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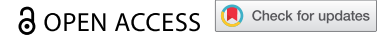


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RESEARCH PAPER



One child, one appointment: how institutional discourses organize the work of parents and nurses in the provision of childhood vaccination for First Nations children

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ABSTRACT

To effectively support childhood vaccine programs for First Nations Peoples, Canada's largest population of Indigenous Peoples, it is essential to understand the context, processes, and structures organizing vaccine access and uptake. Rather than assuming that solutions lie in compliance with current regulations, our aim was to identify opportunities for innovation by exploring the work that nurses and parents must do to have children vaccinated. In partnership with a large First Nations community, we used an institutional ethnography approach that included observing vaccination clinic appointments, interviewing individuals involved in childhood vaccinations, and reviewing documented vaccination processes and regulations (texts). We found that the 'work' nurses engage in to deliver childhood vaccines is highly regulated by standardized texts that prioritize discourses of safety and efficiency. Within the setting of nursing practice in a First Nations community, these regulations do not always support the best interests of families. Nurses and parents are caught between the desire to vaccinate multiple children and the requirement to follow institutionally authorized processes. The success of the vaccination program, when measured solely by the number of children who follow the vaccine schedule, does not take into consideration the challenges nurses encounter in the clinic or the work parents do to get their children vaccinated. Exploring new ways of approaching the processes could lead to increased vaccination uptake and satisfaction for parents and nurses.

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Background

Health care in Canada is situated within a context of entrenched historical distrust, harms and racism directed at Indigenous peoples (First Nations, Métis, and Inuit). There have been centuries of problematic interactions with First Nations peoples on the part of the Canadian government, which installed colonial structures and mandates into the healthcare systems that still exist today.¹ Starting in the 1990s, some First Nations communities (sometimes known as 'reserves') became 'transferred communities' through the Health Transfer Policy.² The stated aim of this policy was to provide communities more autonomy in health center staff hiring decisions and services offered. However, in practice, the Health Transfer Policy requires certain programs to be offered in order for the communities to receive funding. Mandated programs for core funding involve those with a focus on environmental health, tuberculosis elimination, and communicable disease control, including vaccination service delivery. Funding is also contingent on reporting to Health Canada's First Nations and Inuit Health Branch (FNIHB) by First Nations health centers. It has been argued that First

Nations health services are under-funded and under-resourced, and the Health Transfer Policy has been critiqued for drawing on the language of self-determination while implementing a cost-cutting agenda.^{3,4}

Vaccine coverage levels in Canada have been shown to be significantly lower in Indigenous populations, including First Nations communities. The limited data available show that in 2015, among First Nations in the province of Alberta, Canada, only 42% of two year old children received all recommended doses of diphtheria-tetanus-pertussis-polio (DTaP-IPV) vaccine,⁵ compared to 78.3% coverage for non-First Nations children.⁶ Furthermore, between 2013 to 2017, rates of vaccine-preventable infections in Alberta were three times higher among First Nations people compared to their non-First Nations counterparts.⁷ Low vaccine coverage in First Nations communities has been identified as an area of concern by both federal and First Nations health service agencies.⁸

In order to develop strategies to address the low levels of vaccine coverage in First Nations populations, it is essential to better understand the 'work'^a involved in childhood vaccination, or the processes and structures inherently organizing

vaccine access and uptake for First Nations children. Rather than assuming that solutions to low vaccine coverage lie in compliance with current institutional regulations, our aim was to explore the work conducted in one First Nations community, by both vaccination nurses and parents, to have children vaccinated. We also sought to explore the tensions between this work and how the vaccination process is organized within the institution.

Approach

With the intention to investigate “how things work”,⁹ we drew on an institutional ethnography (IE) approach to examine the process of community health nurses administering vaccines in a health center within a First Nations community. IE is grounded in the premise that what people know, and how they know to do it, is produced through, and not independent of, peoples’ activities.¹⁰ Rather than starting research *within concepts* that are generated by those in power and that can perpetuate inequities, IE offers a way to start and stay grounded in what nurses and First Nations families know about vaccination work. In this way, IE can act as a decolonizing method of inquiry.¹¹ The IE approach moves the analysis beyond the local setting to trace how participants’ work is linked with institutional processes and practices that organize and govern their everyday realities.¹⁰ IE focuses on how ‘discourses’ – referring to patterns of social meaning—enter into and organize people’s work through texts such as policies, practice guidelines, and records/documentation. In this way, texts become a source of data for the researcher. Through our use of IE, we created an empirical map of how First Nations parents’ work intersects with that of community health nurses, and how institutional discourses organize the work required to access and administer vaccination services.

Methods

Setting and population

The study was conducted in a large (300 km²) rural First Nations community in central Alberta, Canada, with a population of about 17,000 residents from multiple Nehiyawak (Plains Cree) Nations. It is a transferred community that operates one main community health center that routinely provides vaccination services and three smaller satellite centers that periodically offer vaccinations. The vaccination program operates within norms that were established when the program was administered by FNIHB. Vaccination appointments are offered within the main health center up to three days per week, with walk-in appointments typically available one day per week. No public transport is available, but the community offers transportation to and from appointments at the health center. First Nations children living on-reserve (geographical areas set aside for First Nations communities) can also access provincial vaccination services off-reserve. The study was developed in partnership with the community’s health services leadership, building on collaborative preexisting research relationships.

Ethical processes

Study activities were approved by the University of Alberta Health Research Ethics Board and the First Nations health center leadership. The entire study team was trained in OCAP® (Ownership, Control, Access, and Possession)^b principles for the handling of First Nations data and the study was OCAP® compliant.

Data collection and analysis

Consistent with the IE approach, we collected data through (a) observations, (b) interviews, and (c) review of texts (e.g. policies, practice guidelines, and records/documentation).¹⁰ Our observations took place in the main community health center over the course of four months, shadowing community health nurses who were providing vaccines to First Nations preschool aged children. Nurses were recruited through a meeting with the health center team, where nurses were introduced to the project and invited to participate if they were currently or recently part of the vaccination program. Written consent to observe vaccinations within the community health center was obtained from parents and nurses. We recorded our observations using field notes that included the work processes observed, conversations heard, and texts used or directly/indirectly referred to during the observations.¹⁰

Face-to-face interviews were conducted with nurses to seek clarification on nurses’ activities and their knowledge of the work processes occurring during observations. These interviews provided empirical evidence of how the nurses’ work linked with that of other health center staff (clerical staff and nurse managers) and parents. Individuals from each of these groups were then invited for subsequent interviews.

Parents or guardians (hereafter referred to as “parents”) of preschool aged children were recruited by health center staff through word of mouth, posters in the health center, during appointments, and through social media, following a snowball sampling method. The only inclusion criteria was being the parent of a preschool aged child, regardless of whether they had their children vaccinated. Parents were notified of the days the research team would be at the health center and were invited to come to the health center on those days. Written consent was obtained from parent interviewees, who received an honorarium for their participation. Parents who were interviewed included those who lived within the community and some who lived off-reserve; young and older parents; new parents and more experienced parents with multiple children; single parents, partnered parents, grandparents parenting grandchildren; and parents whose children were under the care of the child welfare system. These members included those who had consistently, inconsistently, or never presented their children for vaccination services.

Observations and interviews were conducted by two non-Indigenous research team members (JP, SM). Interviews followed a semi-structured guide of predetermined yet open-ended questions (Given, 2008).¹² The specific lines of inquiry focused on asking participants to talk about their ‘work’ providing or accessing vaccines, for nurses and parents,

respectively, and how they know to do what they do (see Appendix A). Parents were also free to direct the conversation to other topics. Interviews were recorded and then transcribed.

Data were analyzed for what Smith^{13(p194)} refers to as moments of ‘disjuncture’ (i.e. tension) between how participants talked about their work and the actual activities observed. Smith states “the disjuncture between the experienced actualities of those caught up in such a process and what is recognized in the form of words that represent them institutionally is an important dimension of institutional power”^{13(p194)}. This provided direction for further data collection and analysis (Figure 1). We also reviewed several texts that were used or referred to directly or indirectly during the observations and interviews, including computer charting, vaccination policies, and practice guidelines. Texts were compiled and analyzed to identify empirical links into the social organization of the activities taking place in the health center. Texts were publicly available, or else they were provided to us by the health center leadership.

Data analysis was collaboratively conducted by two team members (JP, CFB), one of whom is First Nations, lending a reflexive Indigenous lens to the understanding and interpretation of the data. Analysis began during the data collection stage through an inductive, iterative process. We increased rigor by collecting data using multiple methods (i.e., observations, interviews and texts), and mapping (using the software Mindomo) how activities taking place during vaccination were empirically linked with institutional priorities (those of the health center, FNIHB and Health Canada). We conducted several rounds of reading, mapping and validating the identified links to generate a picture of how the ‘work’ of childhood vaccination occurs within First Nations families in the community. Our mapping of the data permitted us to elucidate how institutional discourses circle back to enter into and organize the work taking place in vaccination clinics.¹⁰

Findings

In total, we recorded 20 hours of observation within the community health center (4 clinic days were observed, ranging from 4–6 hours each, with a median length of 5 hours), and

39 hours of interviews with health center staff and parents. Six interviews were conducted with individuals representing nursing, clerical staff, and management, five of whom identified as First Nations (interview length ranged from 40–120 minutes, with a median length of 80 minutes). Thirty-three parents were interviewed, six which took place in group interviews with different family units (interview length ranged from 30–60 minutes, with a median length of 50 minutes).

We present our findings in the form of excerpts from research observers’ field notes and interviews. The interwoven narrative shows how, when questions arose, we examined the texts people were using to understand how these connected them to others located outside the health center. By following these empirical links, we traced how the work we observed was being organized externally to the vaccination appointment.

Nurses’ vaccination work

The events summarized in the following paragraph^c describe one nurse’s morning work at the vaccination clinic in the health center, and are similar to those we observed on a number of occasions. Texts used, mentioned, or inferred during the observation are underlined.

On the morning of the clinic, the nurse picks up the day’s appointment sheet at the front desk, which the clerk has previously filled out. The nurse checks the on-reserve health center’s electronic database but does not find a vaccination record for the scheduled child. The nurse then checks the provincial off-reserve database. The nurse tells the researcher that when preparing for an appointment, she is “most concerned about the child’s vaccination status. Good practice is to look at the developmental assessment, and where they are at, but often there is no time.” When we ask the nurse how health center visits are scheduled, she tells us “appointment booking is one child per 45 minutes, and 15 minutes for charting.” The nurse says that although the appointment sheet only lists one child, multiple children may arrive for the appointment: “sometimes whole families show up for support—I don’t want to dissuade, but it is preferable to me if only one or both parents shows.”

Even before the visit begins, a disjuncture is visible as the nurse is torn between “supporting” parents and “dissuading” them from bringing multiple children. This tension is what Smith would describe in IE as ‘bifurcated consciousness’¹⁴ – being pulled between how the nurse knows to do her work on a personal level and how she knows to follow the institutional requirements. We questioned why the nurse prefers to see one child at a time, what she means by “good practice”, and why she states there is “no time.” As we continued our observation, we took particular note of how the nurse organizes and prioritizes her work.

The nurse compares the child’s provincial database record to the recommended schedule of vaccines on her desk and says “this child will need multiple injections. They’re quite behind.” She notes which vaccines the booked child is due for, checks to make sure the needed vaccine doses are in the fridge and confirms the expiry date. The nurse then checks the dosage chart by age taped to the wall and writes the vaccine lot number on each appointment form. She explains that it is important she follow the same order of injections and placement of injections in each appointment, particularly when there are multiple injections, “so that when you go to chart, you know what’s been given and where.”

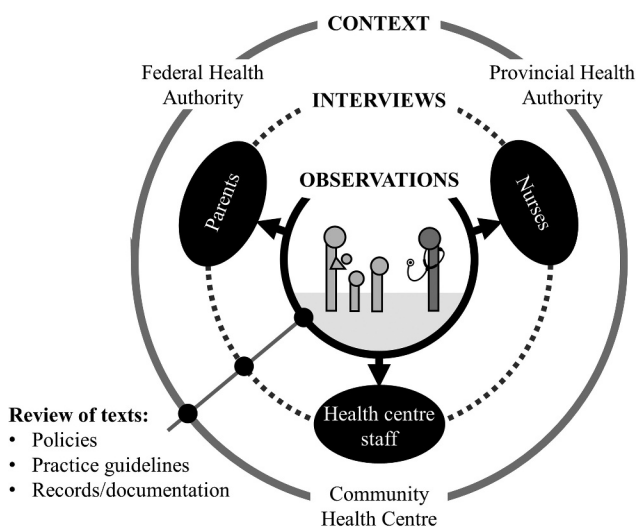


Figure 1. Data collection process and context.

We observed the conflict between the nurse's work to follow protocols as she has been taught and the reality that appointments do not always go as planned, including the complexity of determining which vaccines are currently required for the child.

The family whose child is booked for the appointment does not show up to the health center. The nurse notes this in the health center's computer charting system and uses the missed appointment time to double check the vaccine information binder to make sure the content matches up with recent updates on the FNIHB website.

The nurse calls the next family in from the waiting room. The mom and dad have brought the baby, as well as the baby's two older siblings, and at the start of the appointment ask the nurse to check if the siblings are also up to date on their vaccinations. The nurse proceeds to weigh and measure the baby, recording the measurements on the margins of the appointment sheet. She conducts several assessments and then explains to the parents the vaccines that she is going to give and which diseases they protect against. The nurse describes the visit as a "four shot" appointment. She provides the parents with a printed form called an after-care sheet and goes through the contents to explain what to do for the baby after the vaccinations. The nurse then instructs the dad on how to hold the baby for the first vaccine. She swabs the injection site, checks the syringe and administers the vaccine. She proceeds through these same steps for each of the remaining vaccines. The baby cries after the injections and the mother and baby's siblings in the room comfort the baby.

The nurse asks the family to wait 15 minutes after the vaccination, in case the baby has a reaction to the vaccines. While they wait, the nurse discusses her assessment of the baby's development with the parents and informs them about the car seat program. The mom asks for Tylenol, in case the baby develops a fever, and the nurse refers her to the pharmacy, as a prescription is required in order for the medication to be funded. At the end of the appointment, the nurse checks the vaccination records of the baby's older siblings and finds that they are also due for vaccines. She asks the parents to make appointments with the booking clerk to bring the other two children back at a later date to be vaccinated.

After the family leaves, the nurse completes her documentation of the visit. She enters the vaccine data into the computer charting system: vaccine given, bar code, manufacturer, lot number, vaccination site, dosage, expiry date, and the name of the vaccine provider (herself). She enters the development screening information into another computer charting system that the health center uses. As she transfers the height and weight data from the notes on the appointment sheet into both systems she says "you need weight in case of anaphylaxis." She includes notes on other things that happened in the appointment in a chart summary tab (a discussion about the car seat program and the Tylenol request). She tells the observer that the nurse manager has told her she does not need to chart in both systems but "it's not written down anywhere, so I'm going to keep doing both until someone can show me where it says I'm supposed to chart. I don't want someone coming later to say I did it wrong."

Identifying the problematic

An early step in an IE-informed study is to identify the 'problematic' under investigation, namely something troubling or a sense of unease that suggests a focus of an inquiry.⁹ Our observations raised a number of questions including: who books the appointments and what happens when people do

not show up? How did the nurse know which assessments and information to focus on during the visit? Why did she ask the parents to return at a later date, rather than vaccinate the other children present during this visit?

We paid close attention to these links into the social organization of the health center as we observed and listened to the nurses. We learned that within the safety protocols developed by FNIHB, the nurses' vaccination work focuses on assessing what vaccines are required for the child, getting the vaccines ready, checking that they have the right vaccine and the right vials of vaccine, and preparing and administering the doses. Each of these tasks is carried out in accordance with written policies that the clinic nurses have been taught to follow. The regulations also stipulate a 15-minute wait period for the family after the child is vaccinated in case the child has an allergic reaction (anaphylaxis) to the vaccines and requires administration of epinephrine. Nurses are accountable to their employer and professional licensing body in multiple ways, including accountability for monitoring for adverse events that may occur during the 15-minute wait period. The nurses described that they have been told to keep parents and children in the clinic room during the 15-minute wait period and to fill this time with other tasks. One nurse stated "I always try to do the weight/height thing at the end, because lots of times people are like, 'Okay, I gotta go'. And they leave right afterward. So, it keeps them here before they try to bust out."

In order to fit these tasks into the allotted time, the visits have been organized into hourly time slots (45 minutes plus a 15-minute wait time—families are expected to stay for the full 60 minutes). The nurses work efficiently—using every minute of the visit. As they focus on completing and recording these protocols as expected, tensions rise when the work does not go to plan. The nurses voice frustration when they spend time duplicating data entry, or when the families cancel appointments or bring extra children. The nurses are conflicted, as there is a perception that an insufficient number of children are being vaccinated in the community. One nurse we interviewed stated, "if [we] had unlimited resources, our stats would be way higherWe definitely don't have enough nurses." The nurses are torn between their obligation to safely complete what they have been taught to do during each visit and their frustration that meeting these obligations means they cannot vaccinate additional children while they are in the health center. These tensions became the threads that we followed into the institution.

Tracing the links into the institution: "one child per appointment" – a standardized practice

As IE researchers, we recognize that what the nurses believe they can and cannot do in the vaccination clinic is coordinated by information contained in texts, including the appointment sheet and the FNIHB guidelines. We understand that these texts link the nurses to others whose work intersects with the clinic nurses: the clerk who schedules the appointments, the family who does not arrive for their appointment, and the family who arrives with multiple children. We are especially interested in exploring two work processes that appear to be organizing much of what happens in the visits: the one child

per visit norm and why the family is not asked to wait out the 15 minutes in the waiting room, as is common practice in other vaccination settings.

Clerk's work

In order to learn more about the clinic scheduling, we observed and spoke with the clerk as she performed the front desk duties including booking appointments. The clerk told us that although the nurse manager has informed her that the nurses can only see one patient at a time, she often receives calls from families telling her that they will be bringing additional children, or they arrive at the health center with siblings who were not scheduled. In these instances, the clerk reports that nurses sometimes send the children who are not being vaccinated back out to the waiting room and expect the clerk to “babysit” them. The clerk explained that when families without access to transportation phone the health center, it is her job to organize rides, but added that some families do not come at all because they missed their ride. The clerk is also pulled between how she has been taught to do her work and what happens on a daily basis to disrupt her work's flow.

Manager's work

To understand more about what the nurses are expected to do during a visit, we interviewed the nurse manager about the way appointments are organized:

It's up to the nurse to organize her visit the way she can. But we do promote that before they give any vaccines, that they weigh and measure the child at the minimum, in case they have to give epi.^d So, whether they ask the developmental questions before/after is up to them. But when I train people, I say it really would be more beneficial to ask those questions post-vaccine because the baby has to wait 15 minutes for observation anyway. So that way, once you're done with the client, they don't have to sit in the waiting room [Nurse Manager].

Here, the nurse manager referenced a FNIHB requirement to have patients wait during the 15-minute observation period after the vaccination. Since the nurse manager is also responsible for ensuring efficient use of resources, she suggested that the nurses fill this time with the developmental questions. In turn, completing the required assessments and documentation is only feasible if there is one child per hour-long appointment:

“They can't just stick in three kids”

We've told the receptionist that one appointment is for one child. But I've noticed when I go out there on occasion that they've stuck two or three in. And I've said “you know, you have to allot enough time per person” and give that heads-up to the nurse so that she can prepare ahead of time for each one of those children. And so, we're working on that still, to try and get the receptionist to see that they can't just stick in three kids in an hour appointment. That it's just not feasible. And the only thing that you can do then is give

vaccines. You can't do a proper growth and development assessment – or answer all the questions, let alone getting all the documentation done in an hour [Nurse Manager].

We observed that how visits are organized means that the nurses are expected to prioritize the work of doing assessments and completing paperwork over that of immunizing additional children. In the interview, the nurse manager further reinforced the rationale for the one child per appointment practice on the basis that fewer mistakes will be made:

A “window of opportunity”

When I was the nurse in clinic, I know that I made my fair share of mistakes. And some of it is due to distraction. It's hard to keep in focus. And so, I would then ask if there was a partner out there, or somebody that had come with them just to decrease the possibility of making a mistake if the other children could stay with the person that came with them. And really you know, it's better to do it that way. We shouldn't have more than three people in the room, I'd say – unless that one person is there, caregiving for a baby or something like that. That's not too distracting. But it gets pretty chaotic when you have like four kids running around. But it's the window of opportunity, sometimes [to get all of the children vaccinated]. [Nurse Manager].

Even as the nurse manager provided justification for only booking one child per appointment, she recognized that having several children present may represent a “window of opportunity” to get more vaccinations completed. However, the nurse manager later stated that this window of opportunity to “jab as many kids as possible” may come at the expense of doing key growth and developmental assessments, which are used for ensuring early implementation of important support services for children who are in need of them. In other words, there are always push-pull factors at work for the nurse manager and the nurses in all of the decisions that they make.

As she continued, it became clear that the nurse manager is aware of the many challenges that parents face in making it to scheduled health center appointments, which she considers in tandem with ensuring that children are not harmed and providing a safe work environment for the nurses:

“We just don't give up. We just keep trying”

There's a lot of social determinants that . . . make a difference. So, if today you're worrying about what you're going to feed your children, immunization is lower on that priority list. Or if you've had a domestic violence [incident] occur, you're not going to worry today about your immunization. So, there's a lot of social factors that, I think, get in the way of immunization. There's many deaths in the community. So cultural events, funerals and such, do impact that. So, there's a lot of challenges. So, we just don't give up. We just keep trying. [Nurse Manager].

The nurse manager, too, is pulled between the need to mitigate errors, to demonstrate fiscal responsibility, and her knowledge of the struggles that parents experience in trying to work within the existing health center system. The nurse manager later stated “nursing education promotes safety first, as do licensing bodies. These entities do not take into account social determinants first and the efforts of parents to get to the appointment.”

Families' vaccination work

Since parents coming to the health center with children who are not scheduled was noted as a key issue for the staff, we talked to families about why this happens. Our conversations provided a compelling picture of the complexities that families face trying to work within the current system.

"Tough to get a ride"

The parents we spoke to described four possible options for transportation to the health center for vaccinations: driving themselves if they have a vehicle and sufficient funds for fuel; calling the First Nation transportation system to request a ride; calling the health center for a ride from medical transportation; or asking someone such as a family member for a ride. Parents who drive themselves or opt to get a ride from someone else may be provided with a gas voucher by medical transportation.^e One parent stated: "I have someone pick me up or bring me. Or else I can even call the health center to give me a ride." Asking others for a ride was often a challenge, as one parent said: "me and my girlfriend, we don't really own a vehicle, so we have a hard time getting rides to places. We usually ask my parents for a ride, but usually they're busy because they both have jobs—tough to get a ride." Two parents discuss how they sometimes miss appointments because transportation in the community needs to be booked "a few weeks in advance" and the transportation "usually comes earlier than the time they say." The nurse manager also described the FNIHB policies that affect medical transportation as not conducive to bringing more than one child to an appointment, pointing to another system that parents need to negotiate.

"I just pack them"

Parents also discussed how they navigate the need for childcare. Some parents attempted to schedule vaccinations during a time when their other children are in school or when the other parent is available to look after them. Another option is trying to find a babysitter, although as one parent stated, it is hard to get childcare for vaccination appointments because "nobody likes to watch boys, we have to try and get everything done [for my baby] when my boys are at school." She said that bringing her school aged sons to her baby's appointment is often easier than finding a babysitter for them, if they are not in school. When babysitting is a concern, some parents make the choice to bring siblings to a child's appointment: "it's kind of hard to choose who's gonna watch your babies. That's why I just pack them." Others opt not to attend appointments when unable to find care: "yeah I've missed [appointments] because of childcare because I can't bring two little babies while you're trying to deal with one getting immunizations."

Discussion

During our observations and interviews, the "one child per appointment" practice that has been established as an unwritten but accepted norm in the health center seemed at odds with

the mandate to increase vaccination rates. Based solely on our observations and interviews, it might be tempting to offer an immediate solution, such as reorganizing the booking system. However, our IE examination of how the nurses are expected to complete and document their vaccination work reveals that this situation is more complex than a mere scheduling change will resolve.

Dominance of institutional discourses in the work of the health center

Nurses are held accountable for their vaccination workflows by demonstrating that they have completed each step of the FNIHB processes and procedures they have been trained to follow and reproduce. The FNIHB binder and government policies website act as 'boss texts'^f carrying discourses of safety and efficiency into local health center processes. The nurses demonstrate their competence by completing standardized documentary evidence of how they meet the FNIHB requirements. As part of what Smith¹⁰ refers to as an 'institutional circuit', these documents are passed on to management as evidence of what nurses do during vaccination visits and are used to inform budgetary considerations and decisions around health center practices, including determining how long each appointment will take. Based on this evidence, it has been determined that completing everything on the checklist is only feasible when one child is seen per hour.

As we also learned, the work that parents do to organize transportation and childcare in order to get their children to the health center is substantial. It is clear from our interviews with the nurses and managers that they have considerable insight into the struggles the parents face and we observed them doing extra work to accommodate the parents' specific circumstances. Yet each of their proposed solutions to 'fixing' the transportation and childcare 'barriers' is also dependent on health center staff and parents aligning with the dominant institutional discourses of safe vaccine delivery and fiscal responsibility. The staff are torn between the fact that they want to try and support the families, and the work they are required to do to be safe and efficient. This is seen when the nurse manager states: "there's been the odd times that we will go out and pick a client up. But it's not something we want to do all the time—it's not the most efficient use of resources."

Circling back to the frontlines: how "one child per appointment" perpetuates colonial power struggles

As evidenced in our family interviews, parents may miss appointments due to lack of childcare and/or transportation or bring extra children to appointments due to lack of childcare or because they want to take the opportunity to get all of their children vaccinated. Similar barriers have been reported by Indigenous parents in other Canadian studies.^{15,16} Despite their empathy, the nurses do not have the flexibility to adjust their work to accommodate these unanticipated events and the parents' behaviors are positioned as barriers to the smooth running of the health center.

As we discovered, none of the institutional work involved in the nurses calling the parents, the clerk babysitting extra children, the manager picking up clients, or the parents scrambling to find an extra person to accompany them is entered in the documentation purported to record what happens in a vaccination visit. Despite evidence that many parents are working hard to meet the expectations that are placed upon them (and to present themselves as accountable),⁸ any event that falls outside the institutional circuit organizing this work becomes irrelevant or a source of distraction from safely and efficiently delivering vaccinations.

Nurses' work within the institutional circuit becomes less about accommodating the parents' needs and more about reminding/nudging the parents to fit within these health center policies. In fact, the visits have been scheduled and organized to ensure they do just that. In order for the clinic work to run smoothly, parents are expected to arrive on time, bring only one child and comply with visit procedures. Rather than having families wait 15 minutes in the waiting room as in many other health centers, the visits in this First Nations health center have been structured to ensure parents do not leave before the recommended time to screen for anaphylaxis. This is arranged by keeping families in the clinic room with tasks purposefully left to fill the requisite monitoring time (completing and discussing the child's assessment, informing parents about other health center programs, explaining the prescription process etc.). While this arrangement is rationalized in terms of meeting safety standards, the nurse's comment that "it keeps them here before they try to bust out" carries paternalistic overtones of the parents being regarded as untrustworthy or rebellious—discourses that circulate in the past and present settler colonial state.¹ Utilizing the post-vaccination monitoring time period for developmental review may also damage rapport and relationships between parents and nurses if it places parents in the position of balancing comforting their upset child with attending to the nurse sharing detailed information and completing the child's assessments.

Overall, the parents we interviewed face considerable challenges in getting their children vaccinated within a system that is not designed to accommodate their struggles with transportation and childcare. When health center protocols are taken up within discourses of safety and efficient use of resources, practices such as the one child per appointment policy take precedence over the nurses' ability to attend to the immediate needs of the parents, including immunizing other children who are in the health center. Health center processes perpetuate the colonial system by placing the nurses in a position where they must work to ensure that First Nations families comply with an institutional agenda that does not accommodate the realities of their lives.

Next steps

This study has explored what is happening at the frontline of practice in one First Nations community's vaccination clinic. The institutional discourses we present in this paper form part of a broader exploration of how the health center's vaccination clinic works. Traditionally, proposed solutions to challenges within First Nations communities have been framed through a 'fixing barriers' lens. Instead, the use of IE has offered us a way to co-create

a picture of what is happening with the community. Collaborating in this way and staying grounded in the work of nurses and families has opened new avenues for dialogue about potential change.

Strengths and limitations

The involvement of health center leadership is a strength of the project, both in terms of partnered Indigenous health research and for an IE study, which aims to investigate the work of people in multiple areas. It is important to remember that every First Nations community has its own culture and processes. Thus, the findings of this study are specific to the study community and may not be generalizable to other First Nations communities. However, our findings have shed some light on what may be common issues experienced in similar settings. This study examined the practices that took place during a particular window in time; we mitigated any potential bias introduced by interviewing staff who had previously worked in the program, but had moved into other positions within the health center. The study took place before the 2019 creation of Indigenous Services Canada (ISC), one of two new government departments with responsibility for policies relating to Indigenous peoples in Canada.⁸ We explored the possibility that the creation of ISC changed processes within the health center, but our community partners confirmed that no changes in the vaccination programs resulted from this change in government organizations. The use of snowball sampling and honorariums may have resulted in selection bias, although both strategies are common in community-based work, and honorariums are provided as a sign of reciprocity and respect for participants' time. Although we originally planned for an Indigenous-identifying researcher to conduct the interviews to encourage trust and openness with participants, our First Nations partners felt that parents would be more forthcoming with an outsider, knowing that their comments would not be circulated within the community.

Although this paper focuses on the one child per appointment norm, our study uncovered multiple other textual threads that organize the work of First Nations families attempting to access vaccination services, which will be explored in future papers. These include: the 10-month annual school schedule, which has been shown in previous IE work as inflexible¹⁷ and the consent process for vaccinations, which is especially burdensome for families impacted by the child welfare system.

Conclusion

Our study reveals that First Nations parents in this community put a great deal of work into taking their children to the health center in order to have them vaccinated, including navigating transportation and organizing childcare. From interviews with the nurses, we learned that what they can and cannot do to meet the needs of these families is organized within an institutional circuit that depends on distinct appointments being scheduled for each child and the expectation that appointments will unfold in specific ways. The nurses are held accountable to

efficiency discourses that organize them to focus on administering vaccines without distractions, conducting other assessments during the 15-minute wait period, and charting the required information. While the intent of these rules is to make vaccinations efficient and safe, the one child per appointment norm that has evolved is often incompatible with the daily lives of First Nations families. Achieving high vaccination coverage while attending to the complex and intricate realities of First Nations communities will require community-led solutions.

Notes

- a. Work, in IE, refers to anything that uses time and energy.
- b. <https://fnigc.ca/ocap>.
- c. Notes from the observation throughout this section are indented.
- d. Epinephrine injection for anaphylaxis.
- e. Parents can request a gas voucher from medical transportation to cover their fuel costs, if verification is received that they have an appointment. Although not explored in this paper, this is another example of how the parents are linked into a textually organized funding system that coordinates many aspects of their lives, in this case the work of getting to and from the health center.
- f. In IE, boss texts are “a text or set of texts that supplies the context for what we can see, hear, and know. There are subsidiary documents that come into being and are organized under these texts, which are positioned at the top of a hierarchy of texts.”^{18(p610)}.
- g. Parents’ invisible/visible work will be explored more in-depth in another paper.

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Appendix A

FINCH Parent Interview Guide

Demographic Questions

- (1) Which community do you live in?
- (2) How many children do you have and what are their ages?

Guiding Questions

- (3) Do you normally come to this clinic, or do you sometimes go to a satellite clinic, or an AHS clinic outside of the community?
- (4) Do you usually get your child(ren) immunized for all the vaccines?

The following questions relate to your child or children less than 6 years of age. We want to understand what goes on before, during and after your child's immunization clinic visit:

Pre-Clinic Visit

- (5) Do you tend to come to walk-in clinics or booked appointments? Do you have a preference and if so why?
- (6) If you attend walk-in clinics, how do you know when walk-in days are planned?
- (7) If you come to booked appointment days, can you tell me about how you schedule immunization appointments for your child(ren)? What do you do?
- (8) How do you remember immunization appointments/walk-in days?
- (9) Have you ever missed your child's immunization appointment? What was happening in your life at that time?
- (10) If you have to miss an appointment, what do you do? Is there anyone who you notify?
- (11) What is involved with getting your kid(s) to the clinic? Is this different from when you have a booked appointment compared to if you are attending a walk-in clinic? If you do go to other clinics, let's talk about your appointments at this clinic, but let us know if it is different if you go to a satellite or to an AHS clinic.
- (12) Do you ever plan your clinic trip alongside other trips for things that you need to get done in the community?
- (13) Do you ever access other clinic services (for yourself, your child or other family members) when you come for your child's immunizations? (Provide any experiences).
- (14) What do you do when you arrive at the clinic for your appointment or when you come for a walk-in clinic?

During the Clinic Visit

- (15) Can you tell me what you do in the clinic visit?

Post-Clinic Visit

- (16) What do you do after the appointment?

- (17) Do you book your next appointment while you are at the clinic? Do you ever book appointments for other children or family members while you are there?

End of Interview

- (18) Is there anything else that you would like to talk to us about regarding immunization services/your experiences with these services?
- (19) How do you feel about immunizations in general?

FINCH Nurse Interview Guide

Talk me through what you do in the immunization clinic: what happens before the appointment, what happens during the appointment, what happens after the appointment. How do you know to do it?

- What goes well?
- There was some discussion around children being behind schedule in their appointment. Can you tell me how that works/what you do in those appointments?
 - (a) How do you know when someone is due for their vaccinations?
 - (b) Can you give me an example of what happens when a child in care presents?
 - (c) What reasons have parents given for not keeping up with the schedule?

Identification of Client & Record

- What do you do when you are unsure if a baby has been correctly identified on the appointment sheet?
- There was an issue that arose around vaccinating an adult when it turns out that they had already been vaccinated – could you talk through what happened?

When a situation like that arises, what do you do?

Charting & Different Databases

- You mentioned in the first appointment that I observed “I would rather chart just on in one computer system, but I'd get in trouble”. Could you clarify what you meant by getting in trouble? If you could do it your own way, how would you do it?
- How do you enter immunizations into the computer system?
 - a. If you could do it your own way, how would you do it?
 - b. How do you chart when it is a child in care?

Recertification

- What do you do when you recertify?

Documentation

- Show map of process (record checking and documentation process): feedback – does this look like what you do? Feel free to write on sheet.
- After care form: can you talk me through this form and how you use it?