)), and

a pamphlet on PVZ in English, Inuktitut and French (prepared by the NRBHSS). However, a nurse explained that in general Inuit parents do not like leaflets much. Information not systematically given in Inuktitut and not completely adapted to the Inuit could have caused misunderstanding among the parents or caregivers. Some interviewed participants felt that parents or caregivers signed the consent with confusion and distrust and some of them did not understand why they had to come back with their infant for additional injections.

More specifically, there were concerns regarding the freedom of parents to refuse PVZ for their babies. According to the respondents, misunderstandings occurred among parents in various villages on both coasts. Some feared being judged as bad parents if they refused PVZ for their child. Some parents apparently accepted because they were afraid that the DYP would pressure them and get them in trouble. According to the nurses and midwives, the fear of DYP intervention was one of the main reasons why few parents refused PVZ. Feeling under pressure, parents did not make a free decision.

Discussion

We found significant issues both in terms of feasibility and acceptability during the first year of the new palivizumab immunoprophylaxis programme in HFT infants from Nunavik according to interviewed HCWs.

The Nunavik healthcare system received no additional resources (financial, material and human) to implement the programme. Lack of resources is a recurrent problem in this setting and was observed as well in other health services in Nunavik [16]. Some nurses directly implicated in the administration of PVZ had to decrease their involvement in other existing programmes. This shift of resources (or opportunity cost) triggered serious concerns regarding the priority given to PVZ over other activities for which the priority was obvious (e.g. control of sexually transmissible diseases, tuberculosis, mental health, food insecurity, cancer) [17; 18, 16, 19, 20, 14].

Communication issues also plagued the implementation process, similar to what was described in another programme in Nunavik [19]. The respondents in general were unsatisfied with the communication and reported that the information received was insufficient to work properly in a context of high turnover of human resources. Several authors underscored “the high staff turnover” in Nunavik administration and economy in general, including among the public health authorities and in hospitals [19]. Nurses worked in general in the villages for one or two years, or less [21: 651]. This high turnover can restrain the development of long-term

coordinated networks and smooth communication [19], challenge the sustainability of projects and initiatives [16], and ultimately can have a significant impact on the continuity of care [17,21]. Communication issues were probably due also to the short delay between the announcement of the new programme and the need to implement it before the upcoming RSV season. They caused misunderstandings, increased time for adjustments and distrust.

Some nurses and midwives were unsatisfied with the information they received or gathered. They wanted good evidence that HFT Inuit babies included in the programme were at higher risk for RSV infection and that the intervention was effective enough in these infants to justify their inclusion in the programme. They suspected that Inuit infants were used as experimental subjects to assess the effectiveness of the new PVZ immunoprophylaxis.

Nunavik public health authorities as well would have liked a better communication with decision-makers. They wanted empirical data to assess the value of this intervention, given that INESSS recommendation was based on expert opinion only which is the weakest scientific evidence [22]. Furthermore, we received confirmation from Nunavik public health authorities, administrators, HCWs, and the representatives of the INESSS committee who made the recommendation that there were no consultations prior to the INESSS recommendation with Nunavik public health authorities, with its administrators, Nunavik HCWs or Inuit representatives.

These findings also drew attention to the absence of consultation and involvement of the Inuit population and their leaders in the decision and implementation process, although they are supposed to work in partnership with the provincial authorities [23]. Despite significant improvements made over time, there is still an urgent “need for coherent and engaged processes of health information-gathering and decision-making that involves the Inuit” (ibid.: 56), as observed also in the Nunavik mental health services [16]. This is particularly important given that Indigenous prenatal and infant-toddler health promotion programmes in Canada are successful when they are based on the consultation, involvement and ownership of Indigenous peoples [24]. It has been shown that the success of health programmes in general is greater in the case of community-based initiatives, when the programmes participate in the revalorisation of cultural values, promote collaboration (culturally-adapted), and facilitate empowerment [ibid.; 25, 23, 19, 26].

Furthermore, communication issues with Inuit parents underlined by some HCWs raised ethical concerns

regarding the guarantee of a free and informed consent from parents. Communication problems with health services influence the attitudes of Inuit regarding medical care [21], and have an impact on the health of Canadian Inuit infants [27]. As explained by Hordyk and her colleagues [21], “Misunderstandings in communication affect patient access to care, quality of care, patient capacity to provide informed consent, patient understanding of treatment directives or preventive measures, and patient adherence to treatment.”

The main limitations of this study were the small number of participants, recruited in four villages in Nunavik, among only HCWs, and mainly with non-Inuit professionals. HCWs who were unavailable may have different opinions and experiences from the participants recruited. Although data saturation was reached, our findings could not properly represent the perspective of all the HCWs involved in programme implementation. In addition, participants may have provided socially desirable answers. We tried to control this possible bias by conducting interviews with HCWs having different positions and length of experience regarding the programme implementation in Nunavik. Most of them (12/20) had more than two years of experience in their position in Nunavik, which increases the reliability of the results achieved. Also, we did not obtain the perspective of INESSS or Quebec Ministry of Health. In addition, the evaluation of the PVZ programme did not consider the Inuit experiences and perspectives, as described in other studies in Nunavik about cervical cancer and prevention strategies [17], youth mental health services [16], a nutritional project dedicated to Inuit pregnant women [19], or the role of interpreters in the end of life management [21].

Very few studies have evaluated health programmes' implementation in Nunavik [16,19]. More research about Inuit experiences and opinions regarding health services and programmes is needed, including the participation and leadership of the community. This could be done with the development of a participatory action research project [26] or a community-based participatory research, a design rarely used in Nunavik [28].

Conclusion

The implementation of the new RSV prophylaxis (palivizumab) programme in Nunavik was confronted with feasibility and acceptability issues. The participants suggested that the Inuit population should be properly informed, consulted and involved, and that Inuit parents must be able to make a free and informed decision to accept or refuse an intervention for their child. Good evidence of the need and effectiveness of PVZ for all newborns is required, and should be discussed also

with HCWs involved in the programme. Finally, this study underscores the complexity of implementing health programmes, particularly in the field of Indigenous health. The experiences and perspectives of all stakeholders need to be considered in order to better understand the relationship between patients and healthcare providers, and contribute to the improvement of patient and children care in Nunavik.

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