

# Rural and Remote Maternity Care in Ontario: Analysis and Recommendations

Association of Ontario Midwives

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#### **Executive Summary**

This report summarizes the findings of a Ministry of Health funded research project conducted by the Association of Ontario Midwives (AOM) between April 2014, and March, 2015. The aim of the project was to identify challenges to providing maternity care in rural and remote communities and develop recommendations for how to strengthen maternity care in these communities. The project involved four components: a literature review, interviews with four experts in the field of rural and remote maternity care, a survey of rural and remote midwifery clients, and a consultation with rural and remote midwives.

There is a great deal of variation in availability of health services in rural and remote communities. A growing trend in rural Ontario is the centralization of health services towards regional centres, which often results in the closure of maternity care units. When women need to leave their community to access maternity care or to give birth (in the case of a maternity ward closure or routine evacuation policy), it can result in adverse health outcomes for mother and child, undue stress and trauma, and a negative impact the community's sense of cohesiveness and wellbeing. Individuals living in rural and remote communities may face several challenges accessing maternity care including: transportation, availability of health services, linguistic and culturally limited care, and financial burdens.

Recruiting and retaining health professionals remains a significant challenge in small communities where caseloads may be low. While physicians, nurses and midwives all have government funded initiatives to support recruitment and retention to rural and remote communities, these programs are inequitably distributed amongst the different professions. It is important to have a wide range of health care providers in communities to ensure that a full range of services is offered.

Midwives who wish to practice in a rural or remote community often face many difficulties, including recruiting and retaining midwives and skilled second attendants, maintaining sufficient caseload when birth rates fluctuate, managing clients across large catchment areas, long driving distances, accessing locum coverage, negotiating hospital privileges at small rural hospitals, and insufficient funding to cover the additional costs associated with running a rural or remote midwifery practice.

In order to address the rural and remote maternity care challenges outlined in this report and to strengthen maternity care in rural, remote and northern communities in Ontario, the AOM puts forward the following eight recommendations as informed by the Rural and Northern Health Care Framework, health provider professional organizations, and the primary research conducted as part of this grant:

- 1) Women should have access to high quality maternity care as close to home as possible in all rural, remote and northern communities.
- 2) Local perspectives and needs should be taken into account in rural and remote health care planning.
- 3) The right to self-determination and culturally safe care must be upheld in Aboriginal communities.
- 4) Interprofessional care should be supported through appropriate funding, training, and systems-level supports.
- 5) Equitable recruitment and retention initiatives should be implemented for all health care providers interested in working in rural, remote and northern communities.
- 6) Training opportunities for new and experienced health providers need to be offered in rural and remote communities.
- 7) Rural and remote midwifery funding frameworks must reflect the realities of practicing in these areas.
- 8) Ongoing monitoring is essential to understanding health needs and outcomes in rural, remote and northern communities.

#### Introduction

In Ontario, 1.9 million people, or 14.1% of the population, live in rural regions.¹ Individuals living in rural areas have a lower life expectancy at birth, higher all-cause mortality, and worse self-rated health compared to urban Ontarians.² When it comes to maternal and newborn outcomes, these geographic health disparities tend to persist. For example, for rural women, the rate of severe maternal morbidity is higher than for urban women (2.4% versus 1.7%).³

This report seeks to capture the state of rural and remote maternity care in Ontario, and Canada more generally, in order to better understand the specific challenges facing the rural or remote midwifery sector, and how to best address these issues. First, the concepts of rural and remote will be defined, followed by a brief overview of the availability of general health services in rural and remote communities, and a discussion of the key issues facing rural and remote communities in accessing care. Next, the various funding models and incentives for rural and remote health care providers will be addressed, as well as challenges specific to midwifery service provision. Finally, the report will conclude with recommendations for how to best support quality maternity care in rural and remote communities.

#### Methodology

The Association of Ontario Midwives (AOM) completed a Ministry of Health funded research project between 2014-2015 to identify challenges to providing maternity care in rural and remote communities and develop recommendations for how to strengthen maternity care in these communities. The project involved four components:

- 1. A literature review of academic and grey literature was completed in fall, 2014.
- 2. The AOM conducted interviews with four key experts in the field of rural and remote maternity care: Judy Rogers, RM, Lisa Graves, MD, Richard Graves, MD, and Ivy Bourgeault, PhD.
- 3. Over 330 rural and remote midwifery clients completed an online survey by the AOM about their experiences accessing maternity care in their communities in December, 2014.
- 4. The AOM hosted two consultations with midwives who work in rural, remote and northern communities in November, 2014.

<sup>&</sup>lt;sup>1</sup> Statistics Canada. Population, urban and rural, by province and territory (Ontario) [Internet]. 2011 [updated Feb 4, 2011; cited Aug 19, 2014]. Available from: <a href="http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62g-eng.htm">http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/demo62g-eng.htm</a>

<sup>&</sup>lt;sup>2</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>3</sup> Canadian Institutes for Health Information. Hospital Births in Canada: A Focus on Women Living in Rural and Remote Areas. 2013. Available from: <a href="http://www.cihi.ca/cihi-ext-portal/pdf/internet/BIRTH2013">http://www.cihi.ca/cihi-ext-portal/pdf/internet/BIRTH2013</a> SUMMARY EN

#### **Defining Rural and Remote**

Rurality and remoteness can be defined in multitude of ways. Definitions vary according to geographic parameters and characteristics of the community. The lines between rural, remote and northern often vary according to the definition, and these terms are often conflated in the literature. One of the simplest definitions comes from the Canadian Institute for Health Information (CIHI), which defines a rural community having a population less than 10,000 persons. The Government of Ontario has a higher population threshold for determining a rural community (less than 30,000 people), and also adds that rural communities are greater than 30 minutes away in travel time from a community with a population of more than 30,000. Remote communities are defined by the Government of Ontario as being without year-round road access, or reliant on a third party (such as train, airplane or ferry) for transportation to a larger centre.

The Society of Rural Physicians of Canada (SRPC) defines a rural community operationally using Leduc's General Practice Rurality Index, which assigns scores based on distance from closest advanced and basic referral centre, catchment population size, number of general practitioners (GPs) and presence of an acute care hospital. According to the SRPC, rural communities are typically serviced by general practitioners or family physicians with limited or distant access to specialist resources and high technology health facilities. A remote community then, is one that is 80-400 km from a major regional hospital, and a rural isolated community is defined as being more than 400 km away.

In the midwifery sector, the Ministry of Health and Long Term Care (MOHLTC) uses the Rurality Index of Ontario (RIO) to define rural and remote communities. The Rurality Index is measured as a function of community population and density, time travel to nearest basic referral centre, and time travel to nearest advanced referral centre. According to the midwifery funding agreement, a rural midwifery practice has its main clinical site, or a Ministry approved satellite site, in a location that has a either 2008 RIO score of 25 or greater, or a 2008 RIO score of 20 or greater with 35% of the main clinical client population having a RIO score of 25 of greater,

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>6</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011

<sup>&</sup>lt;sup>7</sup> Society of Rural Physicians of Canada. Rural Obstetrics – Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 1998; 3(2):75.

<sup>&</sup>lt;sup>8</sup> Society of Rural Physicians of Canada. Rural Obstetrics – Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 1998; 3(2):75.

<sup>&</sup>lt;sup>9</sup> Ibid.

<sup>&</sup>lt;sup>10</sup> Kralj B. Measuring Rurality - RIO2008\_BASIC: Methodology and Results. Ontario: Ontario Medical Association. 2009. Available from: <a href="https://www.oma.org/Resources/Documents/2008RIO-FullTechnicalPaper.pdf">https://www.oma.org/Resources/Documents/2008RIO-FullTechnicalPaper.pdf</a>

or a 2008 RIO score of 20 or greater with 35% of the main clinical client population having a RIO score of 45 of greater.

The midwifery funding agreement also specifies two other types of practices. Small rural midwifery practices are defined as having two or fewer midwives with a combined total of 95 or fewer courses of care per year. A remote midwifery practice has its main clinical site or a Ministry approved funded satellite site in a northern Ontario location or that has a RIO score of 50 or greater *and* has a caseload of at least 35% of clients with a RIO score of at least 50. The MOHLTC defines "northern Ontario" as encompassing the following 10 territorial districts (145 municipalities): Kenora, Rainy River, Thunder Bay, Cochrane, Algoma, Sudbury, Timiskaming, Nipissing, Manitoulin and Parry Sound.<sup>11</sup>

#### **Availability and Accessibility of Health Services**

#### **Availability of Services**

There is a great deal of variation in availability of health services in rural and remote communities. Some communities may a hospital equipped with obstetrical facilities in town, or nearby, while others may need to travel quite a distance to access the nearest hospital. As of 2006, there were 62 "very small hospitals" (less than 1,500 inpatients per year) and 31 "small" hospitals (1500-3,999 inpatients per year) in rural Ontario. Rural hospitals vary in terms of the trauma and operative services offered, depending on the availability and training of medical staff and equipment.

Family physicians and general practitioners may operate solo practices in rural and remote communities, or practice in a Family Health Team model. There are 68 Family Health Teams serving rural communities and 42 Family Health Teams in northern communities. Nurses in rural communities may work at a local hospital, health centre or physician's office. In more remote communities, Health Canada operates nursing stations where registered nurses triage patients and decide the course of action for getting the patient the most appropriate care. In Ontario, there are 19 nursing stations.

<sup>&</sup>lt;sup>11</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>12</sup> JPPC Multi-Site/Small Hospitals Advisory Group. The Core Service Role of Small Hospitals in Ontario. Toronto, ON: Ontario Joint Policy and Planning Committee (JPPC); 2006. Available from: http://ruralontarioinstitute.ca/file.aspx?id=06f58a3b-ee30-46eb-84c2-e5ee1b718733

<sup>&</sup>lt;sup>13</sup> Ministry of Health and Long Term Care. Family Health Teams [Internet]. 2014 [updated Jul 8, 2014; cited Aug 17, 2014]. Available from: http://www.health.gov.on.ca/en/pro/programs/fht/

<sup>&</sup>lt;sup>14</sup> Health Canada. Audit of Primary Care Nursing Services. 2010 [archived June 24, 2013; cited August 20, 2014]. Available from: http://www.hc-sc.gc.ca/ahc-asc/alt\_formats/pdf/pubs/audit-verif/2010-06/final-audit-201-rapport-final-eng.pdf <sup>15</sup> lbid.

In terms of maternity care across Canada, pregnant women in rural communities are more likely to have a family physician attend their delivery than urban women (44.8% vs. 26%) and less likely to be attended by an obstetrician (57.7 vs. 79.1%) or a midwife (4% vs. 5.7%). However, in Ontario, the percentage of rural and remote births being attended by a midwife may be higher than is captured in the previous statistic. Midwives attend 12.3% of the total births in Ontario, but this percentage is not stratified by whether the birth took place in an urban or rural area. As of March, 2014, there were 8 Midwifery Practice Groups (with 14 midwives total) in remote communities and 15 Midwifery Practice Groups in rural communities (with 68 midwives total). The number of midwives in rural and remote communities is growing; the number of rural and remote midwifery practice groups grew from 18 to 23 between 2010 and 2014.

In a survey of rural and remote midwifery clients in Ontario conducted by the AOM in December, 2014, 48.4% of the 330 respondents indicated that they were very satisfied with the availability of maternity services in or near their community, 23.4% were satisfied, 14.9% were somewhat satisfied, 6.8% were somewhat dissatisfied, 4.0% were dissatisfied, and 2.4% were very dissatisfied. Many participants noted that they were initially unable to get a midwife or were only able to get a midwife midway through their pregnancy due to midwifery wait lists. While the proportion of rural and remote births being attended by a midwife in Ontario is unknown, it is clear that midwives play an important role in maternal and newborn care in rural, remote and northern communities in Ontario.

#### Challenges to Health Care Planning

Due to the diversity of services offered in rural and remote communities, it can be a challenge to ensure both access and quality to all communities across the province. Recruiting and retaining health professionals remains a significant challenge in small communities where case loads may be low. When a community only has one or two health professionals available, it can be difficult for residents of rural and remote communities to access cultural and linguistically appropriate services. Because rural and remote communities span vast geographic areas with small populations, there can be inter-sectoral and cross-jurisdictional challenges of providing adequate care, including fragmented funding, management and coordination of different parts of the health care system. While the province offers many incentive programs to support

<sup>&</sup>lt;sup>16</sup> Canadian Institutes for Health Information. Hospital Births in Canada: A Focus on Women Living in Rural and Remote Areas. 2013. Available from: http://www.cihi.ca/cihi-ext-portal/pdf/internet/BIRTH2013 SUMMARY EN

<sup>&</sup>lt;sup>17</sup> Association of Ontario Midwives. 2013.

<sup>&</sup>lt;sup>18</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>19</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

health care providers in rural and remote contexts (which will be discussed in the forthcoming section), policies regarding the health system are made at the provincial level, and can often lack the perspective or rural/local residents.<sup>20</sup>

#### **Centralization of Maternity Services**

A growing trend in rural Ontario is the centralization of health services towards regional centres, which often results in the closing of maternity care units. A study conducted in 1999 found a 500% reduction in the number of general hospitals offering obstetrical services in the province.<sup>21</sup> In 2003, the Southwestern Ontario Regional Perinatal Services Project Coordinating Committee identified 12 hospitals in the region no longer offering obstetrical care, and another 11 who may stop offering these services in the near future.<sup>22</sup> BORN data demonstrates that since 2011, another 5 hospitals across the province have ceased offering obstetrical services.<sup>23</sup>

More recently, in 2014, due to financial constraints, the Erie St. Clair Local Health Integration Network (LHIN) proposed closing the obstetrical unit at Leamington District Memorial Hospital.<sup>24</sup> The obstetrical unit costs \$1.4 million per year to operate, while the province provides only \$700,000 a year in funding.<sup>25</sup> This closure would not only eliminate the option of hospital births for women in the surrounding areas, but it would also make home births unfeasible due to the increase in distance from an obstetrical facility. As a result of public protests by the local midwives, midwifery clients, and community members, the LHIN stuck an expert panel to study the issue and identify potential solutions.

The trend towards closing local maternity units can be explained by numerous factors, including decreasing volumes of births, and shortages of anaesthesiologists, general surgeons, obstetricians, and trained nursing staff to provide intrapartum and newborn care. <sup>26</sup> In addition, occupational stress, perceived medico-legal risk, budgetary considerations, confidence in crisis

<sup>&</sup>lt;sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> Silversides A, Tepper J, Konkin J. Maternity services disappearing in rural Canada [Internet]. 2013 [updated May 16, 2013; cited Aug 17, 2014]. Available from: http://healthydebate.ca/2013/05/topic/wait-times-access-to-care/maternity-services-disappearing-in-rural-canada

<sup>&</sup>lt;sup>22</sup> Regional Perinatal Services Project Coordinating Committee. AT RISK: Perinatal Services in Southwestern Ontario Issue Summary and Recommendations for Action. London, ON: Regional Perinatal Services Project; 2003. Available from: http://www.lhsc.on.ca/About\_Us/SPL/projects/completed/SWOPP/finalrpt.pdf

<sup>&</sup>lt;sup>23</sup> Silversides A, Tepper J, Konkin J. Maternity services disappearing in rural Canada [Internet]. 2013 [updated May 16, 2013; cited Aug 17, 2014]. Available from: http://healthydebate.ca/2013/05/topic/wait-times-access-to-care/maternity-services-disappearing-in-rural-canada

<sup>&</sup>lt;sup>24</sup> Spalding, D. Leamington obstetrics closure threatens women's choice of home births. The Windsor Star [Internet]. 2015 Jan 8 [cited 2015 Jan 14]; Available from: http://blogs.windsorstar.com/news/leamington-obstetrics-closure-threatens-womens-choice-of-home-births

<sup>&</sup>lt;sup>25</sup> Ibid.

Regional Perinatal Services Project Coordinating Committee. AT RISK: Perinatal Services in Southwestern Ontario Issue Summary and Recommendations for Action. London, ON: Regional Perinatal Services Project. 2003. Available from: http://www.lhsc.on.ca/About\_Us/SPL/projects/completed/SWOPP/finalrpt.pdf

situations, and retirement of senior staff also help explain the closure trend.<sup>27</sup> Closing maternity wards often signal the loss of other services, including general surgery, anaesthesia and emergency services in smaller hospitals, which in turn makes it more difficult to offer any maternity services.<sup>28</sup>

As noted by Dr. Lisa Graves, Chief of Family Medicine at St. Michael's Hospital, in an interview with the AOM on January 6, 2015, rural maternity care is a canary in a coal mine; if it goes, other services in the community will follow suit. According to Dr. Graves, the trend towards rural obstetrical unit closures is often perpetuated by short-term planning without reference to the long-term implications. For instance, if one community loses a local hospital or its OB unit, the surrounding areas are equally affected in a domino effect. Rural communities can be deeply interconnected, and hospital closures can have far reaching implications. There can be a potential negative effect on recruiting young families to the region, losses to local businesses (due to work absences to travel to get care), and a disruption to the community's sense of place, a key health and wellness indicator.<sup>29</sup> The AOM survey of rural and remote midwifery clients indicates that the availability of maternity services impacted a small minority (9.54%) of participants' decisions about where to live. For these participants, they chose specifically to live in places with access to midwifery or in close proximity to a hospital to ensure they had access to maternity services. Some of these respondents relocated communities when they found the maternity services in their area to be insufficient.

There is evidence to suggest that health outcomes are better when women have access to local intrapartum care programs, regardless of whether there is on-site access to operative birth.<sup>30</sup> In other words, as the College of Family Physicians of Canada notes, a "limited rural maternity care program is superior to none."<sup>31</sup> A common concern about maintaining limited maternity services at the local level is that physicians will not see a delivery volume high enough to maintain their competence, but the Society of Rural Physicians of Canada refutes this claim by stating that there is no evidence that a minimum number of deliveries are required to ensure

31 Ibid.

<sup>&</sup>lt;sup>27</sup> College of Family Physicians of Canada (CFPC), Society of Rural Physicians of Canada, Society of Obstetricians and Gynecologists of Canada. Joint position paper on training for rural family practitioners in advanced maternity skills and cesarean section. Canadian Family Physician. 1999 October; 45

<sup>&</sup>lt;sup>28</sup> Silversides A, Tepper J, Konkin J. Maternity services disappearing in rural Canada [Internet]. 2013 [updated May 16, 2013; cited Aug 17, 2014]. Available from: http://healthydebate.ca/2013/05/topic/wait-times-access-to-care/maternity-services-disappearing-in-rural-canada

<sup>&</sup>lt;sup>29</sup> Miewald C, Klein M.C., Ulrich C, Butcher D, Estekhary S, Rosinski J, Procyk A. "You don't know what you've got till it's gone": the role of maternity care in community sustainability. Canadian Journal of Rural Medicine. 2001; 16(1)

<sup>&</sup>lt;sup>30</sup> College of Family Physicians of Canada, Society of Rural Physicians of Canada, Society of Obstetricians and Gynecologists of Canada. Joint position paper on training for rural family practitioners in advanced maternity skills and cesarean section. Canadian Family Physician. 1999 October; 45

competency.<sup>32</sup> Low volume providers tend to consult more when providing care, indicating that they need more supports than high volume providers, but this does not mean their competency is reduced.<sup>33</sup> It may be that breadth of experience is a more relevant predictor of competence than numbers of births attended per year. Klein et al. demonstrates this point further by showing that family physician delivery volumes are not associated with adverse outcomes for mothers or newborns.<sup>34</sup>

#### **Transportation and Travel**

Women in rural and remote communities often have to travel significant distances to access maternity care. In the AOM survey of rural and remote midwifery clients, 28.9% of respondents had to travel between 30 minutes to one hour to the midwifery clinic where they were a client, and 9.6% had to travel over an hour. For some survey participants long travel times are a quintessential aspect of rural living. However, for others it presented a significant challenge. As one participant explained,

"I had to take full days of work off to go to every prenatal appointment I had, and near the end of my pregnancy, the long travel days were exhausting and added additional stress – luckily I was pregnant in the summer months and not in the winter. Having to travel during the winter months would have been even more stressful with the state of road conditions."

Longer travel times can have an adverse effect on health outcomes. When women have to travel more than 2 hours for maternity care, they are at a higher risk for preterm labour, large for gestational age births<sup>35</sup> and neonatal asphyxia.<sup>36</sup> Lacking access to local maternity services also increases the risk of unplanned out-of-hospital delivery or induction.<sup>37</sup> In order to avoid unsafe driving conditions during labour, Dr. Ivy Bourgeault, professor at University of Ottawa and Canadian Institutes of Health Research (CIHR) Chair in Gender in Work and Health Human Resources, noted in an interview with the AOM on October 9, 2014 that women in rural

<sup>&</sup>lt;sup>32</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

<sup>33</sup> Interview with Dr. Lisa Graves, January 6, 2015

<sup>&</sup>lt;sup>34</sup> Klein M.C., Spence A, Kaczorowski J, Kelly A, Gryzbowski S. Does delivery volume of family physicians predict maternal and newborn outcome? Canadian Medical Association Journal. 2002; 166(10):1257-63.

<sup>&</sup>lt;sup>35</sup> Canadian Institutes for Health Information. Hospital Births in Canada: A Focus on Women Living in Rural and Remote Areas. 2013. Available from: <a href="http://www.cihi.ca/cihi-ext-portal/pdf/internet/BIRTH2013">http://www.cihi.ca/cihi-ext-portal/pdf/internet/BIRTH2013</a> SUMMARY EN

<sup>&</sup>lt;sup>36</sup> Miewald C, Klein M.C., Ulrich C, Butcher D, Estekhary S, Rosinski J, Procyk A. "You don't know what you've got till it's gone": the role of maternity care in community sustainability. Canadian Journal of Rural Medicine. 2001; 16(1)

<sup>&</sup>lt;sup>37</sup> Grzybowski S, Stroll, K, Kornelson J. Distance matters: a population based study examining access to maternity services for rural women. BMC Health Services Research. 2011; 11:147.

and remote communities may be more likely to schedule a c-section or plan their pregnancy to have a summer due date.

Multiple midwives noted in the AOM-led consultation in November, 2014 that clients living in poverty tend to choose home births to avoid the high costs of travelling to give birth. When travel to a clinic or lab can cost upwards of \$100 per direction, many clients will cancel appointments or forgo lab work to avoid the high travel costs, putting them at risk for adverse health outcomes. This sentiment is echoed in the following survey participant's response:

"If we had been required to travel to the nearest larger centre, it would have been a 3 hour drive. We would have gone to fewer appointments..."

When it comes to delivery, women who do not live in close proximity to a hospital equipped with emergency obstetrical services must often leave their community of residence to give birth. In the AOM survey of rural and remote midwifery clients, 12.7% of respondents reported having to leave their community to give birth. Of these respondents, 51.4% traveled between 30 minutes to one hour, 34.3% between one to two hours and 5.7% had to travel more than two hours to give birth. While travel grants exist to support women who have to travel outside their community to access care, these funds are typically only available to women in the far north and at the referral of a physician. Those who are socioeconomically disadvantaged face additional challenges such as accessing transportation, getting paid time off work, and finding childcare.<sup>38</sup> The travel reimbursements may only cover one night of accommodation, which can be an issue in unforeseen travel circumstances, such as poor weather.<sup>39</sup> Of the AOM survey respondents who had to leave their community to give birth, 30.6% stayed for 1-2 days, 25% between 3-6 days, and 11% stayed in the place where they gave birth for over 7 days.

For many of the respondents who completed the AOM's survey, leaving their community to give birth was well justified by receiving care in a high quality facility and their successful birth and a healthy baby. However, for many women having to leave their community is both emotionally and financially draining. Respondents noted:

"...In the later stages of my pregnancy it was very stressful thinking about when to leave for the hospital in order to get there in time. I live 2.5 hours from the hospital and so I didn't want to leave it too late and I was nervous that I may not have enough time – not to mention that driving for long periods of time in labour is a horrible experience. Most

<sup>&</sup>lt;sup>38</sup> Grzybowski S, Stroll K, Kornelson J. Distance matters: a population based study examining access to maternity services for rural women. BMC Health Services Research. 2011; 11:147.

<sup>&</sup>lt;sup>39</sup> Silversides A, Tepper J, Konkin J. Maternity services disappearing in rural Canada [Internet]. 2013 [updated May 16, 2013; cited Aug 17, 2014]. Available from: http://healthydebate.ca/2013/05/topic/wait-times-access-to-care/maternity-services-disappearing-in-rural-canada

people from my community actually stay in a hotel room for a week prior to their due date, however financially this wasn't possible for me."

"Community is where the support network is and my family (as well as myself) had to drive in snowstorm conditions to come support me. We had to rent a hotel near the hospital to avoid the 45 minute drive in snowstorm conditions going back and forth between induction techniques and monitoring."

The need for women to drive to a distant hospital to give birth must be differentiated from the routine evacuation of women from northern, remote and Aboriginal communities. This practice refers to the systematic policy that all women regardless of risk should be evacuated to a city with obstetrical services, since birth is deemed unsafe in certain communities. Although this issue is outside the scope of this analysis, it is important to understand a few of the implications of this practice. Removing women from their communities and support networks weeks before they give birth can be emotionally isolating and traumatic, and has been likened to being the Residential School of medicine.<sup>40</sup> This practice is not only costly to the health system, but also costly to families, in terms of childcare costs, loss of livelihood, and flights for companions.<sup>41</sup> Furthermore, routine evacuation risks the interruption of cultural and familial practice.<sup>42</sup> Not only can evacuation be an isolating and traumatic experience, it can also leave existing children at risk for violence in certain situations. Future analysis is needed to understand how northern Aboriginal communities in particular can be best supported to ensure birth stays in the community.

Traveling outside of one's community for maternity services can result in poorer outcomes for women and newborns; the elimination of continuity of care; the atrophy of other aspects of women's health care; withdrawal of family physicians from the community; loss of skill sets in remaining health care providers; and exodus of businesses and residents from the community. When asked whether it was important to have the option of giving birth in or near one's community of residence, 88% of AOM survey respondents indicated that it is. Accordingly, wherever possible, it is important to keep birth close to home, even in rural and remote communities where access to health care is challenging.

<sup>&</sup>lt;sup>40</sup> Payne E. Evacuating women out of remote communities to give birth is traumatic, harmful to communities and costly. So why is it still happening? [Internet]. 2010 [updated Nov 10; cited Aug 20, 2014]. Available from: http://media.knet.ca/node/10998 <sup>41</sup> lbid.

<sup>&</sup>lt;sup>42</sup> Ibid.

#### Health Care Provider Funding and Support

Despite the trend towards centralized maternity care, there are funding mechanisms and incentives provided by the MOHLTC in order to attract and retain qualified health care professionals to rural and remote communities. However, it is important to note that many of these incentives are not specific to maternity care, but aimed at recruiting health professionals for general practice.

#### **Physicians**

Physicians working under the Rural and Northern Physician Group Agreement are compensated through a blended complement model whereby physicians are funded to provide, coordinate and oversee the core primary health care services to all residents of a defined geographic area.<sup>43</sup> The physicians in the community are responsible for coordinating coverage so that there is 24/7 on-call coverage at the hospital.<sup>44</sup>

This model is available to identified communities with an "underserved designation" where there are 1-7 physicians working in the community.<sup>45</sup> As of 2011, there were 39 approved communities with 114 full time physicians working under the Rural and Northern Physician Group Agreement.<sup>46</sup> Physicians in this model are entitled to 27 days of locum coverage annually.<sup>47</sup> The funding is paid at a flat rate and is determined by the number of physicians working in the community<sup>48</sup>:

Group	Community Designation	Remuneration	Additional Notes
Group Two	one physician	\$197,000	For these communities additional funding for
	two physicians	\$186,000	overhead is paid An additional \$10,000 income applies for hospital or nursing home services
Group One	three physicians	\$211,500	For these communities overhead comes or of this remuneration.  An additional \$5,000 income applies for
	four physicians	\$211,500	
	five to seven physicians	\$201,000	minor surgical services (eg Sigmoidoscopy) \$5,000 for anaesthesia and \$2,500 for surgical assisting

<sup>&</sup>lt;sup>43</sup> Government of Ontario. Guide to Physician Compensation. Toronto, ON: Government of Ontario; 2009 September. Available from: http://www.health.gov.on.ca/en/pro/programs/fht/docs/fht compensation.pdf

<sup>&</sup>lt;sup>44</sup> Government of Ontario. Guide to Physician Compensation. Toronto, ON: Government of Ontario; 2009 September. Available from: http://www.health.gov.on.ca/en/pro/programs/fht/docs/fht\_compensation.pdf

<sup>45</sup> Ihid

<sup>&</sup>lt;sup>46</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>47</sup> Ibid.

<sup>&</sup>lt;sup>48</sup> Ibid.

In addition to the base level funding described above, physicians in communities with a RIO of 45 or higher are eligible for a premium of an annual \$5,000, with an additional \$1,000 premium for each additional increment of '5' in the RIO score of the community of practice.<sup>49</sup>

For on-call hospital work, physicians are funded through the Hospital on Call Coverage Program (HOCC). The HOCC provides premiums for rural physicians. Hospitals with a RIO greater than 45 receives an annual financial incentive of \$15,000 to fund General Practitioners on-call schedules, in addition to the base on-call funding set out in the MOHLTC-OMA agreement.<sup>50</sup>

In addition to base salaries and on-call fees, doctors in rural and remote communities may be eligible for several financial incentives to promote recruitment and retention.

Recruitment		
Free Tuition Program	Provides up to \$40,000, or \$10,000 per year, to final year medical students, residents and new physician graduates in exchange for full-	
o de la companya de l	time three or four year return of service commitment in an eligible underserviced/undersupplied community <sup>51</sup>	
Resident Placement	Funded by Underserviced Area Program (UAP), but coordinated in partnership with PAIRO, this program helps medical residents better understand the career opportunities available in the province and to select those positions that best meet personal and professional needs <sup>52</sup>	

<sup>&</sup>lt;sup>49</sup> Government of Ontario. Guide to Physician Compensation. Toronto, ON: Government of Ontario; 2009 September. Available from: http://www.health.gov.on.ca/en/pro/programs/fht/docs/fht\_compensation.pdf

<sup>&</sup>lt;sup>50</sup> Ministry of Health and Long Term Care. Hospital On-Call Coverage Program [Internet]. Toronto, ON. 2013 [updated Apr 6, 2013; cited Aug 20, 2014]. Available from: http://www.health.gov.on.ca/en/pro/programs/hocc/hocc\_guide.aspx#5

<sup>&</sup>lt;sup>51</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>52</sup> ibid

Rural Ontario Medical Program (ROMP)	Funded by the Ministry of Health and Long Term Care (MOHLTC), this initiative operates a learner placement program for Ontario's six medical universities. ROMP arranges core and elective rotations for medical trainees across south central Ontario in one-on-one learning situations with physician preceptors. It is ROMP's hope that, through creating "home-grown" physicians, it can help the communities ease the burden caused by the nation-wide physician shortage <sup>53</sup>
Rural Northern Initiative (RNI)	Brings physicians who are teaching at the University of Toronto and PGY-3 (final year residents) to Rural Northern Physician Group Agreement (RNPGA) communities to provide additional short term locum coverage <sup>54</sup>
Community Assessment Visit Program	Provides reimbursement for travel and accommodation expenses within Ontario, for a physician or rehabilitation professionals and spouse to visit Ministry designated underserved communities for the purpose of exploring practice opportunities <sup>55</sup>
GP Locum Program	Provides temporary GP/FP services to designated underserviced communities in northern Ontario until a permanent physician can be recruited. This program also provides physicians with exposure to working in a northern community in order to assess their desirability of relocating to the north on a permanent basis <sup>56</sup>
Northern and Rural Recruitment and Retention Initiative Funding	Offers financial incentives to eligible physicians for establishing a full-time practice in an eligible community of the province (must have a RIO score greater than 40). The grants range between \$80,000 and \$117,600, and are paid over a four-year period. The physicians will be required to practice full-time comprehensive care for four years in the community, holding hospital privileges and working in a primary care model (i.e. Family Health Team) where available and appropriate <sup>57</sup>

<sup>&</sup>lt;sup>53</sup> Rural Ontario Medical Program. Welcome [Internet]. 2014 [cited Aug 26, 2014]. Available from: http://www.romponline.com

<sup>&</sup>lt;sup>54</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>55</sup> ibid

<sup>56</sup> ibid

<sup>&</sup>lt;sup>57</sup> Health Force Ontario. Compensation and Incentives. Ontario: Health Force Ontario; 2011. Available from: http://www.healthforceontario.ca/UserFiles/file/Floating/Program/Practice\_U/practice-u-compensation-incentives-dec-2011-en.pdf

Relocation Funding	Provides \$40,000 over four years to GPs/FPs and psychiatrists who
	relocate to designated northern communities, or \$15,000 paid over 4
	years to GPs/FPs who relocate to designated southern communities.
	Specialists are eligible for \$20,000 paid over 4 for relocating to a
	designated northern community, plus a \$20,000 bonus if the specialist
	provides a minimum of 12 days of outreach each year. Audiologists,
	chiropodists, occupational therapists, physiotherapists and speech-
	language pathologists who relocate to fill full-time MOHLTC fully-
	funded positions in UAP approved vacancies in northern Ontario are
	eligible for \$15,000 paid over 3 years <sup>58</sup>
	Retention
	Refermon
The Northern	Established as an initiative under the 2000 Ontario Medical Association
Physician Retention	(OMA) Framework Agreement, this initiative enables eligible physicians
Initiative (NPRI)	in northern Ontario to receive the equivalent of a \$7,000 retention
	incentive paid at the end of each fiscal year in which they continue to
	practice full-time in northern Ontario <sup>59</sup>
Health Force	Offers rural physicians funding for coverage during vacation and other
Ontario Marketing	short-term leaves <sup>60</sup>
and Recruitment	
Agency (HFO MRA)	
Northern Ontario	Provides professional support as a means of promoting retention
Health Professional	
Development	
L	

#### **Nurses**

Registered nurses (RN) working in hospitals and health centres are typically paid an hourly wage according to a pay scale, as outlined in the Hospital Central Agreement or individual/group agreements. Nurse Practitioners are generally funded through a salaried model. While nurses do have some incentives to encourage recruitment and retention (as outlined below), no rural/remote salary premiums or incentives were identified.

<sup>58</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care: 2011

<sup>&</sup>lt;sup>59</sup> Ministry of Health and Long Term Care. Northern Physician Retention Initiative (NPRI) [Internet]. 2014 [updated Feb 11, 2014; cited Aug 19, 2014]. Available from: http://www.health.gov.on.ca/en/pro/programs/northernhealth/npri.aspx

<sup>&</sup>lt;sup>60</sup> Government of Ontario. Guide to Physician Compensation. Toronto, ON: Government of Ontario; 2009 September. Available from: http://www.health.gov.on.ca/en/pro/programs/fht/docs/fht\_compensation.pdf

Recruitment		
The Nursing Community Assessment Visit Program	Provides reimbursement to employers for travel and accommodation expenses incurred by nurses (and their spouses if applicable) for the purpose of assessing nursing employment opportunities in communities with a Rurality Index of Ontario (RIO) score of 40 or over. This program is available to all practicing nurses in Ontario including Registered Nurses, Registered Practical Nurses and Nurse Practitioners interested in relocating to a community with a RIO score of 40 or greater <sup>61</sup>	
The Tuition Support Program for Nurses (TSPN)	Offers tuition reimbursement to recent nursing graduates from rural and remote communities who are new College of Nurses of Ontario (CNO) registrants and who choose to do a return-of-service (ROS) in an eligible underserviced community. The program is open to nurse practitioner, registered nurse and registered practical nurse graduates who apply within one year of having graduated from a Canadian University or College <sup>62</sup>	
Primary Care Nurse Practitioner Program (PCNPP)	Implemented in 2003, provides increased access to primary health care services in small, rural and under-serviced areas and to expand the effective use of nurse practitioners in new clinical settings. Provided funds for 115 PCNP positions, 29 of which in northern regions <sup>63</sup>	
Nurse Practitioner Demonstration Project (NPDP)	Implemented in 2002, provides increased access to primary health care services in 12 small, rural and under-serviced communities <sup>64</sup>	
Retention		

<sup>&</sup>lt;sup>61</sup> Ministry of Health and Long Term Care. Nursing Community Assessment Visit Program [Internet]. 2013 [updated Apr 19, 2013; cited Aug 20, 2014]. Available from: http://www.health.gov.on.ca/en/pro/programs/northernhealth/ncav.aspx <sup>62</sup> lbid.

<sup>&</sup>lt;sup>63</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>64</sup> ibid

The Nursing	
Retention Fund	
(NRF)	

Provides funds to public hospitals in Ontario for education/training as retention initiatives in circumstances where changes to hospital services may otherwise result in layoffs for nurses. The NRF is a Ministry of Health and Long-Term Care initiative managed by the Ontario Nurses' Association (ONA), the Registered Nurses' Association of Ontario (RNAO), and the Registered Practical Nurses Association of Ontario (RPNAO). The fund provides reimbursement to hospitals for the following: cost of education/training required to retain nurses, salary continuance (wages/salary and benefits) for a period of up to 6 months while nurses are attending education/training programs. This program is not specific to rural or remote communities<sup>65</sup>

#### **Midwives**

Midwives are funded a base level of funding (determined by their experience level) for each course of care provided to clients. Remote and small rural midwifery practices are eligible for an operational fee supplement of \$100 and \$50 per course of care respectively. In addition, midwives may bill an extra \$125-175 (depending on their experience level) for each client deemed to be rural or remote by their RIO score.

Midwives are also eligible for funding to cover time spent in travel. Midwives who regularly travel more than 45 minutes per one-way clinical visit between the clinic, hospital and/or clients' homes can allot an additional 5% of budgeted base Billable Courses of Care per contract year.

For small rural and remote practices, it can be difficult, if not impossible (in the case of solo midwives) to have two midwives at every birth. To address this issue, the funding agreement provides \$18,000 per year to retain a qualified second attendant to attend births.

While there are a limited number of retention initiatives for midwives in rural and remote areas, no recruitment initiatives were identified. Unlike both nurses and physicians, there is no tuition support program for midwives working in rural and remote communities, nor are there are no funds available to assist midwives with moving expenses and the higher cost of living in rural, remote and northern locations.

Retention	
Remote Practice	Remote practice groups can request additional funding in the form of a

<sup>65</sup> Nursing Retention Fund. Home [Internet]. 2014 [cited Aug 26, 2014]. Available from: http://nursingretentionfund.ca/

Group Grant	grant to maintain operations, improve quality or access of midwifery services and/or increase the sustainability of the practice. Midwives must apply for this grant yearly, which can be time intensive and make financial planning difficult.
AOM Rural and	Each rural/remote midwife is eligible for 28 days of local relief per fiscal
Remote Locum	year. Funding for the locum program comes from the MOHLTC and is
Program	administered by the AOM.

#### Challenges to Providing Midwifery Care in Rural and Remote Communities

There are several challenges associated with providing midwifery care in rural and remote communities, which were explored in two consultations with midwives conducted by the AOM in November, 2014. This section explores some of the main issues affecting the midwifery sector in rural and remote communities.

#### **Recruitment and Retention**

Midwives are highly committed to working in rural and remote areas. In the AOM-led consultation with midwives, many noted that they feel a deep sense of connection to their community of practice, and this is the real incentive to move to a rural or remote area and stay for many years. In an interview with Dr. Ivy Bourgeault on October 8, 2014, she noted that midwives are much more stable than physicians in rural and remote communities. It takes a great deal of work to establish a rural or remote midwifery practice (including compiling a new practice proposal for the Ministry of Health and getting hospital privileges), and so when midwives establish a practice, they are more likely to stay than physicians, who are better able to move their practice across the province.

However, despite the stability of midwives in rural and remote communities, there remain several barriers to midwife retention in rural and remote areas. Like other health care professionals, it can be difficult to recruit midwives to rural locations where the case loads may be quite low and there is a risk that the practice would not be financially sustainable. Furthermore, if there is a midwife practicing in a rural or remote community, she may find it difficult to recruit a second midwife or a qualified second assistant to the practice. Second attendant funding is quite minimal, and there is not additional funding associated with training second attendants. There is no training program for non-midwife second attendants and it can be difficult to find qualified individual(s) in a rural or remote community.

Solo midwifery practices can be challenging to operate due to administrative/operational fees and difficulties finding coverage during leaves. Challenges associated with operating a rural or

remote practice, such as long driving times, low birth volumes and managing a large catchment area with limited access to hospital, can also be a disincentive for midwives in these communities to remain long-term.

#### **Funding Model**

As describe above, midwives do receive additional funding for practicing in a remote area and the increased driving time associated with a large catchment area, but these can be understood as equalizing the extra costs midwives face when practicing in rural and remote communities, as opposed to incentives. Midwives in small rural and remote practices have to spend much of their time on call, given the limited number of other practitioners, yet there is no funding support for the additional on-call time rural and remote midwives put in, compared to urban midwives. One midwife reported than in the hospital in Hearst, the physicians receive \$300 a day while they are on-call from HOCC, while midwives receive \$320 per client regardless of fee level or RIO score.

Given the variable case load volumes in rural and remote communities, the midwifery payment model based on courses of care may be a less appropriate compensation model than in more urban areas. The low birth volumes in rural and especially remote regions make it difficult for midwives to secure 40 primary and 40 secondary courses of care, meaning they cannot bill to the maximum allowable amount. In addition, the time and breadth of care often increases in remote settings but midwives may be unable to take on a full roster of clients given time constraints. While there is CV funding to support midwives who work with special populations, this maximum allowable funding is insufficient to cover the extensive time spent supporting various population groups in rural and remote settings where there are far fewer health and social service resources to support these clients.

The course of care model was developed to safeguard continuity of care. It assumes that midwives will provide care over roughly 10 months and work in small groups. However, marginalized populations often come into care late due to many factors, including economic reasons, fear of criminalization or evacuation from their community during their pregnancy. The health profile of Aboriginal women and newborns in the far north, for example, is extremely complex. Unlike the typical midwifery client in the south assumed in the course of care mechanism, clients in the far north may present with hypertension, high blood pressure, diabetes and addictions. Clients may require high rates of nutritional counseling, family counseling, blood pressure and medication monitoring and coordination of health and social services. The co-morbidities and complex nature of the health problems of these clients mean midwives must spend time with clients responding to complex issues and ensuring the appropriate coordination of care.

The course of care mechanism assumes that midwives have relatively straightforward access to labs and ultrasounds for their clients. In remote settings, however, ordering an ultrasound can be lengthy endeavor. In the far north, for example, ordering an ultrasound may not be simply a matter of writing the requisition if the required facilities and equipment are not available in community. The midwife must book the appointment with a southern facility, fill out specific paper work, requests travel funds for the client, organize the travel via another organization, and see the client again prior travel to provide clearance to the aviation company.

The funding model does allow for additional travel funding for rural and remote midwives to cover their longer driving distances. However, it was unanimous in both sets of midwife consultations that this funding is inadequate. While the distances will be different for each community, one midwife estimated that it is not uncommon to drive 1,200 KM per course of care. Another estimated that midwives in her practice drive 50,000 KM annually, which amounts to 25-33 cents per kilometer, a rate that is simply too low to cover gas and car maintenance. Winter driving conditions mean that midwives in rural and remote areas need vehicles equipped with 4 wheel drive, and they may need to change their tires every 6 months. As one midwife in the consultation noted, their car is their biggest and most expensive piece of clinical equipment, yet there is no funding to repair or replace it when needed. Further research is required to provide a more accurate picture of the driving distances, gas costs and car maintenance fees rural and remote midwives incur, in order to ensure that the travel fee adequately covers the cost of travel and does not unfairly penalize midwives working in rural and remote areas.

#### Interprofessional Care

Interprofessional care is critical to ensuring health care sustainability, effectiveness and responsiveness to population health needs.<sup>66</sup> This is especially true in rural and remote settings where interprofessional care is essential to long-term sustainability of maternity services.<sup>67</sup> The number of family physicians offering maternity care is declining, as are the number of rural and remote hospitals equipped to handle deliveries.<sup>68,69</sup> Since not every rural or remote community will have the resources or patient volumes to sustain a full-time surgical or obstetric specialist, collaboration between general practitioners, midwives and nurses, can ensure that the majority of births are managed in community, an important benchmark in maternal and newborn health.

<sup>&</sup>lt;sup>66</sup> Health Council of Canada. Modernizing the Management of Health Human Resources in Canada: Identifying Areas for Accelerated Change. A Report from a National Summit; 2005, June 23.

<sup>&</sup>lt;sup>67</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

<sup>&</sup>lt;sup>68</sup> Association of Ontario Midwives. Midwives and Interprofessional Care. Toronto, ON. 2008 June.

<sup>&</sup>lt;sup>69</sup> Silversides A, Tepper J, Konkin J. Maternity services disappearing in rural Canada [Internet]. 2013 [updated May 16, 2013; cited Aug 17, 2014]. Available from: http://healthydebate.ca/2013/05/topic/wait-times-access-to-care/maternity-services-disappearing-in-rural-canada

The Society of Rural Physicians of Canada identified that interprofessional collaboration is a cornerstone of ensuring birth remains close to home.<sup>70</sup>

Health providers in rural and remote communities often do work interprofessionally, simply because there are limited human resources and some providers may have more expertise than others in certain areas.<sup>71</sup> However, there are several barriers to effective interprofessional care that occur in rural and remote communities, including a lack of awareness about the skills and qualifications of other health professionals, fears over liability and risk, and the lack of funding to support interprofessional work.<sup>72</sup>

#### **Hospital Integration**

Acquiring hospital privileges remains a challenge for many midwives across Ontario. Midwives in rural and remote communities have had hospital privileges limited if they offer home births in radius greater than 15 km from the hospital. However, research has demonstrated that there is no excess morbidity or mortality related to being greater than 15 km from a hospital with emergency obstetrical services. <sup>73</sup>

There is also a concern in rural and remote hospitals that expanding midwife privileges will take away births from doctors, who need to attend a certain number of births to ensure competency. However, as noted earlier, the Society of Rural Physicians of Canada refutes this claim by stating that there is no evidence that a minimum number of deliveries is required to ensure competency. Capping midwifery privileges in hospitals stifles the growth of midwifery and leaves midwives unable to meet the growing demand for midwifery services. Midwives also frequently experience restrictions on their scope of practice, which compromises continuity of care, puts clients at risk for unnecessary transfers, and results in double billing between physicians and midwives.

<sup>&</sup>lt;sup>70</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

<sup>&</sup>lt;sup>71</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

<sup>&</sup>lt;sup>72</sup> Ibid.

<sup>&</sup>lt;sup>73</sup> Kryzanauskas M, Wilson A. K. Rural Homebirth in Two Ontario Midwifery Practices: Is Close Proximity to Emergency Obstetrical Services a Prerequisite for Safety? Canadian Association of Midwives Annual Conference; 2010; Edmonton. Available from: http://www.canadianmidwives.org/DATA/DOCUMENT/0710\_Plenary\_Wilson\_Kryzanauskas.pdf

<sup>&</sup>lt;sup>74</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141

<sup>&</sup>lt;sup>75</sup> Association of Ontario Midwives. M Maintaining Primary Care for Clients who Access Induction, Augmentation and Epidural. Toronto (ON): Association of Ontario Midwives. 2011 Jan. 4

#### Planning and Growth

One of the key challenges identified by the rural and remote midwives who participated in the consultation was the difficulty planning in a rural and remote practice. Financially, rural and remote midwives face a similar challenge to urban midwives in that their budgets do not get approved until midway though the fiscal year, meaning that they have to be very strategic with their financial planning. Rural and remote midwives face additional planning challenges in that they must ensure they have appropriate coverage of their catchment area. If a midwife is doing a home visit on one side of the catchment area and a client on the other end goes into labour, the driving time can mean that a laboring client is left unattended. Accordingly, rural and remote midwives must diligently plan catchment coverage among a limited number of providers (including midwives and 2<sup>nd</sup> attendants). In terms of practice growth, one of the major dilemmas of rural and remote midwives is that as soon as a practice applies to grow from two to three midwives, they lose their second attendant funding. If they are then unable to hire a third midwife, they are left in a bind.

#### **Locum Coverage**

While midwives do have access to a locum program that allows midwives in small rural and remote practices to take vacation leave, there are several challenges associated with the current program. As the program currently stands, locum midwives are paid according to block incentives. If the locum midwife attends a birth while on locum, the practice group pays the locum midwife this course of care payment. If the locum midwife attends fewer than 4 births while on locum, she is eligible for top-up payments of \$200 per day up to a maximum amount. This funding comes from the MOHLTC and is currently administered by the AOM. The problem with this payment system is that small rural practices who already have low caseload, are negatively impacted financially by relinquishing their course of care payments to the locum midwife. This means that the midwife on leave may not be able to receive compensation for a full client load that year, thereby penalizing midwives who take locum coverage. The locum program then disadvantages small rural practices with low case load numbers, and there is also little incentive for midwives to take a locum position if her payment amount will be variable.

#### Recommendations to Support Rural and Remote Maternity Care

The MOHLTC identified rural and northern health as a priority by creating a Rural and Northern Healthcare Panel to define a vision, guiding principles, strategic directions and guidelines to address access to care as one dimension of quality of care in rural, remote and

northern communities.<sup>76</sup> The Panel describes the following vision for the future of health care in rural and northern communities, "A health care system that provides appropriate access and achieves equitable outcomes for rural, remote and northern Ontarians." To achieve this vision, the panel acknowledges several guiding principles:<sup>77</sup>

- Community engagement
- Flexible local planning and delivery
- Culturally and linguistically responsible
- Value
- Integration
- Innovation
- Connected and coordinated
- Evidence-based
- Sustainable

The Rural and Northern Health Care Framework puts forward 12 recommendations, which can be found in Appendix A. The following section puts forwards a series of recommendations for strengthening maternity care, and specifically midwifery care, in rural and remote communities, as informed by the Rural and Northern Health Care Framework, health provider professional organizations, and the primary research conducted as part of this grant.

### Recommendation #1: Women should have access to high quality maternity care as close to home as possible in all rural, remote and northern communities.

In line with the College of Family Physicians of Canada Joint Position Paper on Rural Maternity Care, the AOM recommends that women in rural and remote communities should be able to access maternity care as close to home as possible.<sup>78,79</sup> When women have to leave their homes to receive maternity care due to maternity unit closures or lack of availability of services, they may experience adverse health outcomes and unnecessary stress and trauma as a result of being away from their support systems and being in a different environment. For Aboriginal women in particular, it is of the utmost important to maintain births in the community, given the history of removal of Aboriginal individuals and children from their communities.

<sup>&</sup>lt;sup>76</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>77</sup> Ibid.

<sup>&</sup>lt;sup>78</sup> Joint Position Paper Working Group. Joint position paper on rural maternity care. Mississauga, ON: College of Family Physicians of Canada; 2012.

<sup>&</sup>lt;sup>79</sup> Association of Ontario Midwives. Midwives Support Keeping Birth Close to Home. Toronto, ON.; 2008.

Even when surgical and anesthetic services are unavailable, there is evidence that maternity care can be provided in community as long as there is a well-integrated perinatal system. <sup>80</sup> The Society of Rural Physicians of Canada, the College of Family Physicians of Canada Committee on Maternity Care, and the Society of Obstetricians and Gynaecologists of Canada have all endorsed a "regionalized risk management system" for low-risk maternity care populations, where local maternity care units are maintained alongside an efficient system for transfer to specialist (surgical) services when needed. <sup>81</sup> Regionalization is a sustainable alternative to centralization and can be achieved by the use of smaller, level one, birthing centers and teams of midwives, general practitioner surgeons and nurses working together. <sup>82</sup>

Maternity services should not only be made available to women in their communities of residence, but these services must also be accessible. In the AOM survey of rural and remote midwifery clients, many reported barriers to accessing services, including transportation, getting time off work, and language barriers.

### Recommendation #2: Local perspectives and needs should be taken into account in rural and remote health care planning.

Each rural, remote and northern community will have distinctive needs in terms of their population, geographic features, resources, and health care providers. These local level factors must be taken into account when planning for maternity services. The differences between living and working as a health provider in a rural versus remote versus northern community may be quite pronounced, and this diversity needs to be taken into account in planning. The Rural and Northern Health Care Framework proposes a 'local hub' model of health planning, funding and delivery in rural, remote and northern communities. The Ontario Hospital Association describes in further detail how this model would operate. A local health hub is a small scale, collaborative governance mechanism to coordinate health services to meet unique community needs.<sup>83</sup> A health facility (i.e. small rural hospital) would be the hub sponsor (and fund-holder) in charge of developing and implementing a Quality Improvement Plan. The goal of the local hub model would be to have a single funding envelope that spans primary, inpatient, home and long-term care.<sup>84</sup>

<sup>&</sup>lt;sup>80</sup> Association of Ontario Midwives. Midwives Support Keeping Birth Close to Home. Toronto, ON.; 2008.

<sup>81</sup> Ibid.

<sup>82</sup> Ihid

<sup>&</sup>lt;sup>83</sup> Ontario Hospital Association. Local Health Hubs for Rural and Northern Communities. Toronto, ON; 2013. Available from: https://www.oha.com/CURRENTISSUES/KEYINITIATIVES/SRNSMALLREGHOSP/Pages/LocalHealthHubsforRuralandNorthernCommunities.aspx

<sup>84</sup> Ibid.

A local hub model could ensure that there is greater local control over planning, but it is important to ensure that there is equitable representation in such a model. All health providers, including midwives, physicians, nurses, and other allied health professionals need a seat at local planning tables. In addition, population groups within the region must be represented to ensure that local governance structures promote health equity in planning, implementation and evaluation of all services.

## Recommendation #3: The right to self-determination and culturally safe care must be upheld in Aboriginal communities.

Aboriginal women may face significant geographic and social barriers to accessing culturally safe care, particularly in remote and northern communities. The government of Ontario should work with Aboriginal leadership to support culturally safe care and self-determination in Aboriginal communities. In order to bring births back to Aboriginal communities, there must be enhanced funding and supports for recruiting, training, and funding Aboriginal midwives.

Aboriginal midwives working under the exemption are trained to be able to provide culturally safe care to Aboriginal clients, while they have accountability mechanisms in place (reporting to local band councils and voluntarily following CMO standards), until recently there was no centralized funding mechanism in the Ministry of Health to support this work. In 2014, the Ministry of Health committed to issuing a call to accept proposals from Aboriginal midwives to open new practice groups. This represents a significant shift to supporting Aboriginal midwives to work in Aboriginal communities. An evaluation of this initiative in the future is warranted to ensure that there is adequate funding to support the growing demand for Aboriginal midwives and that the funding mechanism provides equitable funding between registered midwives and Aboriginal midwives working under the exemption.

### Recommendation #4: Interprofessional care should be supported through appropriate funding, training, and systems-level supports.

As the Society of Rural Physicians of Canada notes, "the long-term sustainability of a low-volume maternity unit depends on interprofessional respect, continuing education opportunities and collaborative models of practice that include all providers."85

<sup>&</sup>lt;sup>85</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

The Rural and Northern Health Care Framework acknowledges the importance of interprofessional care by recommending that Ontario "create a culture of collaboration and coordination amongst health care providers in rural and northern Ontario." In order to promote a culture of interprofessional collaboration, there must be an agreement on guiding principles between providers. The Multidisciplinary Collaborative Primary Maternity Care Project (MCP2) and the Ontario Maternity Care Expert Panel (OMCEP) identify several guiding principles that would help to support maternity collaboration:<sup>86</sup>

- Care across the continuum of maternity and newborn care
- Equitable access to care as close to home as possible
- Pregnancy and birth as normal physiological process
- Regional coordination of services and access to high-risk care
- Empowerment and participation of women
- Family-centered care
- Continuity of care
- Informed choice
- Choice of birthplace
- Quality care to diverse and vulnerable populations

While these guiding principles provide a useful starting place, there needs to be stronger mechanisms in place to promote uptake of interprofessional care on the ground. One of the first steps in strengthening interprofessional care is to address the disjointed, siloed nature of different health sectors. The Rural and Northern Health Care Framework suggests creating a single point of focus within the Ministry of Health and Long-Term Care (MOHLTC) for rural, remote and northern health that would champion interprofessional care and steward intersectoral integration of funding and policy across MOHLTC portfolios, other Ministries and provincial agencies to improve health status of rural, remote and northern Ontarians.<sup>87</sup> Again, it is important to maintain different health care provider representation at such tables to ensure that all perspectives and needs are heard and understood.

Another key component to making interprofessional care a reality is to implement "flexible funding models that support integration at the local level across existing funding silos." As the OMCEP states, "A system to compensate specialists fairly for consultations with primary care providers is a vital aspect of supporting low-risk and low volume approaches to care and innovative models of practice." Unless there is appropriate funding attached, there are few

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<sup>&</sup>lt;sup>86</sup> Association of Ontario Midwives. Midwives and Interprofessional Care. Toronto, ON; 2008 June.

<sup>&</sup>lt;sup>87</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>88</sup> Ibid.

<sup>&</sup>lt;sup>89</sup> Association of Ontario Midwives. Midwives and Interprofessional Care. Toronto, ON. 2008 June.

incentives and many barriers to working interprofessionally. The development of alternative funding arrangements is crucial to the success of IPC initiatives and is supported by the SRPC<sup>90</sup> and the AOM<sup>91</sup>. A process to identify communities in need, earmark funding, and subsequently develop interprofessional models and teams will ensure that women will be more likely to have access to appropriate care, closer to home.

One example of an alternative funding arrangement to support interprofessional care is in Parry Sound, a remote community with a RIO of 65. In this community, there were six physicians, but one recently left and there is a concern that the number of physicians will continue to decline. In order to ensure sustainability of maternity services in the area, the physicians and midwife in the community realized that interprofessional care was imperative. While the midwife was qualified to fulfill the responsibilities of the on-call physicians (after receiving some additional training), there was no funding to cover this type of work. The MOHLTC is currently funding a pilot project where the midwife is being paid the equivalent of the physician's HOCC on-call funding through caseload variable funding. This funding allows the midwife to be compensated for participating in an interprofessional on-call schedule, which in turn promotes high quality, sustainable maternity care in the remote community.

The Rural and Northern Health Care Framework also proposes that further enhancing scopes of practice for health providers working in rural and remote communities will both increase interprofessional care and also improve access to health services. Providers be trained in neonatal resuscitation and newborn care and that GP-surgeons be supported to perform cesearean sections in places where there are no surgical or obstetrical specialists. Advanced maternity skills, including operative birth, can be incorporated into scope of family practice.

Midwives must be able to work to their full scope of practice within hospitals, including for induction, augmentation and epidural.<sup>95</sup> Working to full scope of practice maintains continuity

<sup>&</sup>lt;sup>90</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

<sup>91</sup> Association of Ontario Midwives. Midwives and Interprofessional Care. Toronto, ON. 2008 June.

<sup>&</sup>lt;sup>92</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

<sup>&</sup>lt;sup>93</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

<sup>&</sup>lt;sup>94</sup> College of Family Physicians of Canada, Society of Rural Physicians of Canada, Society of Obstetricians and Gynecologists of Canada. Joint position paper on training for rural family practitioners in advanced maternity skills and cesarean section. Canadian Family Physician. 1999 October; 45

<sup>&</sup>lt;sup>95</sup> Association of Ontario Midwives. M Maintaining Primary Care for Clients who Access Induction, Augmentation and Epidural. Toronto (ON): Association of Ontario Midwives. 2011 Jan. 4

of care, promotes client safety, and ensures an efficient use of health resources. In rural and remote communities, midwives may also we well-positioned to expand their scope to include vacuum delivery and well-woman care. Such an expansion would need to be tied to additional training and funding for these services. In order to support interprofessional work, the College of Midwives of Ontario has already begun modifying midwives' active practice requirements to allow for greater flexibility to work in alternative ways to support community needs.

Recommendation #5: Equitable recruitment and retention initiatives should be implemented for all health care providers interested in working in rural, remote and northern communities.

To continue and promote recruitment and retention, the Rural and Northern Health Care Framework recommends using "appropriate recruitment strategies" and providing incentives and models for working in these communities to all health professionals. <sup>97</sup> One of the most effective ways of recruiting and retaining health care professionals in rural and remote communities is to recruit young people from these communities and offer training opportunities close to home.

While physicians have many incentives to attract them to work and remain in rural and remote communities, nurses and midwives have far fewer. It is important to recruit and retain a broad range of health care providers to communities to ensure quality of care. In terms of maternity care, nurses, physicians and midwives all have critical roles to play. Providing specific funds, professional development opportunities and leadership roles to physicians, nurses and midwives on an equitable basis can help ensure that rural and northern communities are well-serviced by a range of qualified health professionals.

Midwives in rural areas also need supports in place to enhance retention. In small practices, midwives may be on call 24/7. Second attendant funding and training is imperative to allow midwives to have off-call time and to be able to cover large catchment areas. Higher second attendant salaries may be necessary to recruit and retain high caliber second attendants. The Locum Program for midwives is essential for allowing rural and remote midwives to take time off for vacation and other life circumstances. This program needs to be strengthened to ensure that the midwife on leave and her locum replacement face no financial penalties or

<sup>&</sup>lt;sup>96</sup> Association of Ontario Midwives. M Maintaining Primary Care for Clients who Access Induction, Augmentation and Epidural. Toronto (ON): Association of Ontario Midwives. 2011 Jan. 4 p. Accessed from:

http://www.aom.on.ca/Communications/Position\_Statements/Maintaining\_Primary\_Care.aspx <sup>97</sup> Ihid

<sup>&</sup>lt;sup>98</sup> Society of Rural Physicians of Canada. Joint position paper on rural maternity care. Canadian Journal of Rural Medicine. 2012; 17(4):135-141.

disincentives for participating in the locum program. Locum midwives should be paid a stipend amount equivalent to a full-time midwife at her own fee level with additional amounts for living expenses included. Rural and remote midwives should face no financial disadvantages compared to their urban counterparts. Funding mechanisms need to be continually reviewed to ensure they keep pace with rising costs of living.

### Recommendation #6: Training opportunities for new and experienced health providers need to be offered in rural and remote communities.

The Rural and Northern Health Care Framework recommends increasing on-site education experiences in rural, remote and northern communities, expanding the availability of clinical and education technology and strengthening relationships between academic health sciences centres (teaching and research hospitals) and local providers in rural, remote and northern communities.<sup>99</sup> Expanding training opportunities benefits rural and remote communities in many ways.

Increasing the availability of training programs for students and new professionals is an important way to recruit new health providers to rural and remote areas. Individuals coming from rural and remote communities may be more likely to attend an educational program if it is close to their region of residence, instead of having to move to a larger urban centre for training. By providing opportunities for different health providers to train along side one another in a small rural or remote context, it provides a foundation for enhancing interprofessional collaboration.

While both nurses and physicians have access to rural tuition programs, midwives have no tuition based incentives to practice in rural areas. This is a further incentive that could help recruit midwives from both urban and rural areas to establish practices in rural and remote communities.

For experienced health care providers, continuing education and training opportunities in community will enable providers to maintain their competencies in the absence of high case volumes, and allowing them to act as mentors to newer health providers.

Skilled second attendants are a crucial role in supporting rural and remote midwifery. Second attendants must be able to access funded training programs near their community of residence to provide them with the necessary skills associated with their position.

<sup>&</sup>lt;sup>99</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.

### Recommendation #7: Rural and remote midwifery funding frameworks must reflect the realities of practicing in these areas.

The midwifery funding model rightly prioritized continuity of care, informed choice and choice of birthplace. However, as discussed earlier, in rural and remote contexts, there remain several challenges to applying this funding model in practice.

One potential solution to the funding challenges experienced by rural and remote midwives is a funding model that is more responsive to community need. For example, in Attawapiskat, registered midwife Christine Roy provides services to many Aboriginal clients with highly complex needs. When women come late into care because of lack of economic resources, fears over apprehension by CAS and concerns about being evacuated from their community, the course of care model does not compensate midwives for the type of work that best supports these clients. Accordingly, a model of funding that better reflects the type of midwifery work being done in communities such as Attawapiskat would be more appropriate. Such a funding structure would alleviate some of the conflict and stress that stems from the course of care mechanism and positively contribute to the sustainability of midwifery practices providing care to Ontario's rural and remote populations. Discussions between the AOM and the OMP in conjunction with Neepeeshowan midwives have revolved around a fixed annual fee or a dedicated CV that reflects the nature of the additional work undertaken in the community.

Given the variable birth rates in rural and remote communities, and the extra time midwives in these areas spend on travel and supporting clients with complex needs, another possibility for equitable funding would be to increase the payments per course of care for rural and remote midwives, and lower the courses of care per year considered to be full-time for these midwives to reflect the fact that finding 40 primary and 40 secondary births each year in a rural community can be difficult.

In addition, travel funding should be increased to reflect the actual distances midwives in rural and remote areas drive, and the extra car maintenance and gas costs they incur. For rural and remote midwives in small practices, increasing the on-call fee is another way to ensure that these midwives are equitably compensated for the additional time they spend on-call compared to their urban counterparts. To assist with long-term planning and sustainability, remote midwives should be able to apply for multi-year Remote Practice Group Grants.

Midwives in rural and remote areas often face disincentives to grow their practice. For example, second attendant funding is eliminated as soon as a practice applies to grow to three midwives, but the practice may still require second attendants to help cover the catchment area and to provide on-call relief to midwives. Midwifery practices in rural and remote areas should be supported to grow.

In order to better support low-income clients, midwives should have the authority of referring women into travel bursary programs to cover their cost of travel for pre-natal appointments and birth. As it currently stands, women are typically only able to access travel funding if they are referred into the program by a physician. Another possibility would be that midwives could administer a travel fund (similar to the \$1,953 per uninsured client) whereby they would be able to reimburse clients up until a certain amount to assist with the costs of travelling to medical appointments. In addition, these travel grant programs are typically only available to women in the far north, which leaves isolated women living in the near north without access to this necessary funding. Linking the travel bursaries to the level of isolation in a community instead of its latitude could help alleviate this issue.

### Recommendation #8: Ongoing monitoring is essential to understanding health needs and outcomes in rural, remote and northern communities.

Ongoing monitoring is an essential part of any health system. The SRPC recommends that comprehensive patient safety programs should be an integral part of rural maternity care in order to identify system failures and allow for system redesign to avoid future failures. <sup>100</sup> Using existing data tracking tools, such as BORN, can help monitor outcomes in rural and remote communities to ensure that all clients are getting the right care, at the right time, by the right provider, a philosophy upheld by the MOHLTC. These outcomes are also important indicators of communities in need where further resources and supports should be allocated to improve outcomes on a population level. It is essential that demographic information about clients be captured in order to get useful data about certain population groups, such as Aboriginal and francophone individuals, who may face additional barriers to accessing care.

#### Conclusion

There are several challenges associated with providing maternity care in rural and remote communities in Ontario. Midwives, physicians, nurses and other allied health professionals all have vital roles to play in ensuring sustainable and high-quality maternity care that is responsive to local needs. In order to best support maternity care in rural and remote settings, funding must be allocated to support interprofessional care, training opportunities and incentives to recruit and retails qualified health professionals. Local communities need to be engaged in health system planning to ensure that maternity care is accessible, culturally appropriate and available as close to home as possible.

<sup>100</sup> Rural and Northern Health Care Panel. Rural and Northern Health Care Framework. Toronto, ON: Ministry of Health and Long Term Care; 2011.