BUILDING BLOCKS TO SUSTAINABLE RURAL MATERNITY CARE: Supporting 1A Services

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Objectives

Reflect on the state of rural maternity care in BC

Describe the community-based process in the Kwakwaka'wakw territory, North Vancouver Island, to determine local priorities for maternity care

Discuss the development and implementation of 'Building Blocks to Sustainable Maternity Care"

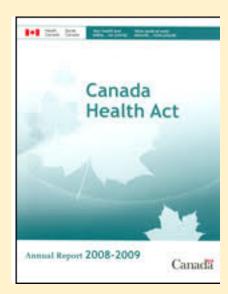
Consider the applicability to other rural communities in BC



Canada Health Act

"To protect, promote and restore the physical and mental wellbeing of residents of Canada and to facilitate reasonable access to health services without financial or other barriers."

[Canada Health Act, 1984, c-6, s-3]



'Closer to Home'

'THE ROYAL COMMISSION ON HEALTH CARE AND COSTS' (THE SEATON REPORT 1991):

"[M]edically necessary services must be provided in, or as near to, the patient's place of residence as is consistent with quality and costeffective health care"

(B.C. Royal Commission on Health Care and Costs 1991: A-6).

'STANDARDS OF ACCESSIBILITY'

(BC MINISTRY OF HEALTH SERVICES AND HEALTH PLANNING 2002):

- Recognized that maternity care services in rural BC could be negatively impacted by regionalization;
- suggested expanding the function of general practitioners to make more services including perinatal surgery, available.



Prioritizing Primary Maternity Care



CROSS SECTOR POLICY DISCUSSION PAPER 2015
PRIMARY AND COMMUNITY CARE IN BC: A STRATEGIC POLICY FRAMEWORK

- 'All British Columbians requiring maternity care will have timely, local access to a primary maternity provider or network.' (p20)
- 'Women who live in rural and remote areas want highquality maternity care as close to home as possible.' (p23)



Returning Birth to Aboriginal, Rural and Remote Communities Policy Statement (SOGC)

"The SOGC strongly supports and promotes the return of birth to rural and remote communities for women at low risk of complications. Training and protocols need to be established to ensure proper identification of women with low-risk pregnancies."

SOGC POLICY STATEMENT

No. 251, December 2010

Returning Birth to Aboriginal, Rural, and Remote Communities

This policy statement has been reviewed by the Aboriginal Health Initiatives Committee and approved by the Executive and Council of the Society of Desterticians and Oynaecologists of Canada. This policy statement has been endorsed by the Indigenous Physicians Association of Canada, the Canadian Association of Midwives, and the Aboriginal Council of Midwives.

J Obstet Gynaecol Can 2010;32(12):1186-1188

INTRODUCTION

Giving birth close to home has been a significant matermity care issue for many years in rural and remote communities in Canada. Twenty-one percent of the Canadian without the presence and support of family and community members. Childbirth has therefore become a stressful event that disrupts rather than strengthens families and community transfer out of the community for birth is costly for the family and the community, as well as for the federal health care budget. The large economic and social costs to families include support for women living away from the community and childcare for the children left behind. Teenage girls may be in particularly vulnerable situations when left without their mothers for weeks at a critical time in their development.

Traditionally, Aboriginal women gave birth in their communities. Cultural practices established strong community



December 2017 Volume 39, Issue 12, Pages e558–e565

Recommendations

- 1. Women who reside in rural and remote communities in Canada should receive high-quality maternity care as close to home as possible.
- 2. The provision of rural maternity care must be collaborative, woman- and family-centred, culturally sensitive, and respectful.
- 3. Rural maternity care services should be supported through active policies aligned with these recommendations.
- 4. While local access to surgical and anaesthetic services is desirable, there is evidence that good outcomes can be sustained within an integrated perinatal care system without local access to operative delivery. There is evidence that the outcomes are better when women do not have to travel far from their communities. Access to an integrated perinatal care system should be provided for all women.



Building the evidence

Patient Satisfaction

Safety and Community The Maternity Ca Needs of R

Jude Kornelsen, PhD, Assistant Clinical Professor, Dr ²Director of Research, Associate

Objective: To investigate rura obstetric care in the context life in rural, remote, and sma Methods: Data collection for thi carried out in 7 rural comm distance to secondary hosp access, and cultural and eth vomen who had given birth

Results: When asked about the associated anxieties. Self-idi with the deficit categories of recognizes the contingency a

The Costs of

The Birth Experiences of V and Remote Communities in

JUDE KORNELSEN A

Cet article est le résultat d'une enquête qualitative des expériences d'accouchées dans les communautés éloignées de la Colombie-Britannique. Les résultats donnent une plus haut taux de mortalité causée par l'obligation pour les femmes

There is a growing understand of the physiological consequence stress during pregnancy, with resea focusing primarily on the relatiship between stress and preterm bour (Mackey and Boyle; Misra;

The Reality of Resistance: The Experienc Parturient Women

Jude Kornelsen, PhD, and Stefan Grzybowski, MD, MCISc

The closure of many local maternity services has given rise to contempora parturient women in Canada, which, in turn, determines their experience of an understanding of the realities influencing the birthing experiences of qualitative investigation explored these issues with women from four rural through semistructured interviews and focus groups. Women in this stud influenced the nature of their experience of birth, including geographic p health service resources, and the influence of parity and financial implication give birth. When these realities were incongruent with participants' needs strategies of resistance to mitigate the dissonance. Strategies included tryin hospital by undergoing an elective induction and seasonal timing of pregi winter travel. Some women showed up at the local hospital in an advanced to a referral center, or in some instances, had an unassisted homebirth. J M 51:260-265 © 2006 by the American College of Nurse-Midwives.

keywords; rural obstetrics, rural health services, access to maternity services

newborns had lone

than those born in

that newborn outc

There has been a significant decline in the number of rural communities in Canada offering local maternity care since 2000.1-3 This has resulted from a confluence of factors including the regionalization of health services

Stress and anxiety associ maternity ser

Centre for Rural Healt Vancouver, British Col

Objective: The objective level of stress and anxiet communities with differe maternity services.

Design: Cross-sectional s local access. In addition, qualitative research about

Abstract

even a limited lo...

Original Article

Jude Kornelsen, Ka

Setting: Fifty-two comn Columbia with different

* Department of Family Practice, University of British Columbia, Canada
**Center for Naral Health Research, 530-1501 West Broadway, Vancouver, BC, Canada Vij 428
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ificantly declined

The geography of belonging: The experience of birthing at home for First

Jude Kornelsen a,b,*, Andrew Kotaska c, Pauline Waterfall d, Louisa Willie e, Dawn Wilson c

Contents lists available at ScienceDirect Health & Place

Alienation and Resilience: The Dynamics of Birth Outside Their Community for **Rural First Nations Women**

Jude Kornelsen, Department of Family Practice, University of British Columbia; Centre for Rural Health Research, Vancouver, British Columbia

Andrew Kotaska, Department of Obstetrics and Gynaecology, Stanton Territorial Hospital, Yellowknife, Northwest Territories

Pauline Waterfall, Heiltsuk College, Bella Bella, British Columbia

Louisa Willie, Health Services, Hailika'as Heiltsuk Health Centre, Bella Bella, British Columbia

Dawn Wilson, Hailika'as Heiltsuk Health Centre, Bella Bella, British Columbia

Maternal-Newborn **Outcomes**

Does Distance Matte Rates for Rural Wom Intrapartum Care

Jude Kornelsen, PhD. Shiraz Moola, MD. ¹Centre for Rural Health Research, Department of Family Pra Kootenay Lake Hospital, Nelson BC

Objectives: Although there has been a devolution of local ru maternity services across Canada in the past 10 years in regional centralization, little is known about the health out women who must travel for care. The objective of this stu compare intervention rates and outcomes between wome live adjacent to maternity service with specialist (surgical) and women who have to travel for this care.

RESEARCH ARTICLE

Distance matters: a population based stu examining access to maternity services for women

Stefan Grzybowski*, Kathrin Stoll and Jude Kornelsen

RESEARCH ARTICLE OPEN ACCESS

The safety of Canadian rural maternity services: a multijurisdictional cohort analysis

Stefan Grzybowski 📼 , John Fahey, Barbara Lai, Sharon Zhang, Nancy Aelicks, Brenda M. Leung, Kathrin Stoll and Rebecca Attenborough

BMC Health Services Research 2015 15:410 DOI: 10.1186/s12913-015-1034-6 © Grzybowski et al. 2015 Received: 20 January 2015 | Accepted: 4 September 2015 | Published: 23 September 2015

Open Peer Review reports

Background: In the past fifteen years there has been a wave of closures of small maternity services in Canada and other developed nations which results in the need for rural parturient women to travel to access care. The purpose of our study is to systematically document newborn and maternal outcomes as they relate to distance to trav-

ARTICLE



ORIGINAL ARTICLE ARTICLE ORIGINAL

The outcomes of perinatal surgica services in rural British Columbia a population-based study

Stefan Grzybowski, MD, CCFP, FCFP, MClSc Centre for Rural Health Research; Vancouver Coastal Health Research Institute;

Introduction: A substantial number of small surgical services in rural Car been discontinued in the past 15 years because of difficulties recruiting an practitioners, health care restructuring and a lack of a coherent evidence ba ing the safety of small services. The objective of this study was to examine th small perinatal surgical services.

Methods: We accessed perinatal data for singleton births that occurred Columbia between Apr. 1, 2000, and Mar. 31, 2007. We defined hospital serv

Maternal and Newborn Outcome Rural Midwifery-Led Maternity ! in British Columbia: A Retrospe

by Jude Kornelsen, PhD, and Maggie Ramsey, RN, RM

Chart Review

Background: Maternity services in rural British Columbia significant changes in the past decade, most notably m closures in over 20 rural services. A potential solution to this rural maternity

service delivery challenge is a shift towards midwife-led or interprofessional

Midwifery Care in Rural and Remote British Columbia: A Retrospective Cohort Study of Perinatal Outcomes of Rural Parturient Women With a Midwife Involved in Their Care, 2003 to 2008

Kathrin Stoll, PhD, Jude Kornelsen, PhD

Introduction: Midwifery has been regulated and publicly funded in British Columbia since 1998. Midwives are currently concentrated in urban areas; access to care is limited in rural communities. Rural midwifery practice can be challenging because of low birth numbers, solo practice, lack of on-site cesareans and specialist backup, and interprofessional tensions resulting from the integration of midwives into rural maternity care systems. Despite these barriers, rural midwives have made a substantial contribution to rural maternity care in British Columbia. The purpose of this retrospective cohort study is to examine outcomes of midwife-involved births in rural British Columbia in the postregionalization era.

Methods: We analyzed the outcomes of all parturient women with postal codes outside of the core urban areas of the province, and their singleton infants without a diagnosed congenital anomaly, who had a midwife involved in their care between April 1, 2003, and March 31, 2008. Outcomes are reported for 6 obstetric service levels. Service levels are assigned to parturient women via maternal postal codes. Women who reside further

Provider Outcomes

THE SAFETY OF RURAL MATERNITY SERVICES WITHOUT LOCAL ACCESS TO CESAREAN SECTION



2015-11-03

An Applied Policy Research Unit Review

Commissioned by Perinatal Services BC, BC Women's Hospital and Health Centre & University Centre for Rural Health, Australia

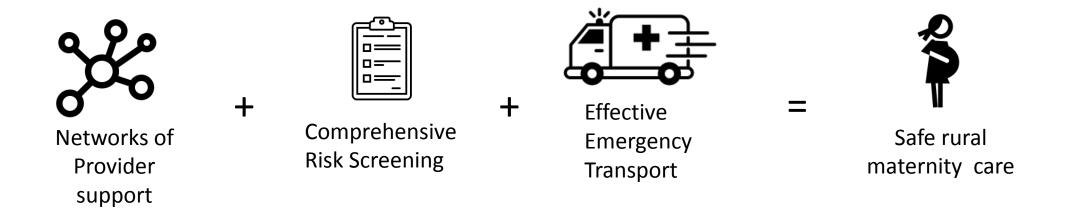
By Jude Kornelsen, PhD (Director) & Kevin McCartney (Lead Researcher)

Review Team: Lana Newton, Emma Butt, Max McAlpine

REVIEW QUESTIONS:

- 1. What is the relative safety of rural maternity health services without local access to caesarean section?
- 2. Is it safer for a rural population to have no local intrapartum services, or primary maternity services?
- Realist Review methodology (Pawson)
- 158 articles included from Canada, Australia, United States, Norway, Sweden, Scotland, New Zealand, France, Germany, England, Netherlands, Iceland, Italy.

First key message from the data:





Second key message from the data:

We haven't paid enough attention to communities without local cesarean section services.

Determine an evidence-base for provision of services

Focus on resources for prenatal period, continuity of care

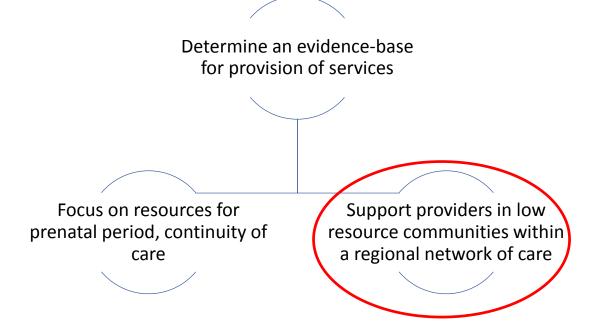
Support providers in low resource communities within a regional network of care





Second key message from the data:

We haven't paid enough attention to communities without local cesarean section services.





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RESEARCH ARTICLE

Open Access

Distance matters: a population based study examining access to maternity services for rural women

Stefan Grzybowski*, Kathrin Stoll and Jude Kornelsen

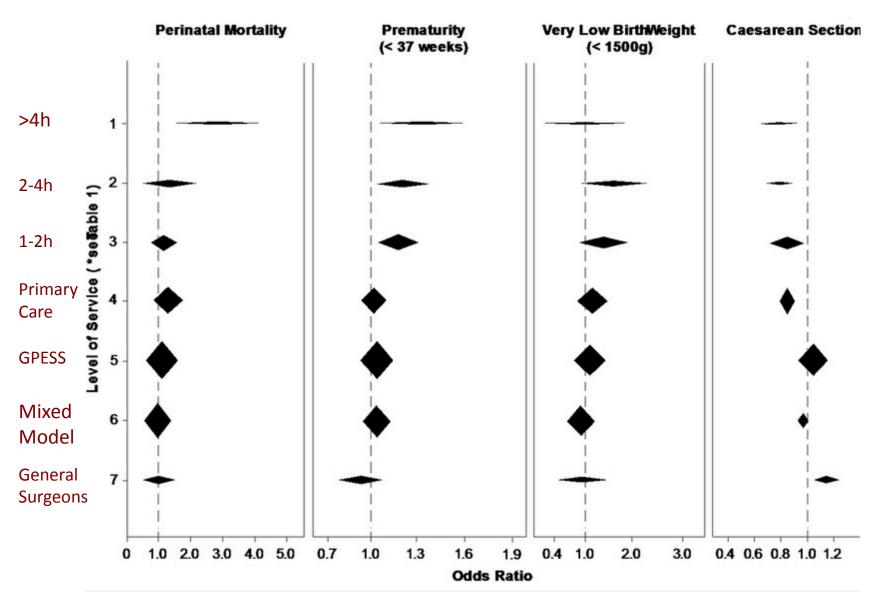
Research article

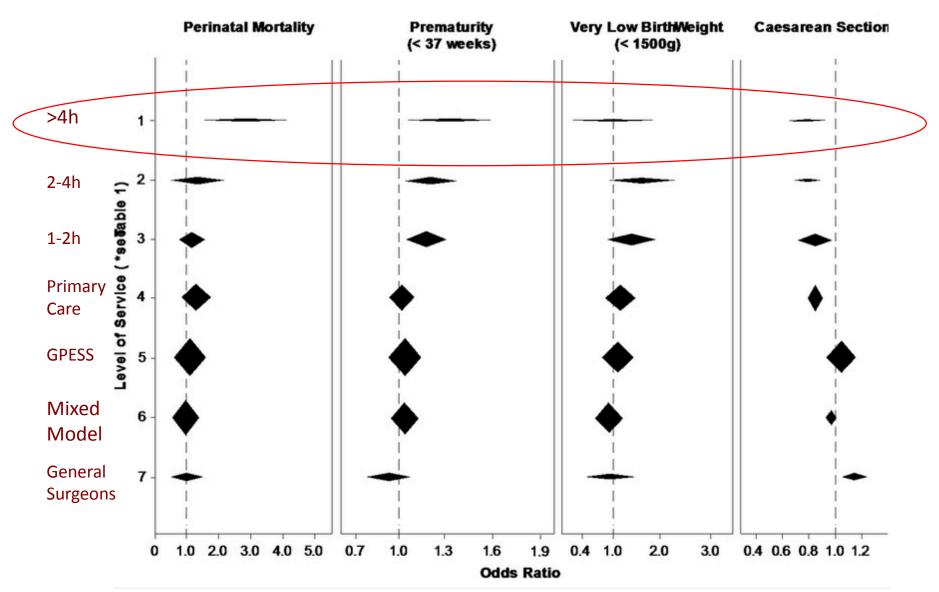
Open Access

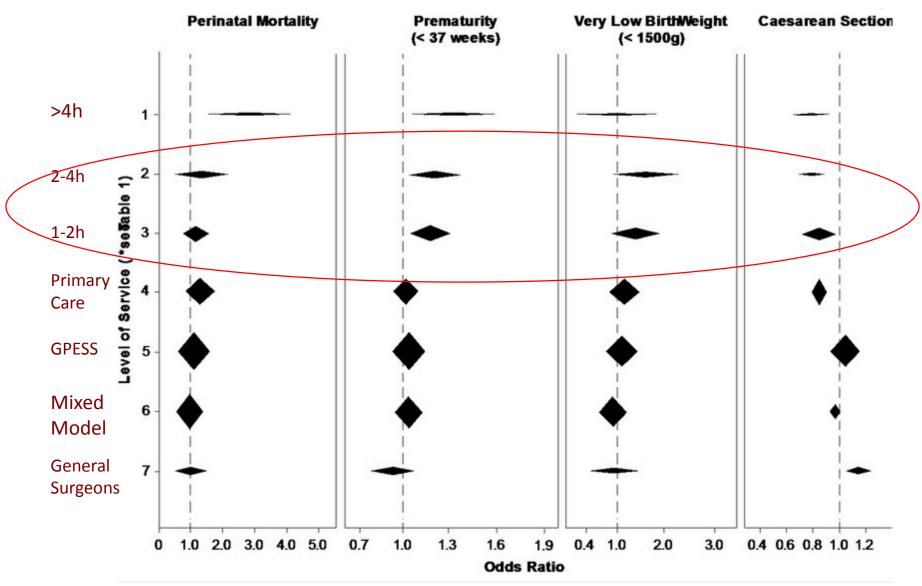
The safety of Canadian rural maternity services: a multijurisdictional cohort analysis

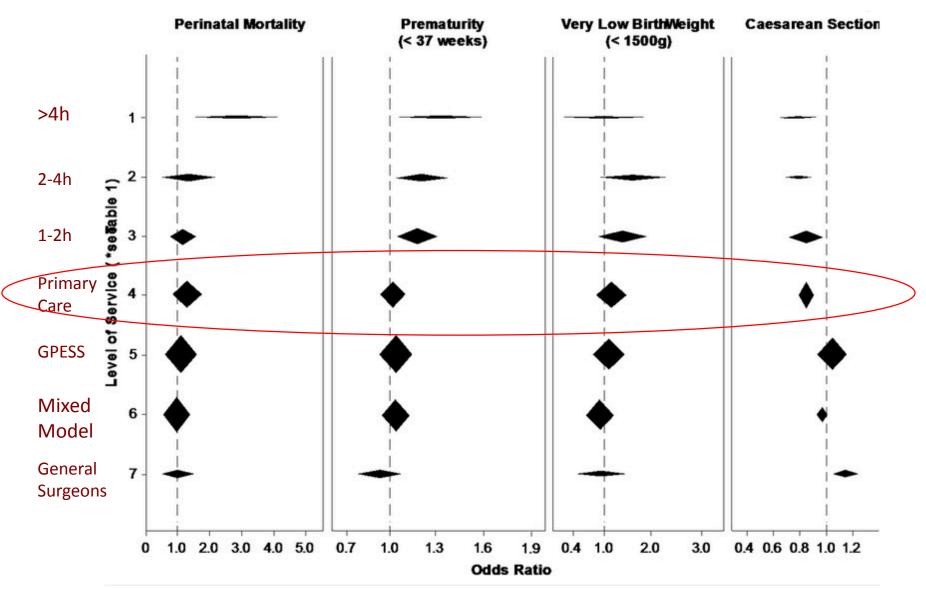
Stefan Grzybowski^{1*}, John Fahey², Barbara Lai¹, Sharon Zhang³, Nancy Aelicks³, Brenda M. Leung³, Kathrin Stoll⁴ and Rebecca Attenborough²

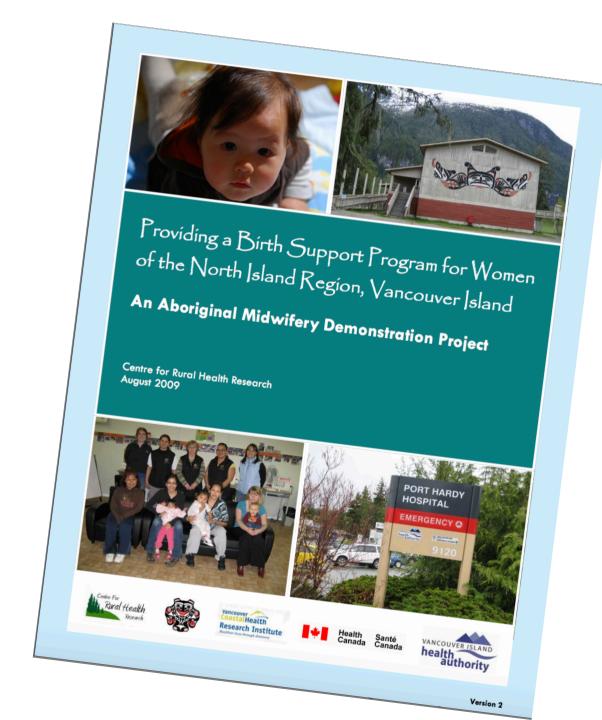
BMC Health Services Research 2015, 15:410











RECCOMENDATIONS:

Phase 1: Introduce two community midwives into the NI and build local capacity for maternity care;

Phase 2: Foster an active midwifery-led birthing service for the NI; and

Phase 3: Introduce local cesarean section services to the NI, subject to feasibility.

Kwakwaka'wakw Territory (North Vancouver Island)



- Kwakwaka'wakw region covers 21,157 square kilometers of northern Vancouver Island and adjacent mainland; comprised of a number of isolated communities
- The current population is 11,506, and over 26% of the population identify themselves as members of the Kwakwaka'wakw Family.
- One designated maternity site (Port McNeill)



Kwakwaka'wakw Territory (North Vancouver Island)

- The population has a **high degree of social vulnerability** represented in the high rate of teen pregnancies, single parent families, alcohol consumption and death from illicit drug use.
- Despite these known health disparities, these communities have *less* access to health services than populations of like size in other parts of BC.
- Many women currently **travel from the their communities** to Campbell River (2.5 hours) or Courtenay/Comox (3.5 hours) to receive primary or specialist maternity care



Kwakwaka'wakw Territory (North Vancouver Island)

Port McNeill Hospital



Port Hardy Hospital



Community-Driven Process

- Interviews and focus groups (n=80)
- Strong advisory committee
- Regular community updates
- Commitment to OCAP









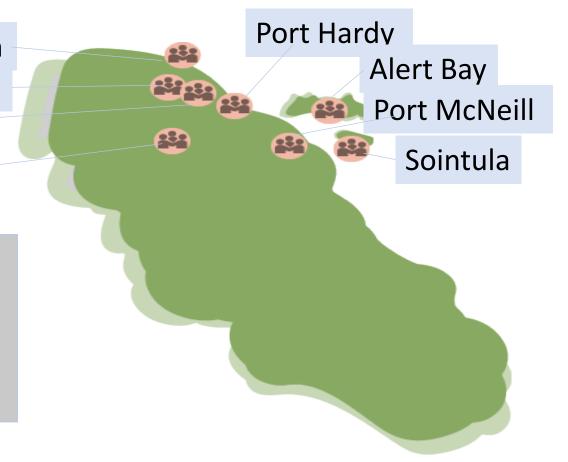
Community-Driven Process

Gwa'sala-Nakwaxda'xw Nation Sacred Wolf Friendship Centre Fort Rupert

Quatsino

4 Community Engagement Trips:

- May 2017
- June 2017
- October 2017
- November 2017



Current Situation

Out of **103** pregnancies a year in North Vancouver Island, there are an average of **3** deliveries at Port Hardy hospital and **4** at Port McNeill hospital.



Where NI Moms Deliver:

| Vancouver General Hospital | Nanaimo Regional General Hospital | St. Joseph's General Hospital | Campbell River Hospital | Port Hardy Hospital | Port McNeill Hospital |
|----------------------------------|--|-------------------------------------|-------------------------------|------------------------|--------------------------|
| 5.8 | 14.6 | 37.4 | 35.8 | 3 | 4.4 |

Women's Experiences: Travelling for Birth

Birthing moms suggested the following reasons for leaving the community to give birth:

- low confidence in local maternity care
- a desire for midwifery care
- being considered high risk
- a lack of awareness that they can give birth in the North Island



Women's Experiences: Travelling for Birth

Moms spoke of the **challenges** travelling for care.

- Arranging accommodation and transport
- Cost
- Experiences of loneliness, anxiety and a lack of support

Not all respondents had negative experiences, **positive experiences** in referral communities include:

A sense of safety (OR, confident providers)

Often, these positive experiences led to a referral pattern.

Women's Experiences: Transport

- Uncomfortable
- Inconvenient
- Expensive
- Inclement weather conditions



Women's Experiences: Transport

To go down, it was alright but it was really bumpy and stuff and my stomach was hurting. On the way back, because I was having a C-section, I tried to stay in the front of the bus so it wasn't so bouncy, and yeah it hurt a lot. It was bouncy, and [the driver] was stopping places, he was braking... And plus it was hard to carry, you know, all your luggage and stuff that you're needing, and supplies for the baby, supplies for yourself, and then your partner too.

North Island Mom



Local Birth

- Desire for local birth
- Family and community supports
- Narrative of local birth
- Concerns with local birth



Desire for Local Birth

It would be really nice to stay home and not have to go down and... just being away from home and not in your environment and you're nesting, but you don't have your nest. — North Island Mom



Family and Community Supports

But in a perfect world, if we had births here, we'd have family around. There may be a doula there. There may be some of the, the family, the very support people need... Who are there, and who are visiting in the hospital before, during labour, afterwards. And the hospital staff will know who some of the support people are. The Ministry will know who some of the support people are. - North Island Mom



Narrative of Local Birth

- Strong historical birth narrative
- Common current birth narratives include:
 - Fear of birth
 - Lack of safety

I actually believe that if we had just in our community alone three or four good births, where people had folks around and then they shared those stories... Everybody would come running.

- North Island Mom



Concerns with Local Birth

- Low confidence of care providers
- Low-resource setting
 - High turnover of nurses
 - No OR
 - No access to epidural



What Moms Want

- Well supported local care
 - Culturally appropriate safe care
 - Midwifery
 - Confidence in local care providers





Directive #1: Community-Driven, Nation-Based

Directive #2: Increase First Nations Decision-Making and Control

Directive #3: Improve Services

Directive #4: Foster Meaningful Collaboration and Partnership

Directive #5: Develop Human and Economic Capacity

Directive #6: Be Without Prejudice to First Nations Interests

Directive #7: Function at a High Operational Standard

- 'Ground up' articulation of provider needs for sustainability
- North Island physician reference group

 Regular extended meetings (Support from Kwakwaka'wakw Maternal Child Family Health project, Divisions of Family Practice and Facilities Engagement funding)



Building Blocks to Sustainable Rural Maternity Care

Timely & Reliable Patient Transport

Develop mechanisms for ground and air transports

Increased Provider Confidence

Through provider exchange to high-volume centers; local rural obstetrical CME

Inter-profession Care Teams

Engage in a feasibility analysis of the mechanisms of interprofessional care teams with the potential of establishing a pilot project in the North Island



Expanded Inclusion Criteria for Low-Risk Deliveries

Include uncomplicated primiparous deliveries as per PSBC guidelines; include agreed-on criteria for risk screening and mechanism for collaborative decision making

Virtual Technologies to Link with Referral Center

Mobile Maternity care (MOM2) to connect local care providers with specialists in real time



Interprofessional Care Teams

- Findings from community field work indicated a strong desire for midwifery care on the North Island (many women were leaving to seek out such care);
- Previous experiences of midwives starting practice
- Challenge of low volume in a course of care billing model
- Some physicians wish to remain involved
- Developed local model & draft job description





Interprofessional Care Teams

- Have secured funding through FNHA Joint Project Board funding to hire 2 midwives (Spring 2018)
- Will work in a collaborative shared care model with local physicians





Increased Provider Confidence

Lead by Hannah Chester, UNBC Medical Student Focus groups revealed concern of local nurses regarding on-site deliveries due to:

- Low volume (lack of maintenance of skills)
- Lack of previous experience with deliveries
- Concerns regarding transport to referral centre should it be necessary and
- Vulnerability of the population





Increased Provider Confidence

Focus groups revealed concern of local nurses regarding on-site deliveries due to:

- Low volume (lack of maintenance of skills)
- Lack of previous experience with deliveries
- Concerns regarding transport to referral centre should it be necessary and
- Vulnerability of the population







Expanded Inclusion Criteria for Local Deliveries

- Led by Krista Loewen, UBCO Medical Student
- Literature review looking for existing guidelines on appropriate criteria for local delivery/outcomes studies
- Consolidated local community experience



Krista Loewen in Alert Bay BC



Expanded Inclusion Criteria for Local Deliveries

No published clinical guidelines were found that specifically apply to risk screening for planned delivery in rural communities without local Caesarean section

Screening process is <u>highly localized</u> and developed within the community context

local resources, patient population, provider skills, remoteness use of multidisciplinary decision-making panels or committees

North Island Risk Screening for Planned Delivery Does this patient have any clinical risk factors that exclude local delivery? Would this patient benefit from staying in their home community? Am I comfortable with this patient going into labour here? Is this patient comfortable going into labour here? RECOMMENDED COMMUNITY RECOMMENDED REFERRAL HIGHER-LEVEL **DELIVERY** CARE CENTER COMMUNITY DELIVERY

Exclusion factors:

- Pret erm ge sta tion <3 7 we eks
- Multiplegestation
- Non-v ert ex p re se ntat io n
- Prev io us Caesarea n
- Prev io us o bstetric c om plications
- Previous still birth or perinatal death
- Cur re nt pregna ncy c omp lic ations (ie. IU GR, oli go/p oly hydramn io s)
- Cur rent me dical complications (ie. hypertension, diabetes)
- Knownfetal a nom aly
- Need for in duction/augmentation
- Po st-d ate s pre gna ncy

Clinical be nefits of staying:

- Increased like liho od of spontaneou sva ginal birth and breastfeeding
- Decrea se d like li ho od of intervention
- Prot ective f or emotional wellbeing

Social ben efits of staving

- Red uce d f ina ncia l bu rd en
- Reduce dfa mily burden (partner, other children, other family mem bers)
- Hon ou ring cult urally alues

Consider:

- Per so nal risk tole ranc e a nd co mfort leve l
- Confidence of care team
- Tran sp ort a nd weat her

of ormied ich oice:

- Are they aware of what services are and are not available?
- Are they comfortable with the possibility of transport?



Expanded Inclusion Criteria for Local Deliveries

 Building Block discussion led by Dr. Andrew Kotaska (OBGYN Yellowknife) regarding locally appropriate criteria (March 5th)

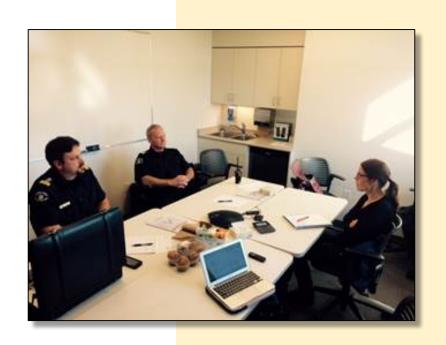




Timely and Reliable Patient Transport

Concerns regarding timely intrapartum transport

- '4 cm cutoff'
- Communication between rural sites and PTN
- Weather/geography
- Referral site refusal
- Transport escort & staff shortage
- Shift change
- Time concerns





Timely and Reliable Patient Transport

PLANNED ACTIVITIES:

- Meeting between North Island providers/paramedics to discuss transport challenges
- Meeting with Campbell River specialists (pediatricians/Obs) to discuss optimal integration
- Policy brief to Access and Flow Rural Transport subcommittee regarding addressing the NI transport challenges
- *We anticipate the NI MW will alleviate some of the transport challenges





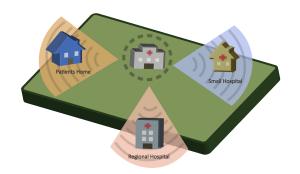
Virtual Technology Link with Referral Centre

- Less that 4% of OBGYN's practice in communities with populations less than 25,000
- Creates +++ vulnerability for rural providers
- MOM project
 - pilot initiative to increase primary health care capacity and improve patient and population outcomes by providing a specialist obstetrics telehealth service
 - Allows the patient to "meet" with her out-of-town specialist using a computer monitor, video camera and microphone;
 - Facilitates 3-way conversation between specialist, GP and patient/family
 - 'MOMI Rounds' (distributed and synchronous CME)

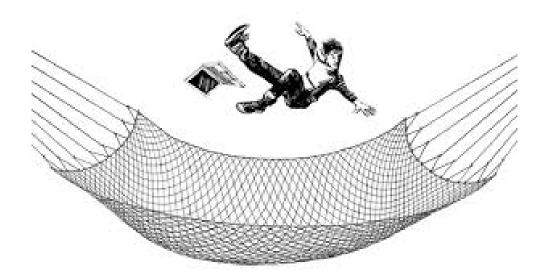


The Mobile Maternity Project (MOM)

- Consultations range from booked, elective tele-video appointments to urgent bed-side assessments in hospital, clinic or at home.
- Improved shared care of high-risk pregnancies to reduce patient travel to see a specialist, and, in less common situations, support for precipitous deliveries in communities without a local maternity care program.



Care Provider Support



Overarching Principles

Importance of simultaneous development of all building blocks

Importance of community-driven processes

Need for system support



Next Steps







Building Blocks For Rural Maternity Care: Working With Communities



Cultural Safety

Prioritizing the provision of health services within a context of respectful engagement leading to a health services environment where people feel safe when receiving health care.

Generating Community Awareness

Comprehensive engagement with the community to let the women and families know about the availability of primary maternity services on the North Island, including the criteria for local delivery.

Appropriate Case Selection

Discussion with community members regarding local resources available and consequently, appropriate criteria for local delivery (i.e. no local caesarean-section, epidural capacity, neonatal intensive care).

Accommodation in Referral Community

Work with key stakeholder groups to define appropriate lodging and accommodation for mothers who must leave the community before they go into labor. Establish appropriate transportation to the referral center and back home following birth.

Ongoing Dialogue and Listening

Implement an iterative quality improvement mechanism of continuous feedback with the community regarding the appropriateness of birthing services either local or away.

Next Steps









Next Steps



An Invitation Symposium to support

Sustainable Rural Maternity Care in BC

June 15.2018



