

# Interdisciplinary Maternity Care in Rural Environments

Barriers and Solutions to the Integration of  
Midwives in Trail, British Columbia





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## Barriers and Solutions to the Integration of Midwives in Trail, British Columbia

Jude Kornelsen, PhD & the Centre for Rural Health Research  
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## The Centre for Rural Health Research

### About Us

The Centre for Rural Health Research (CRHR) was formed in 2005 in response to the need for evidence to develop policies and inform decision making in the area of rural health. This mandate is based on an understanding of the known health inequities between rural and urban residents arising in part from the difference between their respective health needs and service delivery context.<sup>1 2 3 4 5</sup> Under the direction of Drs Stefan Grzybowski (a rural family physician) and Jude Kornelsen (a medical sociologist who specializes in maternity care), the CRHR is supported by both the Vancouver Coastal Health Research Institute and the Department of Family Practice at the University of British Columbia. All projects are grant-funded through the Canadian Institutes of Health Research (CIHR), the Michael Smith Foundation for Health Research (MSFHR), or British Columbia Medical Services Foundation (part of the Vancouver Foundation). To date the program of research has focused primarily on rural maternity care (supported infrastructurally by the Vancouver Coastal Health Research Institute and a New Emerging Team Grant from CIHR). As we recognize the multi-faceted context that has led to challenges in the provision of care to rural parturient women, all research is undertaken from a multi-disciplinary perspective employing quantitative or qualitative methods as appropriate. The current research on inter-disciplinary care in rural environments, funded through CIHR, is one of the current projects being undertaken by the centre. Please see [www.ruralmatresearch.net](http://www.ruralmatresearch.net) for a complete list of projects and recent publications.

## Executive Summary

The Centre for Rural Health Research, funded by CIHR, undertook the first component of the “Inter-professional Collaborative Maternity Care Project” in Trail, British Columbia and surrounding communities in May 2008. The project was undertaken in response to the rural maternity care ‘crisis’ across British Columbia<sup>6</sup> and the lack of research on multidisciplinary models of care in a rural-specific environment.

The **goal** of this research is to identify barriers to collaborative inter-professional models of maternity care within a rural environment and the changes that need to occur to enable such models. An in-depth qualitative, exploratory policy framework guided the data collection and analysis which included 21 in-depth interviews and 7 focus groups with care providers, administrators, and women, as well as documentary analysis of regulatory, legislative, and professional documents. Trail is one of four study sites for this research project.

**Findings** revealed challenges with the current model of service delivery for maternity care through the Family Obstetrical Clinic (FOBC) and, more significantly, the importance of on-call funding for physicians doing primary care obstetrics. Participants in the satellite communities highlighted the need for strengthening communication between the Kootenay Boundary Regional Hospital (KBRH) and their communities.

Other key issues were grouped around the qualities of inter-professional care including the benefits of such an approach to care, characteristics necessary to underscore it, and potential challenges that may be encountered. Additionally, the birthing women we spoke with clearly expressed priorities for their birth experience whether or not they accessed midwifery care.

**Recommendations include:**

1. Increased recruitment and retention through on-call funding of rural GPs doing maternity care
2. A start-up stipend for rural midwives
3. Increased mechanisms of communication between KBRH and community-based care providers in Trail and satellite communities
4. A regional approach to supporting midwives
5. The allocation of resources to facilitate the introduction of midwifery
6. An inclusive process to determine the model of inter-professional care in Trail
7. The need to establish a long-term approach to the introduction of midwifery in Trail
8. Ongoing evaluation of outcomes



## Preface

Health services in rural BC – and across Canada – are currently in a state of crisis due to the lack of a comprehensive strategy for sustainability. As the Society of Rural Physicians of Canada notes, the concern is not that anyone is actively dismantling rural services but, rather, that no one is trying hard enough to save them. This is perhaps most acutely felt in the area of maternity care where the negative implications of the closure of local services on parturient women, their families, care providers, and communities are increasingly noted in the research literature, along with suggested causes.

One of the potential solutions gaining currency with health planners and local communities alike is models of inter-professional collaborative care involving family physicians and midwives working together with specialists, public health and labour and delivery nurses, as well as allied professionals including lactation consultants and doulas to provide comprehensive and local care to parturient women.

Although the move towards increased choice in care provider for women and the potential for synergistic learning and practice that can occur between professionals is a positive one, we would be in error to assume that new models alone will fix the underlying issues that have led to this crisis in the first place. The most glaring of these issues is the lack of mechanisms to sustain rural maternity care providers highlighted most clearly perhaps by their exclusion from on-call funding through the province's 2002 MOCAP agreement.

The importance of family physicians to sustainable rural maternity care cannot be overstated: many physicians enable the maintenance of low-volume specialist services through their roles as GP Surgeons who provide cesarean section back-up (or offer primary surgical services to communities without the volume to sustain specialist care at all). They are currently the mainstay in delivering maternity services to rural

We would be in error to assume that new models alone will fix the underlying issues that have led to the crisis in rural maternity care.

communities. BC midwives are currently unable to fill this role on their own due to low numbers of registered practitioners.

The lack of attention afforded to appropriately remunerating the onerous job of providing obstetrical care in low-resourced, geographically isolated environments cannot be rectified by introducing another profession into the mix. Instead, the underlying issue of inadequate funding must be addressed both for rural family physicians and also for rural midwives who face numerous financial disincentives to starting up practice and maintaining a geographically broad catchment due to travel costs, not to mention significant implications to transferring women out of their care during labour and delivery.

These issues are not unique to Trail or to a handful of rural communities across BC: they are endemic in the model of rural health services delivery and need to be addressed at a provincial level. Addressing these issues demands that we, as a community of practitioners mandated to meet the health needs of the populations we serve, prioritize the needs of birthing mothers and their infants.

Once these underlying issues are resolved, the KBRH catchment will be able to work inclusively to determine the most efficacious model of integrating midwives into the community from the array of suggestions provided. The amount of good will and openness to collaboration expressed through this research process bodes well for the success of this endeavor.

We hope the findings presented from this research process will be a starting point for local discussion around how to integrate midwives into Trail in an inclusive and sustainable way that compliments the care already provided.

Submitted by Jude Kornelsen on behalf of the Centre  
for Rural Health Research

July 22, 2008

Rural maternity care  
can be challenging for  
care providers who  
have demanding  
schedules with no on-  
call remuneration.

## A. Introduction and Context

### 1. Rural Maternity Care in British Columbia

There has been a significant decline in the number of rural hospitals offering maternity care in BC since 2000, mirroring trends of closures and service reductions that are occurring across Canada<sup>7 8</sup> and internationally.<sup>9</sup> In Nova Scotia between 1970 and 2002, 31 of 42 hospitals ceased to provide maternity services.<sup>10 11</sup> In Ontario, 11 small hospitals that provided obstetric care in 1988 closed their services by 1995.<sup>12 13</sup> In British Columbia alone, 20 communities\* have closed local services since 2000 (see Figure 1).<sup>14 15 16 17</sup> A convergence of factors has led to the lack of access of maternity services including structural-economic changes in rural communities,<sup>18 19 20</sup> health care restructuring,<sup>21</sup> a changing context of care that supervaluates access to technology and specialists,<sup>22</sup> and health human resource issues. The latter provide the most significant challenges, which include providing surgical care in low-resource environments, shortages in obstetrically-trained nurses,<sup>23</sup> and the growing attrition of family physicians from rural practice. This attrition has been well-documented and is attributed to general workplace stress among rural physicians,<sup>24 25 26 27 28 29 30 31 32</sup> demanding call schedules,<sup>33</sup> and, in British Columbia, the lack of remuneration for on-call obstetrics as many physicians take up the opportunity to participate in remunerated competing call groups such as Emergency, Pediatrics, or Psychiatry.

Rural service closures give rise to inequities in access to care for rural parturient women, and lead to place of residence becoming a determinant of maternal and newborn health.<sup>34 35 36</sup> A review of the existing literature indicates that negative health consequences for the maternal-newborn population can occur as a result of these changing patterns of access to services, as has been found in rural Florida and Washington State.<sup>37 38 39</sup> Closures of small-volume maternity units contradicts evidence from several large population-based studies from countries such as New Zealand, Finland, and Norway, which have shown that small hospitals can provide safe

“There is very little redundancy in rural communities. Essentially we survive by good will. And that’s not a strategy, that’s just a hope.” (FG 04:1782)

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\* Closures since 2000 include the communities of Alert Bay, Ashcroft, Bella Bella, Burns Lake, Castlegar, Clearwater, Grand Forks, Hope, Kimberley, Lytton, Masset, Merritt, Nakusp, Oliver, Port Hardy, Princeton, Sparwood, Summerland, and Tofino.

maternity service.<sup>40 41 42</sup> Low risk pregnancies may in fact have fewer risk factors in a minimal-technology environment such as a small rural facility: “delivery with no known risk factors may actually be put at risk by the increased medical attention of technologically advanced maternity units, and low risk deliveries may benefit from the minimal intervention approach in small maternity units.”<sup>43</sup>

In British Columbia, 20 rural communities have ceased to provide local maternity services since the year 2000.

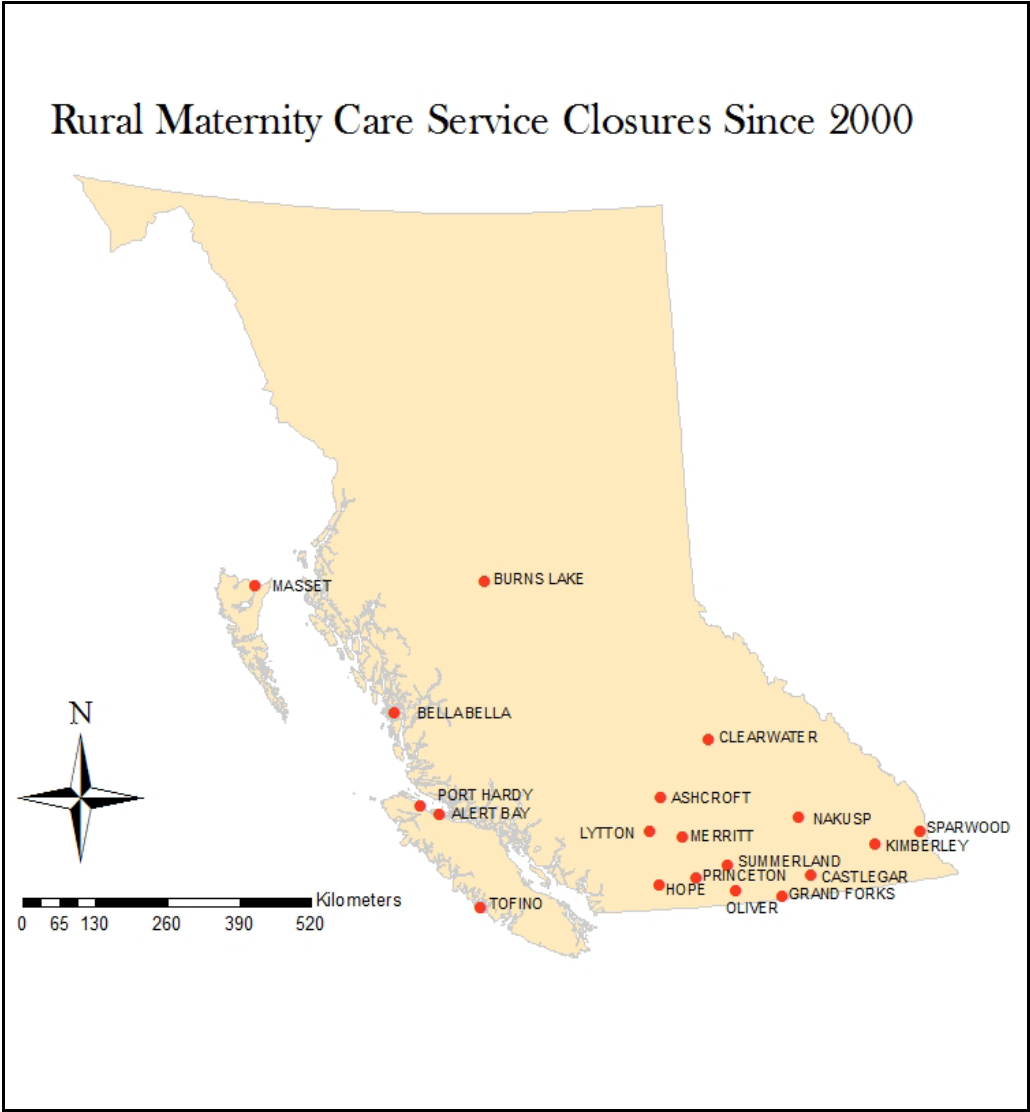


Figure 1

While concern for safe birth outcomes is often cited as a reason for closing services, there is evidence that when adequately supported, small rural maternity services can

safely serve rural parturient women,<sup>44 45 46</sup> including in the absence of local caesarean section capability,<sup>47 48 49</sup> suggesting that within a regionalized perinatal system, small maternity services can be as safe as tertiary obstetrical units provided an efficient mechanism for intrapartum transfer has been established.<sup>50 51</sup>

In addition, research shows that evacuating women to give birth causes psychosocial stress to women, families, and communities, thus accentuating their vulnerability.<sup>52 53 54 55 56 57</sup> We have an emerging understanding of the psychosocial consequences for pregnant women from communities without local services, many of whom experience labour and delivery in referral communities as a crisis event fraught with anxiety, because they cannot plan for birth with any certainty.<sup>58 59 60</sup> Not surprisingly, these social consequences have the greatest effect on women with limited social and economic resources. Studies have also demonstrated a number of adverse effects associated with travel for rural parturient women, which include increased intervention rates; stress; financial loss;<sup>61</sup> separation from spouse, children and community; and lack of continuity of care.<sup>62 63 64 65 66</sup>

For mothers with other children or dependent parents at home, leaving them behind can be emotionally stressful and it can be expensive to arrange care for them. To avoid these stresses, women may stay in their communities and wait until labour begins before traveling to the referral community, risking having their baby en route or at their unequipped local hospital. Limited numbers of rural women choose not to travel at all and have unassisted home births with lay attendants instead.<sup>67</sup> Another technique that mothers and care providers use to avoid long stays away from home is geographic induction (elective induction of labour chosen to reduce a pregnant woman's time away from home when she is in a referral community). Approximately 4% of all inductions in rural BC are geographic inductions.<sup>68</sup> Many mothers have no choice but to undergo a geographic induction so that they can avoid a prolonged stay away from their families.

Women who evacuate from their communities to give birth experience a great deal of emotional, financial, and cultural stress.

Although emerging evidence clearly suggests the importance of maintaining local services (where warranted by population need), there are no clearly articulated policies aimed at strengthening the infrastructure for care on a provincial level.<sup>69</sup> This has led to challenges for regional health planners and a local response to meeting the needs of rural parturient women.

Although the nuances of the situation are unique to rural environments, the challenges facing the provision of maternity care extend to urban settings as well where planners must also contend with the attrition of providers and the lack of obstetrically trained nurses.<sup>70 71</sup> A solution that has been gaining attention has been *multi-disciplinary* or *inter-professional* care.

## 2. Inter-professional Care

Within a context that recognizes the current “crisis” in maternity care,<sup>72</sup> there is a theoretical movement towards multidisciplinary care teams. At a national level, this movement has been led primarily through the *Multidisciplinary Collaborative Primary Maternity Care Project (MCP2)*,<sup>†</sup> a joint initiative of all key care provider organizations designed to “reduce key barriers and facilitate the implementation of national multidisciplinary collaborative primary maternity care strategies as a means of increasing the availability and quality of maternity services for all Canadian women.”<sup>73</sup> MCP2 defines multidisciplinary care as collaboration between maternity care providers (including nurses and nurse practitioners, midwives, family physicians, obstetricians, and gynecologists) built on mutual respect and trust and flexible, competency-based definitions of care provider roles. MCP2 highlights the differential and complementary nature of maternity care providers’ respective roles and argues for recognition of and respect for each care provider group’s distinct skill set and scope of practice.

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<sup>†</sup> The Multidisciplinary Collaborative Primary Maternity Care Project (MCP2) is a joint initiative of the Society of Obstetricians and Gynaecologists of Canada (SOGC); the Association of Women’s Health, Obstetric and Neonatal Nurses, Canada (AWHONN); the Canadian Association of Midwives (CAM); the College of Family Physicians of Canada (CFPC); and the Society of Rural Physicians of Canada (SRPC).

Specifically, MCP2 discusses the evolving roles of midwives and nurse practitioners as emerging solutions to the physician shortage. MCP2 argues for an expanded scope of practice for midwives and nurse practitioners to allow for their full integration into the maternity care system, thereby facilitating inter-professional collaboration and reducing the burden on physicians.

Building on MCP2, the Society of Obstetricians and Gynecologists of Canada (SOGC) published a National Birthing Initiative (NBI) in 2008, highlighting the importance of Inter-professional Collaboration as a means for addressing the health human resource crisis in maternity care in the short term.<sup>74</sup> Establishing multidisciplinary collaborative maternal and newborn care models is one of the seven priorities defined in the NBI. The NBI recognizes that there are key barriers to the implementation of national multidisciplinary collaborative primary maternity care strategies. Specifically, more work needs to be done to: increase communication and collaboration between individual care providers and their associations; establish national standards in terminology and scope of practice between care providers; increased awareness of the benefits of collaborative care with health care providers and communities; pilot collaborative maternity care models in both urban and rural settings; and, develop financial modeling initiatives. Despite these challenges, the NBI states that “the key to increasing patient safety and managing risk of adverse events is to break down traditional hierarchy and practices and direct the focus onto teamwork, thereby creating an environment that will facilitate multidisciplinary collaborative care.”<sup>75</sup>

This concerted, national effort to effect solutions speaks to the prioritizing of responsive models of care by professional opinion leaders. The barriers to such models identified in the literature from other jurisdictions, however, are significant and include lack of understanding and awareness of each others’ roles and professional education, communication difficulties, and atmospheres of conflict, fear, mistrust, and disrespect.<sup>76</sup> <sup>77</sup> Tensions also exist regarding litigation and accountability, and worry over midwifery’s encroachment into obstetric practice.<sup>78 79</sup>

Effective communication is of utmost importance to the success of multidisciplinary care provider teams.

Barriers to inter-professional collaboration stem from the lack of infrastructure and programs to support new models of maternity care.

### 3. The BC Context

Currently in British Columbia, specific potential barriers to inter-professional care exist and include the following:

- **Leadership provided by the professional and regulatory organizations:** For example, the College of Physicians and Surgeons of BC has stated that physicians' involvement with midwifery care "may occur at the discretion of the physician," but they are "not under an obligation to ... provide backup care [to midwives] and ... may quite reasonably ask the midwife to find another doctor to provide backup."<sup>80</sup>
- **Home birth:** The College of Physicians and Surgeons of BC and CMA state that "births should take place in hospitals, clinics and low-risk birthing units associated with hospitals."<sup>81</sup> In addition, the Society of General Practitioners clearly stipulates that physicians should not agree to attend planned home births, and should advise women against them as well.<sup>82</sup> As midwives are obligated to practice within a model that acknowledges choice in location of birth (domiciliary or institutional) as a fundamental tenant of care,<sup>83</sup> it is currently not possible for professions to share call in a way that acknowledges midwives' full scope of practice.
- **Remuneration and reimbursement:** Though funded through the same government ministry, midwives and GPs have different models of remuneration, which is reflected in part through the length of time practitioners are able to spend with clients during clinic visits, labour, and home visits. Midwives are paid on a course-of-care basis, while GPs are paid on a fee-for-service basis. Currently, there are no billing structures for inter-professional consultations.<sup>84 85</sup>
- **Liability issues:** These include the disparate and inequitable mechanisms of insurance between professions which leads to different interpretations of risk and liability. For example, the Canadian Medical Protective Association has stated that in multidisciplinary care models, all care providers are named defendants if a patient decides to begin legal action. If the court decides that multiple defendants are liable for damages, the plaintiff may receive



compensation from any one of the negligent defendants. That defendant may then seek money to cover the compensation from the other negligent defendant(s).<sup>86</sup> This may lead to reluctance on the part of some care providers to enter into multidisciplinary care agreements for fear of being held financially responsible for damages. This is further exacerbated where care providers feel uncertain about the experience, skills, and competence of other professionals.

- Additionally, there is variance between **midwives and physicians' scope of practice** which may make some aspects of collaboration challenging. Examples of differences include:
  - *Prescribing*: GPs have a wider range of medications they may prescribe; midwives are limited to prescription of common drugs used during normal pregnancy, labour, delivery, and postpartum, as well as certain obstetrical emergencies (including several antibiotics, vaccines, local anaesthetics, and haemorrhage medications).<sup>87</sup> There are also medications midwives may not prescribe, but may administer in emergency conditions only after consultation.
  - *Tests and diagnostics*: GPs have a wider range of tests they may order and interpret, while midwives are restricted to those tests related to maternity-care.
  - *Choice in place of birth*: Midwives offer women a choice in place of birth, including out-of-hospital birth, while GPs do not.
  - *Instruments and procedures*: GPs may use forceps and perform vacuum extraction, and some are qualified to perform or assist with caesarean sections. Midwives may only provide supporting care to their clients after transferring care to a physician when these interventions are necessary.
  - *Postpartum*: While both midwives and doctors provide counseling on family planning and contraception, only GPs may prescribe contraceptive medications and devices. Midwives complete care of their clients at 6-weeks postpartum and refer them back to their GP, providing their doctor with the maternity and newborn records.

Midwives and physicians have different scopes of practice, which may cause inconsistent care in a shared call environment.

Additionally, midwives do not perform circumcision, but as requested refer clients to GPs.

Despite known challenges, however, existing literature on collaborative models have shown a number of positive outcomes, including cost-efficient service,<sup>88</sup> low incidences of negative birth outcomes,<sup>89</sup> and improved patient satisfaction.<sup>90</sup> It has also been suggested that inter-professional collaborative models will be key elements of a long-term solution to care provider shortages in rural communities.<sup>91</sup>

#### **4. Midwifery in Canada**

Midwifery is regulated in 7 provinces and one territory in Canada and publicly funded in each of these regions except Alberta. In 1994, Ontario became the first jurisdiction in Canada to regulate midwifery, followed by British Columbia and Alberta in 1998, Quebec in 1999, and Manitoba in 2000. In 2005, the Northwest Territories became the first territory to regulate midwifery and, most recently, Saskatchewan has regulated the profession (2008). Currently, New Brunswick, Nova Scotia, and Nunavut are all in the process of regulating midwifery while Newfoundland and Labrador, Prince Edward Island, and the Yukon are the only jurisdictions in Canada that have yet to address regulating midwifery

#### **5. Model of Care**

In BC, a midwife works as an autonomous primary caregiver delivering maternity care service to an average of 40 women per year for full-time work. This care begins early in pregnancy and continues through labour, delivery, and the first 6 weeks postpartum. Midwives are legislated in BC under the Health Professions Act and are regulated by the College of Midwives of BC (CMBC).<sup>92</sup> Midwifery services are funded through the BC Medical Services Plan.

The key principles that inform the model of midwifery care include:

- Continuity of care;
- Informed client choice (including choice of birth setting), which recognizes that decision-making is shared between a woman, her family, and midwife, with the woman as the primary decision-maker and the midwife primarily providing complete, relevant, and objective information needed to make a decision;<sup>93</sup>
- Collaboration with other health care professionals;
- Accountability (to women in their care, other health care professionals, their regulatory body, their local health authority, and the general public); and
- Evidence-based practice.<sup>94</sup>

Midwives consider pregnancy as a state of health and childbirth as a normal physiological process. They may work alone or in a small group practice, with each practice having on-call 24-hour care available. A midwife works in a variety of settings, including a clinic, hospital, or client's home, according to the request of the woman in her care. Because of this, it is important for midwives to have admitting and discharge privileges at the hospital maternity unit or units within the catchment they serve. In the event of a planned home birth, the birth is attended by two qualified attendants skilled in neonatal resuscitation and management of maternal emergencies.<sup>95</sup> The primary attendant is a midwife and the second attendant may be another midwife or a health professional whose qualifications have been approved by the CMBC.

## **6. Scope of Practice**

Midwives in BC and across Canada work as primary caregivers mainly to women and newborns in uncomplicated pregnancy, birth, and postpartum. The scope of practice for midwives in BC specifically includes:

- assessing, monitoring, and caring for women during normal pregnancy, labour, birth, and postpartum periods;

- providing counsel, support, and advice to women during pregnancy, labour, birth, and postpartum periods;
- managing normal vaginal deliveries;
- providing care for, assessment, and monitoring of the healthy newborn; and
- providing advice and information on infant care, contraception, and family planning.<sup>96</sup>

To aid in providing these services, midwives are authorized to order a variety of diagnostic and screening tests, as well as prescribe a variety of medications. In the event that a woman or infant needs additional care during pregnancy, labour, delivery, or postpartum, a midwife will seek collaboration with other health care professionals through discussion, consultation, or transfer of care. In the event that transfer of care occurs, the midwife provides supportive care to the woman and resumes primary care when appropriate.

## 7. Education

Midwives come from diverse educational backgrounds, but to register and practice in BC they must undergo written, clinical, and oral examinations specified by the CMBC. British Columbia has one midwifery training program: a four year Bachelor of Midwifery degree offered through the Faculty of Medicine at UBC.<sup>97</sup>



## B. Project Background and Description

Previous research projects undertaken by the Centre for Rural Health Research have led to work in 21 communities which have included interviews with 45 administrators/key informants, 208 care providers, and 121 rural women. Thematic to this composite data was an understanding of the fragility of many of the rural maternity services across BC due to challenges in recruiting and retaining physicians and nurses and many women's desires for access to midwifery care. The emerging data complemented findings from the MCP2 project, but did not create a plan for how to integrate midwifery into rural settings. As concerns around the urban focus of the MCP2 project emerged, it was clear that an understanding of new models of care in a rural setting was crucial to efficaciously guide the integration of midwives without destabilizing current practice. This context motivated an application for funding to the Canadian Institutes of Health Research titled, "Inter-Professional Care in Rural Environments: An Investigation of Regulatory and Legislative Barriers." The project was funded as part of a larger program of research on sustainable rural maternity care and began in January 2007.

### 1. Research Goals and Methods – Overview

The **goal** of this research project is to identify barriers to inter-professional models of maternity care within a rural environment and the changes that need to occur to facilitate the integration of midwifery into rural communities. Specific objectives include investigating legislative and regulatory barriers; legal and financial barriers; and professional (ideological) barriers. A qualitative, exploratory policy framework guided the data collection and analysis, an approach used when there is an overall lack of developed knowledge about an issue or a problem.<sup>98</sup> Data collection was undertaken primarily through **in-depth interviews** with care providers, administrators, and women and **documentary analysis** of regulatory, legislative, and professional documents.

The phenomenon of inter-professional collaboration in maternity care is not well understood in a Canadian context,<sup>99</sup> and international experiences take place within

"How do we create a structure that works for everybody that is going to be involved, that is fair and equitable, that is transparent, that we all buy into and that we all understand?"  
(Participant 10:1153)

“The worst thing we can do is introduce a new profession and have it be unsuccessful because we didn’t listen and do the preliminary work properly ... We have the potential to disrupt the current model of care.”  
(Participant 10: 1018)

different health service delivery, historical, and social contexts. As a result, exploratory research is an appropriate approach as it allows for a range of issues, including unanticipated themes, to be understood. This research built on the themes arising from the currently funded project on resources necessary (including human) for sustainable maternity care in rural communities.<sup>100</sup>

## 2. Trail Specific Recruitment Methods

On the invitation of Kootenay Boundary Regional Hospital (KBRH) Maternal/Child Integrated Network of Care Team, the research team made an initial visit to Trail, British Columbia on January 25, 2008 to present the goals and objectives of the research project to all key maternity care stakeholders at a ‘Maternal Child Health Integrated Care Meeting.’ The larger context of the meeting was the presentation of a proposal to “Create a Patient Centered Community Based Primary Care Obstetrical Network for the South KBHSA.” This proposal was in response to the threat of maternity care closure at KBRH, the regional hospital for the South Kootenay Region. In the weeks that followed, community support was received and the necessary paperwork was completed and submitted to the Interior Health Research Ethics Board (February 2, 2008). Approval to proceed with the research was received May 1, 2008.

Third-party recruitment was undertaken through the local hospital administrator at KBRH via an invitational letter sent to physicians currently practicing maternity care, pediatricians, obstetricians, nurses, public health nurses, hospital administrators, BC Ambulance, maternity nurses, lactation consultants, prenatal educators, doulas, and birthing women from Trail and outlying communities who are served by the Trail hospital (Grand Forks, Rossland, Castlegar, Montrose, Fruitvale, and Salmo). All potential participants noted above then either a) contacted the research team directly to express interest in participation or b) gave permission to the hospital administrator for the research team to follow up with them directly.

Given the proximity of Nelson to Trail (70 km away, approximately 1 hour by road) and the expressed need for a regional approach for solutions, the research team interviewed midwives and obstetrical care providers in Nelson.

### 3. Data Collection

The research team visited Trail from May 5-9, 2008 for primary data collection and undertook 16 interviews and 3 focus groups. They returned on Trail May 20-21, 2008 to follow up with all key stakeholders who were unable to be interviewed during the first visit and to include interviews with moms who birthed in Trail. Unfortunately the response for participation was low for these moms due the difficulty of scheduling and transportation. These participants were followed up again through telephone interviews. During the interviews it was noted by the moms that travel is challenging due to rising gas prices and unpredictable work schedules.

The research team followed up with representatives from the Colleges of Midwives of BC and the Midwives Association of BC in Vancouver to clarify logistical issues around midwifery models that were presented by research participants.

**Table 1: Participant Cohort** (Trail, Nelson, Rossland, Salmo, Grand Forks, Castlegar)

Participant Designation	# of Participants
Physicians	7
Obstetricians	2
Midwives	5
Maternity Nurses	5
Public Health Nurses	7
Administrators	4
Lactation Consultants	1
Prenatal Educators	4
Doulas	6
Moms	12
Policy makers	3
<b>Total # of Participants</b>	<b>56</b>

“Women should deliver where they live. That should be at the top of our list for what’s good for the community.”  
(FG 04:2166)

## C. Guiding Principles Underpinning this Report

Assumptions underlying this research were derived from analysis of the transcripts and include the following:

1. It is the social responsibility of health service providers to meet the needs of the population they are mandated to serve. This implies the need for sustainable maternity services in Trail.
2. For the immediate and foreseeable future, it is desirable that this service include the active involvement of physicians.
3. There is a need for innovative models for the delivery of maternity care.
4. Service planning should respect the desire for women’s choice of (regulated) care provider.
5. Current challenges faced in Trail are characteristic of those faced in other rural communities across the province and thus require a province-wide solution.

Assumptions specific to each profession or group will be explicated further in the findings, below.





## D. Findings

### 1. Kootenay Boundary Regional Hospital

Interior Health Authority has established a system of Regional and Service Area Hospitals (SAH) to provide specialized care to residents of the service area in addition to core medical care. SAH's provide Level 3 laboratory and radiology/diagnostic imaging services, 24-hour emergency services, and core physician specialties such as General Surgery, Internal Medicine, Orthopedics, Psychiatry, Pediatrics, and Obstetrics. KBRH's service area includes the communities of Kootenay Lake, Nelson, Castlegar, Arrow Lakes, Trail, Grand Forks, and Kettle Valley (see Figure 2).

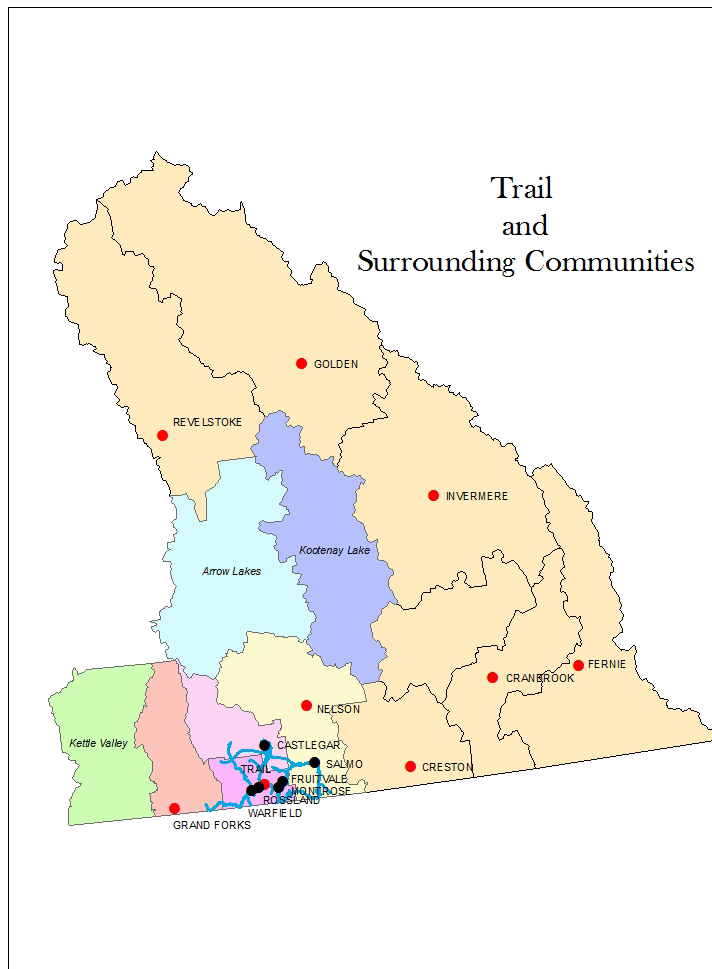


Figure 2

“Each outlying community has a GP champion, someone who until quite recently has been doing obstetrics and is still happy to be involved. So they are doing outreach for us.” (Participant 01:568)

## 2. Maternity Care in Trail

Primary maternity care in Trail is currently provided through the Family Obstetrical Clinic (FOBC) call group. Surgical backup is available through the obstetrical call group which includes two obstetricians and three general practitioners with enhanced obstetrical surgical skills (GP Surgeons). Pediatric services are available through the pediatric call groups (one pediatrician and two general practitioners with enhanced skills). Currently deliveries at KBRH are managed by the FOBC, the obstetrical specialists (due to high risk status), or transferred out to a tertiary care facility for a higher level of care.

The FOBC began as a call group at KBRH in March 2002 in response to the increase in 'orphaned' patients due in part to the closure of the Castlegar maternity service in February 2002 and the concomitant increase in on-call responsibilities. Although the FOBC began with a sustainable cadre of participating physicians, gradual attrition resulted in four physicians covering call for maternity patients in Trail and the outlying communities which, as of January 2008, included Grand Forks. This precipitated the threat of closure of services due to the un-sustainability of on-call requirements.

In January 2008 a temporary solution was championed by Dr. Nattana Warren Dixon which included:

- *Physician Recruitment:* Seven physicians from the Kootenay Boundary Health Service Area were recruited to provide obstetrical care with the FOBC through new funding incentives;
- *Innovative Funding* included "MC for BC" (Maternity Care for BC) and the application of reverted CME funds to an on-call stipend (\$6000/month until January 31, 2009). The MC for BC rural education assistance funds provides a stipend for physicians and their mentors who begin or re-enter maternity care. Three physicians are currently participating in the program.
- *Contributions in-kind:* Since 2002 the Interior Health Authority has provided the FOBC with clinic space and janitorial/medical supplies; in January 2008 IH

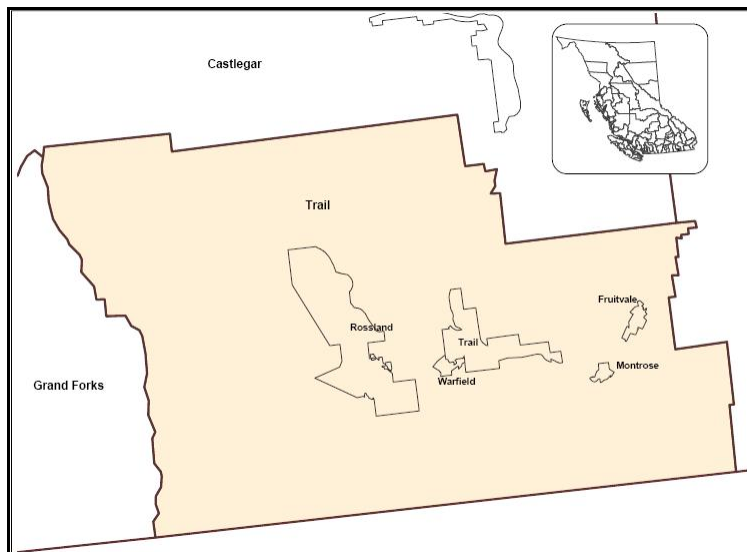
assumed additional responsibility for administrative and accounting (billing) costs.

These innovative mechanisms have provided a temporary solution to the potential of closure of services: it was clear from the participants interviewed that the mechanisms will not lead to long-term sustainability.

### 3. The KBRH Catchment

The Trail Local Health Area (LHA) contains the communities of Trail, Grand Forks, Fruitvale, Montrose, and Warfield. The FOBC is mandated to meet the maternity care needs of women in Trail and the outlying communities including those noted above, as well as the communities that feed into Trail as part of the regionalized system of care.

Trail makes up 35% (7,237) of the catchment. Current LHA population demographics are found in Table 2. Below is a map of Trail's LHA (LHA 11).



**Figure 2**

Catchment birthing breakdown to March 2007 and projections are found in Table 3. We anticipate changes in current trends based on the recent closure of the Grand Forks maternity service in 2008.

“There are I think at least 40 women a year, patients from our area, mostly Rossland, who deliver in Nelson because they want midwives. So if we’re getting those back here, then the few that wanted GP care only could certainly, they’d have the capacity.”  
 (Participant 001: 208)

<b>Table 2: LHA Birthing Statistics</b>	
<b>LHA Population</b>	<b>20,325</b>
<b>Trail Population (% of LHA)</b>	<b>7,237 (35.6%)</b>
<b>2012 Population Projections</b>	<b>20,147</b>
<b>2017 Population Projections</b>	<b>20,160</b>
<b>Average Birth Rate / 1000</b>	<b>6.6</b>
<b>Social Vulnerability (-1 to +1)</b>	<b>- 0.17</b>
<b>% Aboriginal</b>	<b>625 (3.1%)</b>

<b>Table 3: KBRH (over 6 years: 2001 -2007)</b>	
<b>Average # of births / year at KBRH *over 6 years</b>	<b>204.6</b>
<b>Average # of births/ day at KBRH *over 6 years</b>	<b>0.56</b>
<b>Average # of women from outside catchment (Castlegar, Grand Forks, Salmo) delivered at KBRH *over 6 years</b>	<b>80.6 (39% of deliveries)</b>

Between 2001 and 2007, almost all women from the Trail LHA (as opposed to the KBRH catchment) delivered at KBRH.

<b>Table 4: Catchment Birthing Statistics (over 5 yrs)</b>	
<b>Average # of Births / Catchment</b>	<b>134.7</b>
<b>Birth Projections 2012</b>	<b>133</b>
<b>Birth Projections 2017</b>	<b>133</b>
<b>Average # of Women from catchment delivered locally</b>	<b>124.3 (92%)</b>
<b>Average # of Home Births</b>	<b>2.2 (2%)</b>

**Table 5: Trail Catchment Utilization Patterns**  
*Where do women from the LHA go to deliver?*

Hospital	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008	Avg.	%
KBRH	128	112	123	117	141	125	82	118.2	91
Kootenay Lake Hospital	1	2	3	5	7	12	12	6	4.6
Home Births	2	1	3	2	3	2	1	2	1.5
Other	6	3	3	4	1	2	0	2.7	2.1
<b>Total Catchment Births</b>	<b>137</b>	<b>118</b>	<b>132</b>	<b>128</b>	<b>152</b>	<b>141</b>	<b>119</b>	<b>130</b>	<b>100</b>

**Table 6: Women who traveled to Nelson to receive midwifery care between January 2006 – June 2008**

Home Community	# Of Women
Trail	5
Fruitvale	2
Castlegar	7
Grand Forks	10
Rossland	23
<b>TOTAL = 47 women</b>	

**Table 7: Kootenay Boundary Regional Hospital Inflow Patterns**

Births by community	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	Avg	%
Trail	128	112	123	117	141	125	124.3	61
Castlegar	42	60	38	44	33	30	41.2	20
Grand Forks	7	8	14	18	15	27	14.8	7
Nelson	9	16	12	9	8	11	10.8	5
Creston	15	14	11	4	3	5	8.7	4
Other	4	6	2	2	4	4	3.7	2
Out of Province	2	1	0	1	1	2	1.2	1
<b>Total Hospital Births</b>	<b>207</b>	<b>217</b>	<b>200</b>	<b>195</b>	<b>205</b>	<b>204</b>	<b>204.7</b>	<b>100</b>

Table 8: Births by Hospital in Kootenay LHAs (2001/2002-2006/2007)					
LHA	Kootenay Lake	Kootenay Boundary	Boundary	Other	Total
Nelson	176	11	0	24	211
Castlegar	38	41	0	8	87
Arrow Lakes	18	2	0	12	32
Trail	5	124	0	6	135
Grand Forks	0	15	35	13	63
Other	33	2	11		
<b>Total</b>	<b>270</b>	<b>195</b>	<b>46</b>		

*Potential deliveries at KBRH*

Between 2001-2007, KBRH averaged 205 deliveries per year (.56 births/day) (see Figure 3). With 1:6 call rotation each physician would do 33.6 deliveries/year. **It should be noted that the FOBC physicians feel that these numbers are not sustainable for their practice.** According to vital statistics/PHN records there are 350 births in a reasonable KBRH catchment that includes Trail, greater Trail, Grand Forks, Salmo, Kettle Valley, and Castlegar. Repatriating these births to KBRH would bring the births to 0.95 births per day (58 deliveries per year per care provider assuming 1:6 call). The introduction of 2 midwives would reduce this number by 80, assuming full course-load (40 courses of care) for both.

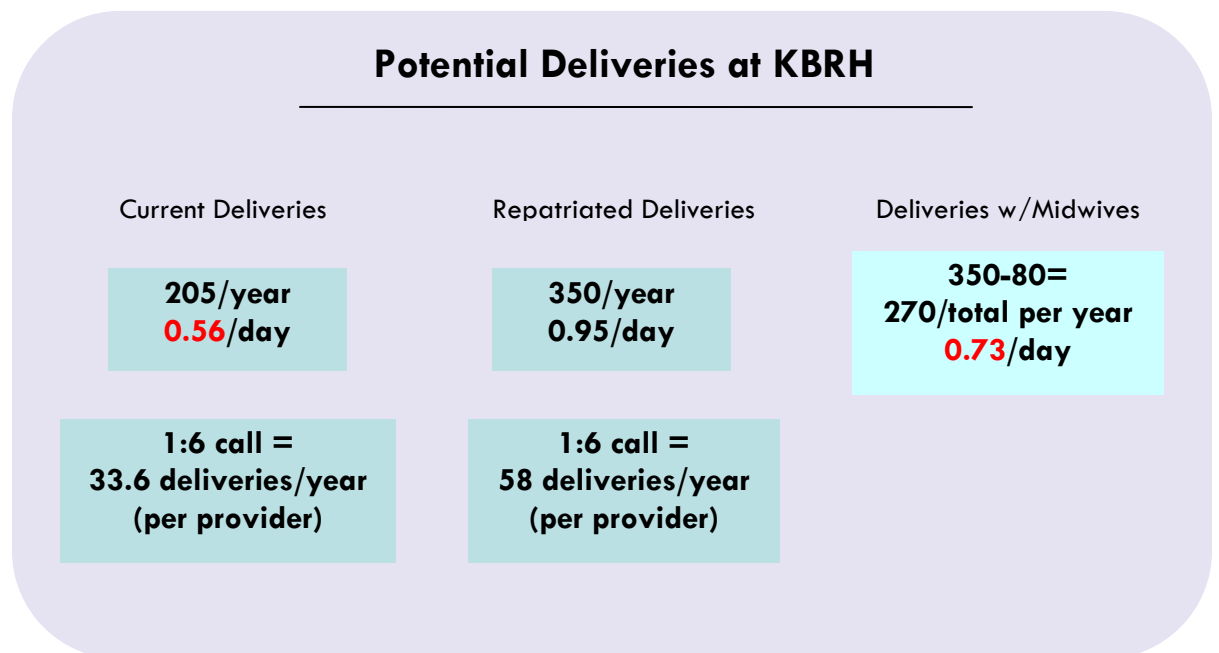


Figure 3

#### 4. Themes from Interviews and Focus Groups

Several themes emerged from the interviews and focus groups that spoke to factors necessary to underpin sustainable physician-based maternity care in Trail, the precursor to inter-professional care. These included current challenges around the FOBC model of service delivery and, more substantively, the lack of remuneration for physicians for obstetrical call. The latter was perceived by many as a proxy for disrespect to generalist obstetrical care and, if unaddressed, may potentially lead to the end of such care in rural communities. Other themes were grouped around the qualities of inter-professional care including: the benefits of such an approach to care, qualities necessary to underscore it and potential challenges that may be encountered. Additionally, the women we spoke with clearly expressed the qualities of the birthing experience that were important to them, whether or not they accessed midwifery care.

The summation of the interviews and focus groups is found in the last part of this section: potential models of care.

##### *The current model of care and the FOBC*

The current organization of the delivery of prenatal care through the FOBC was formed in response to increasing on-call responsibilities for individual physicians offering maternity care. As one noted,

Individually we would each burn out... one person would burn out and then someone would sort of take the torch and start running again. And then that person would get frustrated and burn out. [Participant 9:62]

Challenges with the FOBC model were noted, however, by several care provider participants, including their diminished ability to form relationships with women and their families and the lack of flexibility in how care could be provided. Almost all respondents noted the need for improving the physical infrastructure currently housing the FOBC. See table below for representative quotes.

Many participants noted the excellent standard of care available to women who give birth in Trail.

#### Relationship with patients

“Incorporating all of these extra patients with the GPs means there is a high chance you haven’t even met the person [you are delivering]. You have to gain their trust in 5, 10 minutes, whatever it is, while they are in labour. But when you come into an emergency situation with someone you have known for ten months they trust you so when you say, ‘you need to go on your hands,’ there’s no questions because they know you are there for them.” [Participant 04:133]

“At one level the FOBC clinic provides potential sustainability and provides access for orphaned patients who just show up. But you know, at another level I feel part of the reason we’re in rural communities is because we want to be involved in our patients’ lives and we may be losing something there.” [Participant 8:162]

#### Centralization of patients

“Part of the problem with the current model is there is a feeling that we need to have everybody flow through the FOBC to generate enough income to make it viable. But if the funding is there to make the FOBC viable without having to force everybody to come here, I think that would be great. I’d like to see some of my prenats in Rossland rather than having them come down here...”[Participant 19:99]

#### Need for adequate space

“We need bigger office space, a better waiting room, a place where we can have group discussions with patients. We need a birthing tub.” [Participant 01:260]

An additional challenge to the current model of care was expressed by participants in the satellite communities who depend on Trail for labour and delivery care for their parturient population. There was an overall perception of lack of communication which manifested in confusion over patient care but also feelings of exclusion from a decision-making process that often had an impact on the satellite community. One participant, referring to the lack of communication with Public Health Nurses regarding patient records commented:

There has to be clear communication. They need to be phoning the public health nurses when a person is discharged, faxing us the information. We have no early maternal discharge program in this area, so we are doubling our workload ... we’re trying to see women as soon as possible after they get home so we can make sure everything is going well. [FG 001:507]



Likewise, another participant expressed a perceived lack of involvement in the decision-making process:

I feel like we're still really, really disconnected in the two communities. Things will be happening in Trail that we're still not always aware of. And at perinatal meetings at the hospital we'll find out things that we're all surprised about. I don't feel like there is a good network of communication between us. [FG 006:27]

Both providers and women in the satellite communities articulated a sense of confusion around a protocol when one of the local hospitals closes maternity services and when Trail was on the brink of closure. They believed that for some, this confusion resulted in the decision to remain in the community for the birth of their children despite the lack of availability of local resources.

Despite challenges to the model of care noted, many participants noted the excellent standard of care available to women who give birth in Trail. As one participant said,

Generally I think that the nurses and doctors who work up here provide really, really good care. And I know that everybody tries really, really hard. I think everyone who comes here gets excellent care. [FG 05:61]

### *Remuneration*

The most significant issue for physicians in the study was the lack of adequate remuneration for on-call obstetrics. Many interpreted the lack of on-call remuneration as a statement of disrespect towards family physician maternity care providers and noted that this, combined with the financial incentives offered by other call groups, provides insurmountable challenges to recruitment and retention to the FOBC. Most expressed a belief in the necessity of such payment for sustaining rural generalist obstetrics. As one participant said, "It may be in this day and age that you can't have family physicians providing obstetrics if you're not going to pay them to be on call" [Participant 8:90]. See further participant quotes below.

The most significant issue for physicians in this study was the lack of adequate remuneration for on-call obstetrics.

<p><b>Funding as a proxy for respect</b></p> <p>“The fact that the governments and the BCMA and health authority do not recognize the value of family physician obstetrics may be more of a disincentive than the actual issue around money.” [Participant 08:62]</p> <p>“We are undervalued and under-funded. It doesn’t pay to do obstetrics around here. The consequences to your lifestyle for the amount of money you get just isn’t worth it.” [Participant 19:17]</p>
<p><b>Perceived inconsistencies in MOCAP guidelines</b></p> <p>“The argument around making sure you’re not getting reimbursed for covering your own patients doesn’t work in a regional setting where they closed two hospitals and you’re getting an influx of more than a hundred orphaned patients a year.” [Participant 15:288]</p> <p>“I’m kind of confused myself about why primary obstetrics doesn’t get MOCAP and everyone else does.” [Participant 14: 299]</p>
<p><b>The reality of competing call schedules</b></p> <p>“For reasons that are not entirely clear the family physicians who provide obstetrical care in this province are not paid to do call. And the hospitalists are, emergency physicians are, internal medical call schedules are, psychiatric call schedules are. So there’s a glaring absence of recognition of the importance of family physicians. From a financial point of view it doesn’t make sense for a family physician to put their life on hold, not being able to schedule things with their children, not being able to go to a party, have a drink, on the off chance that somebody might come in labour.” [Participant 8:14]</p> <p>“I guess what brought things to the crisis was the fact that people were saying, ‘I’d sooner be doing emerge where I get MOCAP,’ and it needed up being a monetary thing. Because we were working pretty hard to try to keep it going, but there’s no way we were getting remuneration.” [Participant 9:42]</p>
<p><b>Financial losses</b></p> <p>“So if you look at our day we are on call from 8:00 in the morning to 8:00 the next morning. Usually on that day you would book half a day at your own clinic and then you’d have half a day seeing prenatal patients. But of course you’re on call for whatever happens. 30-50% of the time you end up canceling some of your own patients in your own clinic, but you’re still responsible for the overhead there and you have to make up seeing those patients some other time. And often it’s night work so you need some sort of recovery the next day. I think our pay for that period was somewhere between \$400 to \$660. But you’ve probably got \$400 owing for overhead for your own clinic.” [Participant 01:102]</p> <p>“I was working for \$4.72 an hour. I made more cutting fish at Safeway before I went to university.” [Participant 12:143]</p>

Within this context, the potential for midwifery to further destabilize family practice maternity care was cited by many participants, especially if midwives set up an independent or community-based practice instead of joining the FOBC. Specifically participants expressed concerns over the relatively low volume of deliveries in the catchment; numbers from which midwives could potentially detract. The potential of the “cascade” effect of further diminished remuneration from maternity care was seen by some to lead to the destabilization not just of the maternity service, but generalist medical services in the community:

The status of family physicians in this province is so precarious and they are looking for any reason to give up obstetrics. So it may be that putting a midwife in the community means 40 or 50 of the deliveries are gone so a family physician might say, ‘Geez, here is someone with specialists skills in obstetrics with an interest in obstetrics so I don’t need to do this anymore,’ and they would go work in the emergency department. Or just leave. [Participant 08:214]

Others took a more philosophical approach underscored by the belief that ultimately health services delivery will organize in a way that is responsive to what the population needs and that machinations to fight against this may be counter-productive:

The big problem with trying to keep a GP rota going is that eventually market forces play out. If the midwives come and they are hugely popular and there are not enough GP deliveries to keep us going, then so be it. Maybe we’ll end up with six midwives in the community and no GPs. I kind of think maybe we should just throw it wide open and see what happens. [Participant 01:562]

### *Inter-professional collaboration*

All care provider and administrator participants were supportive of the idea of inter-professional collaboration and assumed the team would involve family physician care providers, midwives, hospital and community-based nurses, specialists (obstetricians and pediatricians) and others involved in the support of birthing women such as doulas

and lactation consultants. On a theoretical level there was a wide-spread recognition that “true inter-professional collaboration it is much more than one plus one equals two ... it really is synergistic” [Participant 10:153], but beyond this, few participants had a sense of how the collaboration might work. Despite the lack of specifics, however, participants cited benefits to inter-professional collaboration including mutual learning, a lightened workload and the ability to better meet the needs of the community. Qualities of such care included the need for mutual respect and trust, the need for clarity around roles and responsibilities and the need for flexibility and adaptability in approaches to care. Perceived challenges included an awareness of differences in styles and approaches to care, especially with regards to home birth, and the “iconoclast” nature of rural family physicians. Interestingly, medical-legal issues were only a concern to a minority of the participants and most of those who did raise questions had had a negative experience with lay midwifery prior to regulation. As one participant noted,

The only time in my 25-year career I’ve been threatened with a lawsuit was when I bailed out a midwife that was doing a home delivery. She brought the patient in, things didn’t go well and it was me who took the blame, as far as the patient was concerned. [Participant 01:618]

Further representative quotes can be found in the table below.

<b>Benefits of inter-professional collaboration</b>
“Everyone could probably learn more from each other. Midwives bring something totally different to the table and as nurses we would get to work with both groups, right. So we would get to have the best of both worlds and the more people, the more heads, the better. I am really excited about it and hoping that it will happen!” [FG 05:231]
“I see midwifery complimenting our work, and us complimenting them.” [FG 03: 352]
“The fact is they will come in and help initiate breastfeeding and that takes a lot of the workload off [us]. I’m looking forward to working with midwives ... their holistic views and type of care they provide.” [FG 03:360]
“Midwifery care exists in this region [and] women vote with their feet. Lots of my patients go to Nelson. I think if we’re going to have some sustainable solution in Trail we have to have midwives, because that’s what people want.” [Participant 12:53]
“I think the patients will have more choice because right now they don’t have the choice of a midwife unless they are willing to drive to Nelson for all of their care. So having midwives actually functioning in our community would be a huge benefit.” [Participant 01:427]

### Qualities of inter-professional collaboration

“There is a lot of differences of opinion between nurses and doctors, so there probably will be between doctors and midwives. But everybody is able to work through it and talk respectfully to each other.” [FG 05:299]

“So the issue is of respect. The issues of listening to one another and providing an opportunity and space where we really can listen. And shared decision-making ... you know it's not really collaboration if you just sort of ask me what I think and then ignore what I've shared.” [Participant 10:123]

“As a nurse working with a midwife I need to know what their scope of practice is and what my responsibility is when she's involved in the care of a patient.” [FG 03:625]

“If midwives come in and do my job, then what is there necessity of me?” [FG 03:368]

“I think our group has to be more flexible in how we work. We will have to realize that group visits are different, it isn't just ‘bang, bang’ and you're out the door. There is a human element and that is less predictable.” [Participant 12:165]

### Challenges to inter-professional collaboration

“I think we have to work towards managing labour and delivery very similarly because right now there are big discrepancies. But we have to learn from each other and we [physicians] probably need to be a little more open-minded, but they need to know where we're coming from, too. And that's something that's going to take time.” [Participant 01:622]

“I like to know there is a safety net, so I'm not a really big fan of home birth. I realize that's a personal choice, but I just really don't think it's a good idea.” [FG 03:55]

“To me it's just not worth taking a chance of not having enough hands or enough help or enough experienced help around for your baby, no matter how healthy you are. But I respect that most births go well and people love [birthing at home] so if that's what they want I'm okay with it.” [Participant 01:304]

“Why is it that we don't have more collaborative models in this province? The issues might be volume, or that we have a limited number of midwives. And the nature of family physicians in rural communities is that you get to be an iconoclast. We're out here because we want to do things our way. And the idea of sharing necessarily is not one that is common to us.” [Participant 08:198]

### *Women's preferences for care in childbirth*

Birthing women who participated in this study can be broken down into two general cohorts: those who either actively sought midwifery care or by-passed Trail to seek care elsewhere and those who gave birth in Trail, either by choice or by default.

Those in the former group seeking out midwifery care emphasized the importance of being able to have “true” midwifery care that adhered to the tenets of the philosophy and model of midwifery including continuity of care and choice in place of birth. Consequently, women from this group suggested they would continue to seek care in

Nelson or elsewhere in subsequent deliveries if they could not be guaranteed access to a midwife throughout the pregnancy, labour, and delivery. Those who by-passed Trail, whether or not they sought midwifery care, clearly expressed the importance of continuity of care throughout their childbearing year. All believed that this could not be achieved through the FOBC. Interestingly, most participants in this group noted that they would consider Trail physicians for their next delivery if they had one-to-one care. Other concerns expressed included the perceived lack of a 'family-centered approach' in Trail and the lack of key physical resources including access to a birthing tub. Representative quotes can be found in the table below.

<b>Commitment to the midwifery model of care</b>
<p>"One of the attributes that I found comforting about having midwifery care was the fact that I could call my midwife at any time of the day or night throughout the entire pregnancy and basically get an answer, no matter what. I knew who I was calling every time and who was calling me back." [FG 08: 202]</p> <p>"I'm not a big fan of the medical philosophy that says I am at risk for something just because I'm having a baby. I don't like that philosophy." [FG 04:36]</p> <p>"I've always wanted a midwife. The philosophy is what suits me and what I'm connected to." [FG 08:135]</p> <p>"I wanted midwifery care; I do lots of herb stuff. I was just really drawn to the whole feel of it." [FG 08:143]</p>
<b>Concerns over mixed models</b>
<p>"I wouldn't go [to the FOBC] on the chance a midwife <i>might</i> be on call. It would be like player poker." [FG 08:68-69]</p>
<b>The importance of continuity of care provider</b>
<p>"The doctors are all different – you don't know who you are going to have. It's whoever comes in or is on-call. That is scary. The first time I hear that could have one of five people it [was a shock]." [FG 04:27]</p> <p>"I don't think the fact that there is very little continuity of caregiver is good. I don't feel like I get any personal attention." [FG 04:41]</p> <p>"It makes you feel good to know that you can trust the person who has been with you throughout the whole process, who is going to be there [for the delivery]." [FG 06:233]</p> <p>"You don't know who is going to be at your birth. You don't know who is going to be at your appointment. I don't like that lack of continuation." [FG 08:21]</p> <p>"And I think in Trail there is not as much money so for moms who don't have transportation, midwifery in Nelson is not an option. So I think you will find they will be really receptive to midwifery care you know, with the continuity, having the support, somebody around all</p>

the time they care rely on, will make a big difference.” [Participant 13:385]

#### **The importance of a family-centered approach**

“I didn’t want a ‘pop the baby in the nursery’ option. I wanted a more family-centered approach so I went to Nelson.” [FG 04:416]

“I was able to hold her and be with her and my husband and I could be together: there was no whisking away at all. That opportunity is not presented to you after giving birth in Trail.” [FG 08:47]

#### **Physical space**

“The renovations in Nelson have made it really nice. They have a tub and are open to laboring in water and delivering in water.” [FG 04:389]

“I wanted to be in the tub.” [FG 08:40]

Both care providers and women recognized the importance of securing additional resources to support women who need to travel from out of town to access care at KBRH, particularly access to appropriate, subsidized accommodation and transportation. As one participant noted:

I think in the community there needs to be more services for people that are from out of town, that are in early labour, that are not costly. There are people that are coming from out of town that don’t necessarily have much money and I don’t think that because they don’t have a high socioeconomic status that they shouldn’t be able to have good care. [FG 03:689]

## **5. Potential Models of Care**

Based on analysis of interview transcripts with care providers and key stakeholders, five potential models for integrated midwifery emerged, ranging from complete integration with the FOBC to independent community based midwifery practice. Each is explicated below.

## Model A

### Integrated FOBC/Midwifery

Description	Funding	Perceived Benefits	Perceived Costs
<ul style="list-style-type: none"> <li>Shared call between FOBC physicians and 1 or 2 midwives, including on call prenatal, labour and delivery and postpartum</li> <li>Prenatal and postpartum in FOBC clinic</li> <li>Random assignment of women to provider based on call rota</li> <li>No independent/ community based midwifery practice (no home birth)</li> </ul>	<p>Option 1: Pooled fee for service</p> <p>Option 2: Physician fee for service, midwife service contract</p>	<ul style="list-style-type: none"> <li>Increased call coverage for FOBC</li> <li>Increase sustainability</li> <li>Midwifery care in Trail</li> <li>Enhance image of KBRH maternity</li> <li>Potential repatriation of women currently going to Nelson for midwifery care</li> <li>Gentle entrance of midwives into community</li> </ul>	<ul style="list-style-type: none"> <li>Recruitment of midwife</li> <li>Midwives' limited scope of practice</li> <li>Women cannot opt out of midwifery care in FOBC</li> <li>Women cannot opt out of physician care</li> <li>Midwives cannot do home birth under this model</li> <li>Concerns about midwives' financial sustainability (only if pooled fee for service billing model)</li> </ul>

### Feasibility Issues

- Regulatory Issues
  - No home birth – midwives are required to offer choice of birth place through their standards of practice designated by the College of Midwives of British Columbia (CMBC)
  - No continuity of care – midwives may work in call groups with a maximum of only 4 practitioners as designated by CMBC. Midwifery clients must be guaranteed a known care provider during labour
  - Length of prenatal visits – according to CMBC, midwives are required to spend an adequate amount of time to develop a trusting relationship with their clients and offer thorough informed consent [CMBC suggests visit lengths of 45 min – 1 hour]
  - No in-home postpartum care – expectations of midwifery clients include several home visits during the first week postpartum
- Professional Issues
  - Recruitment & retention of midwives
  - Salaried/contract position – contract position is preferred by MABC
  - Attractiveness of position to midwives
  - Ability to find a midwife to work under contracted scope of practice
- Communication
  - Challenge of having a system for sharing medical records during shared call



## Participants' Impressions of Model A

### *Attributes*

“What we would like to have is to have them join our group; and work as much as possible the same way we do ... they'd do the 24 hours of call, they'd do the clinic. They...because their scope of practice is a little bit different, they probably would have to call help a little more often than the GPs do. And then the question is do they go straight to the obstetrician or do we have a GP as backup as well.”  
(Participant 001:170)

“When you see true Inter-professional Collaboration, it is much more than a one plus one equals two. It really is synergistic. It really is the outcome that comes from is much more than what could have come by those two individuals working independently, and patients just benefit.”  
(Participant 010:153)

“I would hope that it's totally integrated into the FOBC. So that, you know, we can depend on them to do what we would do, and they could depend on us to pretty much do what they would do. I mean, it doesn't make sense to have two separate call groups in this area.”  
(Participant 019:81)



### *Concerns*

“I think midwives should care for their own patients because that's what their patients would want. That's what midwifery is. And if GPs want the midwives to share call, it should be the GP patients that they're sharing call with.”  
(FG 003:468-474)

“It’s harder for a midwifery client to accept physician care than vice versa. In many cases, it might not be in all cases. There may be some women who just don’t want care from a midwife. But, it’s hard because midwifery patients are expecting that one to one care through labour. And to lose that is a big thing.”

(FG 004:59)

“I don’t know if mixing family physicians and midwives together would dilute what each of their special skills would be, right. And that something is lost from the family physician air, that person who delivered that child, looks at that child through that child’s adolescence, delivers that child, and looks after them into their age. As opposed to the midwife who’s been intimately associated through hour long discussions, though home visits, through home birth for instance. And how these things [distinct models of care] could mesh is not clear to me. I think both of them are valuable, I think both of them are sustainable, I think both of them are the right way to look after patients. But I think at one level patients have an opportunity to choose, and if those models are mixed then the patients are losing things from both of them.”

(Participant 008:210)

“If the issue in Trail right now is they will not have a service if they do not have enough warm bodies to cover call, and the midwife is able to that, then that may be the service, the only service, that family physicians are looking for in her. Which is someone that the nurses can call at night to come and deliver a baby. Her other services, like home visits, home deliveries, postpartum care, may not be of interest to them at all, right. And how she’s going to be able to maintain that part of her practice is not clear.”

(Participant 008:260)

“I mean, that’s a big reason why some people go to midwives, because they have other means of offering going into labour rather than medical prostaglandins and all of a sudden, things like that. So it would have to be, I guess, an education for the GP and to understand you know homeopathy and things like that. And then to accept it. I don’t know if they would. And again, it’s not their fault; they’ve been in the medicalized system most of their lives, so it’s kind of hard to step out of that. I mean, even for me as a nurse it was kind of hard for me to step out of that. You, I could classify myself more as a medicalized midwife than a true midwife.”

(Participant 001:291)

## Model B

### Collaborative Call + Community Midwifery Practice

Description	Funding	Perceived Benefits	Perceived Costs
<ul style="list-style-type: none"> <li>Shared call between FOBC and midwives</li> <li><b>Additionally: Community based midwifery practice including home birth (2 midwives minimum)</b></li> <li><b>Maternity nurses as potential second attendants for home births</b></li> <li><b>Group prenatal care led by midwife and GP (Centering Pregnancy Model)</b></li> <li><b>Collaborative postpartum care (PHN's, lactation consultant, midwives and physicians)</b></li> </ul>	<p>Option 1: Pooled fee for service</p> <p>Option 2: Physician fee for service, midwife service contract</p> <p><b>Option 3: Partial pooled fee for service + service contract (i.e. 0.4 for FOBC work and outreach)</b></p>	<ul style="list-style-type: none"> <li>Increased call coverage for FOBC</li> <li>Increased sustainability</li> <li>Midwifery care in Trail</li> <li>Enhance image of KBRH maternity</li> <li>Potential repatriation of women currently going to Nelson for midwifery care</li> <li><b>Availability of home birth in Trail (repatriation of women traveling for midwifery care in outlying communities)</b></li> <li><b>Innovative models of prenatal and postpartum care</b></li> <li><b>Collaborative learning between care providers</b></li> <li><b>Increased choices for women</b></li> </ul>	<ul style="list-style-type: none"> <li>Recruitment of midwife</li> <li>Midwives' limited scope of practice</li> <li>No choice to opt out of midwifery care in FOBC</li> <li><b>Challenges to sustainability of midwife doing FOBC call + independent practice call care in FOBC</b></li> </ul>

### Feasibility Issues

- Regulatory Issues (see Model A for details)
  - No home birth; no continuity of care
  - Length of prenatal visits
  - No in-home postpartum care
- Professional Issues
  - Recruitment & retention of midwives
  - Salaried/contract position – contract position is preferred by MABC
  - Attractiveness of position to midwives
  - Ability to find a midwife to work under contracted scope of practice
  - Feasibility of fee for service billing**
  - Challenge of appropriate coverage for time off call (eg. CME, holidays)**
  - Challenge of designating the “most responsible person” for different intrapartum scenarios**
- Communication
  - Challenge of having a system for sharing medical records during shared call
- Logistics of Shared Care Led by GP and Midwife
  - Different approaches to informed consent**
  - Women traveling to attend Centering Pregnancy**
  - Conceptual barriers to Centering Pregnancy for vulnerable population of moms**
  - Understanding each other's scope of practice**
  - Tracking system for care, billing, and sharing medical records**
  - Challenge of developing shared philosophy of care**

## Participants' Impressions of Model B

### Attributes

"You know, I think the midwives would want their home birth practice, and maybe this would have to be part of the deal in some way."

(FG 004:175)

"I think the patients will have more choice. Because right now they don't have any choice. They don't have a choice of a midwife unless they are willing to drive to Nelson for all their care. So having midwives actually functioning in our community would be a huge benefit."

(Participant 001:216)

"I think realistically we do have to look at having a mixed model of care where we collaborate. So we have some midwives and some GPs."

(Participant 001:154).

### Concerns

"She [the midwife] would need more income. She would need more than one in eight or nine in order to survive, even if she did do the home deliveries, because there's not a huge volume of home deliveries. So I thought, well if she could do two days in every cycle rather than one, and do the home deliveries, and maybe have a ... somehow work together with the Nelson group, or work with the FOBC group to back her shifts. If she's got a home delivery and she's supposed to be delivering in the hospital, if there's a conflict between the two roles that it would be backed up by somebody in the FOBC group or somebody in Nelson, one of the midwives in Nelson backing her up for delivery. I mean, I don't know, that's why I say there's still a lot to work out."

(Participant 002:250)

*Regarding the downside of Centering Pregnancy:*

"I think for our higher risk women, they are less apt to access prenatal, because, monetarily, of course. And they always feel like it's upper middle class people with partners who are in the group, and they feel like they stick out like a sore thumb if they – if they attend. So, often, if they do attend, they'll attend once, and that'll be the end of them. And that's the group that needs the education, you know, so much."

(Participant 013).

"The other thing is that you might...that would then increase the amount of pay going to the midwives, it might make it sustainable for 3. Because if you have someone on call for the GPs, then you still need...if someone went into labour and you're doing a home delivery, you still need two midwives available to go to that home birth. So, you would have to have 3 midwives in the community if they're going to share call with the docs." (FG 003:522).

## Model C

### Collaborative Call + Community and Outreach Midwifery Practice

Description	Funding	Perceived Benefits	Perceived Costs
<ul style="list-style-type: none"> <li>Shared call between FOBC and midwives</li> <li>Additionally: Community based midwifery practice including home birth (2 midwives needed)</li> <li>Maternity nurses as potential second attendants for home births</li> <li>Group prenatal care led by midwife and GP (Centering Pregnancy Model)</li> <li>Collaborative postpartum care (PHN's, lactation consultant, midwives and physicians)</li> <li><b>Midwifery outreach to Trail catchment (Grand Forks, Castlegar, Salmo etc.) for prenatal care + care provider education</b></li> </ul>	<p>Option 1: Pooled fee for service</p> <p>Option 2: Physician fee for service, midwife service contract</p> <p>Option 3: Partial pooled fee for service + service contract (i.e. 0.4 for FOBC work and outreach)</p>	<ul style="list-style-type: none"> <li>Increased call coverage for FOBC</li> <li>Increased sustainability</li> <li>Midwifery care in Trail</li> <li>Enhance image of KBRH maternity</li> <li>Potential repatriation of women currently going to Nelson for midwifery care</li> <li>Availability of home birth in Trail (repatriation of women traveling for midwifery care in outlying communities)</li> <li>Innovative models of prenatal and postpartum care</li> <li>Collaborative learning between care providers</li> <li>Increased choices for women</li> <li><b>Outreach to under-serviced communities</b></li> </ul>	<ul style="list-style-type: none"> <li>Recruitment of midwife</li> <li>Midwives' limited scope of practice</li> <li>No choice to opt out of midwifery care in FOBC</li> <li>Challenges to sustainability of midwife doing FOBC call + independent practice call</li> <li><b>Increased travel time/time away from community practice for midwives</b></li> </ul>

### Feasibility Issues

- Regulatory Issues (see Model A for details)
  - No home birth
  - No continuity of care
  - Short prenatal visits
  - No in-home postpartum care
- Professional Issues (see Model A for details)
  - Recruitment & retention of midwives
  - Salaried/contract position – contract position is preferred by MABC
  - Attractiveness of position to midwives
  - Ability to find a midwife to practice under contracted scope of practice
  - Feasibility of fee for service billing
  - Challenge of appropriate coverage for time off call (eg. CME, holidays), including possibly providing temporary privileges to midwives in Nelson to help cover holiday time
  - Challenge of designating the “most responsible person”**
- Communication
  - Challenge of having a system for sharing medical records during shared call
  - For outreach: communication plan between midwives and care providers in Trail (i.e. PHN's)**

4. Logistics of shared care led by GP and midwife
  - Different approaches to informed consent
  - Conceptual barriers to Centering Pregnancy for vulnerable population
  - Understanding each other's scope of practice
  - Tracking system for care, billing, and sharing medical records
  - Challenge of developing shared philosophy of care
5. Travel
  - **Cost (financial and time) to midwives, including remuneration**
  - **Stress of being away from Trail and on call for births concurrently**
  - **Doing home birth in Castlegar and Grand Forks**
  - **Road conditions in the winter**

## Participants' Impressions of Model C

### *Attributes*

"If the midwives were able to do a clinic somehow or other to capture that Grand Forks population, that would be huge." (Participant 009:201)

"I think midwives should care for their own patients because that's what their patients would want. That's what midwifery is. And if GPs want the midwives to share call, it should be the GP patients that they're sharing call with." (FG 003:468-474)

*Regarding birth in outlying communities without local cesarean back-up:*

"As long as the patients are fully informed and there's informed consent there, and know the risks they're taking." (Participant 015:336)

## Model D

### Independent Midwifery & Physician Practices [parallel practice]

Description	Funding	Perceived Benefits	Perceived Costs
<ul style="list-style-type: none"> <li>FOBC call group staffed by physicians</li> <li>Independent community-based full scope midwifery practice</li> <li>Minimum 2 midwives</li> </ul>	<ul style="list-style-type: none"> <li>Fee for service</li> </ul>	<ul style="list-style-type: none"> <li>Increased choices for women</li> <li>Midwifery care in Trail</li> <li>Potential repatriation of women currently going to Nelson for midwifery care</li> <li>Ability to meet the needs of orphan patients from outlying communities</li> <li>Enhance levels of care in the regional hospital [midwives/ doctors/ OBs/ pediatrician]</li> </ul>	<ul style="list-style-type: none"> <li>Questions around sustainability of FOBC without on call funding</li> <li>Potential for decrease in FOBC patients</li> </ul>

### Feasibility Issues

- Volume
  - In the Trail catchment, there is an average of 290 annual births
  - a full 2-person midwifery practice consists of 80 births
  - this leaves 210 births for the FOBC call group
  - Based on this annual volume, there would be 0.58 births per day for the FOBC call group
  - (OBC desired call 1:6 =  $210 \text{ births} / 365 \text{ days} = 0.58$ )
  - Physicians in the 1 in 6 call group would each attend 34.8 births per year
  - $0.58 \times 60 \text{ [days of call/year]} = 34.8$
- Professional Issues
  - Challenge of appropriate coverage for time off-call (eg. CME, holidays)
- Financial
  - Cost of establishing a midwifery practice due to inability to bill for first few months

### Participants' Impressions of Model D

#### Attributes

"There are I think at least 40 women a year, patients from our area, mostly Rossland, who deliver in Nelson because they want midwives. So if we're getting those back here, then the few that wanted GP care only could certainly, they'd have the capacity." (Participant 001:208)

#### Concerns

"I don't know ... if studies have been about what happens to family practice models when a midwife arrives in a community. If women suddenly will all migrate to the midwife, and the family physicians will end up shutting their office? Or will the patients then not want to go to the midwife and end up seeing the family physician. So I don't know if a theoretical model has been developed, or even a real model." (Participant 008:212)

## Model E

### One-to-One GP Care and Community Midwifery Practice

Description	Funding	Perceived Benefits	Perceived Costs
<ul style="list-style-type: none"> <li>One-to-one GP care for women</li> <li>Full scope community midwifery practice</li> </ul>	Fee for service	<ul style="list-style-type: none"> <li>Increased choices for women</li> <li>Continuity of care for women accessing either model of care</li> </ul>	<ul style="list-style-type: none"> <li>Onerous on call requirements for physicians</li> <li>Lack of flexibility to incorporate orphan patients into Trail practice models</li> </ul>

#### Feasibility Issues

- Professional Issues
  - Challenge of appropriate coverage for time off-call (eg. CME, holidays)
- Financial
  - Cost of establishing a midwifery practice due to inability to bill for first few months

#### Participants' Impressions of Model E

##### Attributes

"It would be my dream to go back to one-to-one call. It would be my dream! I used to just do my own deliveries and it was lovely. I saw patients, knew their husbands, knew their fears... it was ideal."  
(Participant 12:184-187)

"I don't know if mixing family physicians and midwives together would dilute what each of their special skills would be, right. And that something is lost from the family physician air, that person who delivered that child, looks at that child through that child's adolescence, delivers that child, and looks after them into their age. As opposed to the midwife who's been intimately associated through hour long discussions, through home visits, through home birth for instance. And how these things [distinct models of care] could mesh is not clear to me. I think both of them are valuable, I think both of them are sustainable, I think both of them are the right way to look after patients. But I think at one level patients have an opportunity to choose, and if those models are mixed then the patients are losing things from both of them."  
(Participant 008:210)

"It still makes you feel good to know that you trust the person who has been with you throughout the whole process, who is going to be there."  
(Focus Group 006:233)



## E. Recommendations

The key issue emerging from this study was the need to address underlying difficulties that currently threaten the sustainability of rural maternity care in Trail and across rural BC, the most glaring being the exclusion of family physicians doing obstetrical care from on-call funding through the province's 2002 MOCAP agreement. Inadequate funding must be addressed for rural midwives as well who also face numerous financial disincentives to starting up practice and maintaining a geographically broad catchment due to travel costs, not to mention the significant implications of transferring women out of their care during labour and delivery. Once these underlying issues are resolved, the KBRH catchment will be able to work inclusively to determine the most efficacious model of integrating midwives into the community from the array of suggestions provided, guided in part by the recommendations that follow.

### 1. Recruitment and retention of rural GPs doing maternity care through on-call funding

Rural primary care practitioners are leaving maternity practice due to opportunities for remuneration in other specialty call groups and the lack of remuneration for obstetric call. Care providers in referral communities are now responsible for being on-call for the deliveries of "orphaned patients" due to the closure of services in satellite communities. This is in addition to the deliveries of women in their local practice. The introduction of midwives to rural communities will contribute to meeting the needs of rural birthing women. Rural maternity care has been disincented due to competing on-call payments. There needs to be fair remuneration in rural communities in order for maternity care to be competitive with other on-call groups. On-call remuneration for primary care maternity call must be implemented province-wide.

#### *Rural Maternity Care On-Call Stipend*

- All care providers who practice in rural communities (mixed model service and under) should be paid for primary care maternity on-call work.

"In the nurse-practitioner model where they're funded through the Health Authority there's no threat to physicians' income or the fee-for-service model."  
[Participant 10:896]

- This stipend would apply to physician call groups in mixed model communities (obstetrician supported by GP Surgeon or GP Obstetrician), communities with GP Surgeon- or GP Obstetrician-led call groups, and communities with call groups of primary care providers (there are 35 such communities in British Columbia; see Figure 4 below).
- This recommendation would be strengthened by an on-call stipend for maternity care nurses.



Figure 4

### Formula

The Rural Primary Care Maternity On-Call Stipend is based on current Medical On-Call Availability Program (MOCAP) payment levels, with the assumption that the 35 eligible rural BC communities provide Level 1 MOCAP on-call services. Care providers will receive only one stream of funding per on-call shift (i.e. a physician on-call for maternity care may not also receive MOCAP payments for her Emergency or Anesthesia call groups during that shift).

### Rural Primary Maternity Care On-Call Stipend

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<p>Total Provincial Stipend</p> <div style="background-color: #e0f2f1; padding: 10px; display: inline-block;"> <math display="block">\\$225,000^1 \times 35^2 =</math> <math display="block">\\$7,875,000</math> </div>	<p>→</p>	<p>Annual Stipend per Physician</p> <div style="background-color: #e0f2f1; padding: 10px; display: inline-block;"> <math display="block">\\$225,000 / 3^3 =</math> <math display="block">\\$75,000</math> </div>
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**Note**

1. Level 1 MOCAP annual call group payment
2. # of communities that provide maternity care without a full specialist service
3. Typical # of providers within rural maternity call group

### *Anticipated Implications*

The introduction of on-call payment for rural primary care maternity coverage will have a profound effect on the retention, recruitment, and repatriation of rural maternity care providers. This stipend will lead to more sustainable practice for rural maternity care providers and the sustainability of regional care centres. The improved sustainability of rural physician maternity care underpins sustainable rural midwifery care and is necessary as we work towards integrating midwives into rural communities.

## **2. Start-Up Stipend for Rural Midwives**

Midwives face onerous start-up costs in new communities. There needs to be fair remuneration for midwives starting practice. This solution comes from a rural evidence base; it may be applicable in an urban environment.

### *Start-Up Stipend for Rural Midwives (see Figure 5)*

- All midwives who commit to set up a practice in a rural community should receive a start-up stipend.
- Additional funding may be required for travel due to the geographic realities of providing home based care in rural catchments.
- Funding must be made available for locum coverage in rural communities to increase sustainability of permanent care providers.

### *Formula*

- Rural midwifery practice = 40 births/year (3.3 births/month)
- Billing paid per trimester = \$225 each for first and second trimester
- Labour/delivery (L&D) fee and third trimester = \$1450
- Postpartum fee = \$1000 each

“The old funding models are so rigid; they’re often a huge barrier to collaboration.”  
[Participant 10:971]

**Proposed start-up stipend for rural midwives**

	Month											
# Clients	1	2	3	4	5	6	7	8	9	10	11	12
4		900			900			5800	4000			
8		900	900			900		5800	5800	4000		
12			900	900			900			5800	4000	
16				900	900			900			5800	4000
20					900	900			900			5800
24						900				900		
28							900				900	
32								900				900
36									900			
40										900		
44											900	
Service billing	0	900	900	900	1800	1800	1800	7600	11600	11600	11600	11600
Start-up stipend	3000	2100	2100	2100	1200	1200	1200	0	0	0	0	0

Total anticipated stipend = \$12,900

**Fee per client**

- First trimester ~\$225
- Second trimester ~\$225
- Third trimester + birth ~\$1450
- Postpartum ~\$1000

- Income of \$3000 per month (approx. one course of care) from combination of start-up stipend and practice fees over first 7 months until practice becomes financially lucrative.
- Model based on focus group consultation with rural midwives in British Columbia. The focus group emphasized that this calculation should be considered the minimum for a start-up stipend.
- Model based on no clients coming into care late in pregnancy when midwifery care becomes available in the community.
- Model based on approximate 2008 billing fees

**Figure 5**

*Anticipated Implications*

The introduction of start-up funding for rural midwives will increase the feasibility of midwifery practice in communities that have never had midwifery care. Travel subsidies will contribute to the fair remuneration of midwife travel in dispersed rural catchments, enabling them to do outreach to women whose communities are under-served due to hospital closure. Funding support for rural midwifery locums will increase the sustainability of rural midwifery practice due to providing time off call and away from the community.

**3. Increased Mechanisms of Communication between KBRH and Community-Based Care Providers in Trail and Satellite Communities**

New mechanisms must be developed for efficacious communication and inclusion in decision-making between professions and with non-KBRH care providers in Trail and in the outlying communities with the goal of providing ‘seamless care’ to parturient women. This may be facilitated by the Inter-professional Practice Committee at KBRH if membership can include representation from satellite communities. Also, the introduction of MORE OB

should be considered as an established mechanism achieving these ends.

#### 4. A Regional Approach to Supporting Midwives

The development of a regionally-based cohesive group to support the integration of new midwives into the Kootenay Boundary Service Delivery Area and other jurisdictions in Interior Health is necessary to support new midwife practitioners. Formation of a regional “community of practice”<sup>101</sup> can support the development of regional policies around privileging, CME and quality assurance, as well as provide mentorship and collegial support to new practitioners. This will also increase efficiency for committee work by providing a larger cohort to draw on. Mechanisms of engagement may include regular face to face meetings for relationship building and subsequent teleconference calls.

A subsequent facet of a regionally-based approach may involve establishing immediate linkages with Nelson regarding their experiences of integrating midwives into the community and engaging Nelson midwives in early discussions regarding how they could contribute to establishing sustainable midwifery in Trail.

#### 5. Allocation of Resources to Facilitate the Introduction of Midwifery

- The designation of a resource person for a tenure of not less than 6 months will contribute to a smoother process of integration. Tasks can include liaising with other care providers (including but not limited to physicians, labour and delivery and community health nurses, and lactation consultants); facilitating educational sessions regarding the role (model of care, scope of practice) of midwives with providers, administrators, and community members in Trail and outlying communities; and overseeing conflict resolution where necessary.
- The development of community-specific written material appropriately targeted to community members and practitioners to introduce midwifery and provide answers to ‘Frequently Asked Questions’ will contribute to a greater understanding of the role midwives can play in BC’s health care

“It is important if a midwife or two are moving into Trail that they feel like they have support. Because I think it would be very difficult going into that setting without knowing there was midwifery support.” [FG 04:637]

system.

**6. Inclusive Process to Determine the Model of Inter-professional Care in Trail**

Discussions regarding the model of inter-professional practice within the community must involve key stakeholders from all care provider groups (including midwifery), administration, and community. Regular discussions will contribute to greater clarity around community need and the most appropriate way to meet the need within the context of KBRH.

**7. Establishing a Long-Term Approach to the Introduction of Midwifery in Trail**

Although variations to standard models of practice may be required to meet the unique needs of the KBRH catchment, and these nuances may need development and modification over time, the integration of midwifery in Trail should be approached as a long-term health service delivery option. Pilot projects to evaluate the viability of midwifery care within this context may contribute disruption to the population and the destabilization of existing services.

**8. Ongoing Evaluation of Outcomes**

Subsequent to recommendation 7, the introduction of midwifery in Trail should be subject to clear methods for evaluation for the purposes of on-going quality improvement in accordance with regulatory, regional, and provincial standards. Evaluation criteria should be mutually determined by all key stakeholders but at a minimum should include relevant maternal and newborn health indicators as well as population and care-provider satisfaction.



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