LEARNING MIDWIFERY IN NUNAVIK: Community-based Education for Inuit Midwives

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Abstract

This article describes the Inuulitsivik Midwifery Education Program: Inuulitsiviup Nutarataatitsijingita Ilisarningata Aulagusinga (INIA). The program is recognized within Canada and globally as a model for local Indigenous midwifery education that supports the return of birth to small, remote communities. The program began at the Inuulitsivik Health Centre in 1986 through community activism which advocated for an end to the evacuation of all women for birth and the reclamation of Inuit midwifery knowledge and skills. Students are employed in local birth centres, called Maternities, and learn while working with midwifery mentors as part of an interdisciplinary team. Graduates are licensed by the governing body of midwifery in Quebec. Based on Inuit ways of knowing, learning, and teaching, as well as global standards in midwifery, the curriculum is competency based and consistent with Canadian university-based education programs. The return of birth and midwifery to Inuit land and culture has resulted in excellent outcomes, and is highly valued by the communities.

Keywords: Aboriginal, Aboriginal health, Aboriginal education, Indigenous, Indigenous health, Indigenous education, Inuit health, Inuit education, northern health, maternal health, midwifery, midwifery education, midwifery training, remote hospital, perinatal health, perinatal care, women's health.

INTRODUCTION

In 1986, the Inuulitsivik Health Centre and local activists brought childbirth home to the Hudson Coast communities of Nunavik, Canada. In the early 1970s, changes in Canadian northern health services resulted in the evacuation of women from remote communities to southern hospitals for childbirth. These communities lost birth as a significant and celebrated part of the social fabric and life cycle. The problems that accompanied the routine evacuation of all women for birth are well documented. (Chamberlain and Barklay, 2002; Iglesias et al., 1998; Kornelson and Gryzbowski, 2004, 2005; Stonier, 1990). They pervaded every aspect of community life, disrupting families and negatively affecting the overall health of the people. Before routine evacuation, women of the Hudson Coast gave birth in their own territory, amongst their people. The breach in cultural coherence brought on by evacuation motivated them to work with community leaders and local health professionals to establish community birth centres, first in Puvirnituq (1986) and later in Inukjuak (1996) and Salluit (2004). An integral part of these centres, called Maternities, is an education program for Inuit midwives, known in Inutitut as Inuulitsiviup Nutarataatitsijingita Ilisarningata Aulagusinga (INIA). Having local midwifery care and education is fundamental to the strength, effectiveness, and sustainability of Inuulitsivik's maternal and infant care service, which has gained global attention for its successes (Van Wagner et al., 2007; Crosbie and Stonier, 2003; Gherardi, 2002).

Acknowledgement. This article was first presented as a report by the Inuulitsivik Health Centre to the Ordre des Sage-Femmes du Quebéc in June, 2011. The authors would like to acknowledge those who have contributed to the research projects demonstrating the successful outcomes of the midwifery service, and those who inform *Inuulitsiviup Nutarataatitsijingita Ilisarningata Aulagusinga* on a daily basis: the students and mentors and, of course, the women they work with and who have given them their trust. Correspondence regarding this article may be directed to: Jennie Stonier, <u>juststones@</u> <u>gmail.com</u>, Salluit Maternity, Salluit, Nunavik, Quebec. JOM 1S0, 819-225-8009

Nunavik is in the northern third of the Canadian province of Quebec above the 55th parallel, spanning a vast 660,000 square kilometres of tundra (Statistics Canada, 2006). Communities line the eastern coast of Hudson Bay, the Hudson Strait, and Ungava Bay. They are isolated from the rest of Canada, and it takes a plane flight or several long days by boat, snowmobile, or dog team to arrive in the nearest neighbouring community. There is a small regional 25 bed hospital in Puvurnituq which can more readily accommodate women with medical complications than the smaller birth centres in Inukjuak and Salluit. The Inuulitsivik Health Centre is accessed by plane from the other villages. It does not have cesarean section capacity. The villages are a minimum of 6-8 hours by plane from tertiary hospital centre access.

The region is the home of the Nunavimmiut, the Indigenous Inuit of the region, who make up over 91% of the local population of close to 12,000 (Statistics Canada, 2011). Inutitut is spoken by 99% of Nunavimmiut (Statistics Canada, 2008), and many also speak English, French, and, in the southernmost

Figure 1: Map of Nunavik. (Pending permission from Makivik Corporation). From http://www. makivik.org/media-centre/nunavik-maps/



community, Cree. The population of Nunavik is young and rising rapidly: 36% of Nunavik's population is under the age of 20 (Statistics Canada, 2012). Local education in these remote villages includes primary and secondary schools, and adult education centres in the larger communities. Postsecondary education is only available outside of Nunavik.

The regional economy is based on new and traditional Inuit ways of life. Inuit culture is woven into health, social, and educational services, and local traditions are strong despite major and relatively recent changes. Traditionally, Nunavimmiut have been a moving people, traveling vast distances, following the yearly cycles of the land. Since the early 1950s, a process of developing settlements has brought Nunavik residents into communities that are geographically fixed. The subsequent changes in lifestyle have brought with them many advantages, but have also been accompanied by the many cultural, psychosocial, and health consequences that commonly affect Indigenous peoples globally (United Nations Permanent Forum on Indigenous Issues, 2010).

Nunavik's high birth rate is offset by a reduced life expectancy (Statistics Canada, 2006; Nunavik Regional Board of Health and Social Services [NRBHSS], 2004). Violence, sexual violence, and death by accident and suicide are much higher than the national average (NRBHSS, 2004). Smoking, alcohol, illicit drug consumption, and solvent misuse are also elevated when compared to provincial/ national rates, as are overcrowding and respiratory tract illness (NRBHSS, 2004). As for reproductive health, there are increased rates of anemia, decreased age at first pregnancy, and higher rates of pregnancy complications such as preterm labour when compared with national and provincial populations (Van Wagner et al., 2012; Luo et al., 2004). Infant mortality is more than four times the provincial average (Statistics Canada, 2012; Luo et al., 2004). These statistics are similar to health statistics of Aboriginal populations elsewhere in Canada, and represent the effects of rapid change and a long history of injustice and inadequate services inherent to the process of colonization (Royal Commission on Aboriginal Peoples, 1996). Nunavik's poor health statistics, along with the negative experiences of birthing women during the evacuation period, fueled the process which lobbied for perinatal services that could address the needs of Nunavik's childbearing women and families.

METHODS

This article was inspired by a request from the Ordre des Sages Femmes du Québec (OSFQ) asking the Inuulitsivik midwives to provide an in-depth and detailed description of the curriculum used in Nunavik for the local education of Inuit midwives. In response, Inuulitsivik brought three experienced members of the Inuulitsivik teaching team together to document the educational process used in Nunavik. Brenda Epoo was raised in Inukjuak, and from a young age wanted to become a midwife. She is one of the first midwives from Inukjuak to graduate from the INIA, and has served as Coordinator of Perinatal Services for Inuulitsivik. Jennie Stonier was among the first southern midwives recruited to support the reclamation of Inuit birth and midwifery. She is a practicing midwife from Quebec who has worked as a mentor to midwifery students in Puvurnituq, Inukjuak, and Salluit since 1986. Vicki Van Wagner is an Ontario midwife who has worked in Nunavik as a mentor since 1998. These three midwives are very familiar with the process of learning to be a midwife in Nunavik, and worked together intensively to create the report for the OSFQ. Evelyn Harney is an Anishnaabe registered midwife from Ontario who worked first as a student and research assistant, then as a mentor midwife in Nunavik. She joined the writing team to help transform the report into an article. The article is based on first-hand knowledge gained from our work in Nunavik.

Restoring Midwifery and Returning Birth to the Community

Remarkably, Inuulitsivik succeeded in developing midwifery services during a time when midwifery was not yet a legally recognized health profession in the province of Quebec, or anywhere in Canada. This was possible in part because Nunavik negotiated a degree of self government and political autonomy with the 1978 James Bay Northern Quebec Agreement and developed regional boards of administration for health and education. While health care services are provided by the province of Quebec, Nunavik is able to inform and influence the process of service development and delivery. When Inuulitsivik was established as the regional health centre, it was based on Inuit governance and a commitment to the education of Inuit health care workers (Van Wagner et al., 2007; Crosbie and Stonier 2003).

At the outset of developing the initial program, a community consultation process determined that local midwifery education was a top priority for the overall midwifery service. The midwives who had practiced before routine evacuation were by that time elderly. They were consulted about the role they wanted to have in the process. The Elder midwives hoped that young women would become midwives and learn both traditional and modern skills. They were active in the process as advisers and teachers, and shared their knowledge and skills with the midwives in training. Midwives from outside of Nunavik came to the village of Puvirnituq to collaborate with the community in the development of a curriculum for local education that included the skills required to work in an isolated northern environment. The recruitment of local midwifery students was essential to ensuring that care would be provided in the Inutitut language, within the Inuit cultural framework. This was the key to ensuring real sustainability and longevity of services. As health care in the North has very high staff turnover, locally trained Inuit midwives were envisioned as the cornerstone of the service, providing excellent and empowering perinatal care that would help to reshape the health of their entire communities.

This vision has guided the Inuulitsivik midwifery service for over twenty-six years, during which Inuulitsivik has successfully provided communitybased midwifery education. To date, thirteen midwives have graduated from the program, five of whom graduated before midwifery became a legally recognized health profession elsewhere in the province of Quebec in 1999. Currently there are ten students in progress. In 2008, the Ministry of Health and the Ordre des Sage Femmes du Québec, the province's midwifery regulatory body, formally recognized Inuulitsivik's education process by granting its graduates full license to practice. Before this recognition, the Nunavik midwives worked under a Nunavik-specific community midwife license.

In Nunavik, each village has a small health centre staffed with nurses and a family physician either on site, or who makes scheduled visits in the smaller communities. Each village also has an airport that can be accessed for an urgent medical evacuation, known in the North as a *medevac*. Most people can be treated at one of the two small Nunavik hospitals located in Puvirnituq and Kuujjuaq. These small hospitals have inpatient and outpatient services that include lab, x-ray and ultrasound, 24 hour medical and midwifery services, scheduled dental, and specialist consults by telehealth (Nunavik Regional Board of Health and Social Services, 2012). Everyone requiring direct assessment or care by a specialist is evacuated south of Nunavik, to Montreal or Quebec City.

Midwives are the lead providers of perinatal care for all women on the Hudson Bay coast, regardless of medical or social risk status. They work as primary caregivers within an interdisciplinary team to provide care to about 200 women per year. All women see a physician once early in pregnancy, and receive specialist consults as needed with ongoing prenatal care provided by the midwives. All nearterm cases are reviewed during weekly meetings of the Perinatal Review Committee, an interdisciplinary team consisting of midwives, students, nurses, and physicians, to discuss care plans and most suitable birth site.

Students and teachers of the program are employed members of the health care team and are paid by Inuulitsivik Health Centre. Student midwives are front-line health care workers, who provide an essential service to their community while gaining an education on the job. Students are on call for the women they follow from the time they begin their learning. They thereby provide continuity and care within the local language and culture while being mentored by an experienced midwife.

The health centre does not receive direct funding for midwifery education. Rather it has been supported through the clinical budget consistent with Inuulitsivik's commitment to community development. Although the education program at Inuulitsivik is not formally affiliated with an educational institution, it has been well supported by faculty from many of Canada's university-based education programs. Despite the program's lack of educational funding, Inuulitsivik has developed a globally recognized process for midwifery education in remote areas, and has developed rich and diverse teaching and learning resources over the years.

KNOWLEDGE SHARING: LEARNING AND TEACHING IN THE INIA

Education at Inuulitsivik includes academic and clinical learning and evaluation. Curriculum content is based on core competencies which outline required knowledge and skills (see Appendix). Ways of learning and teaching are culturally based and focus on using day to day clinical situations together with structured learning modules. Experiential and hands-on learning is traditional to Inuit culture and is used to flexibly cover curriculum topics and develop clinical skills.

Inuit ways of learning such as observation, "being shown rather than told," mentorship, storytelling, and other oral methods of teaching are the foundation of education at Inuulitsivik. Inuit students often come to midwifery with knowledge and skills learned through traditional Inuit lifestyle and developed since childhood. Inuulitsivik's education process has evolved out of and is built on these strengths.

In the tradition of observational learning, students begin by observing care provided by midwifery mentors who act as role models and demonstrate hands-on communication and counseling skills. Students are present for all aspects of midwifery work, and participate in clinical assessments of pregnant and postpartum women and newborns, care during labour and birth, sexual health and family planning clinics, and community health teaching. They learn by doing and provide hands-on care to the women they follow under the guidance of their mentors. Teaching and learning are integrated into the daily work of the students and midwives. While there is opportunity each week for staff to look more formally at theory behind practice, most learning takes place in the moments surrounding an actual event, when questions are raised and explanations explored, individually or in group. Simulations, workshops, and practice scenarios augment handson learning, particularly for skills and knowledge of abnormalities and emergencies encountered less frequently in practice. This overall approach to clinical learning is similar to that of other midwifery, medical, and nursing programs, where ongoing exposure to clinical situations is key to the development and integration of the student's knowledge and skills.

Storytelling is a respected Inuit cultural way of conveying knowledge, learning pattern recognition, judgment, and problem solving. Theoretical knowledge about assessment and making diagnoses of both normal and abnormal situations is gained through listening to and telling stories which are primarily based on real clinical situations. Students and midwifery mentors engage in daily chart review, a feedback and debriefing process where clinical situations, assessments, and management are discussed in detail. In this way students learn about the organization and planning of care, health care language, and decision making. Students regularly prepare and present cases for review. This case-based learning is similar to problem or situation-based learning. Daily chart review and weekly team case reports are used by midwifery teachers to cover academic content, identify learning needs, and integrate the weekly classroom sessions with ongoing clinical work.

The INIA is competency-based, and the curriculum is covered in a rigorous, yet flexible manner. The overall curriculum plan has four levels, starting with basic knowledge and abilities, and moving on to more advanced content and skills. Because clinical experiences do not unfold in an order determined by a curriculum plan, learning modules and skills checklists are used to take advantage of learning situations as they arise and to track the student's progress. These tools also assist midwifery teachers to tailor theoretical teaching to fit the current learning needs of each student and allow academic teaching to flow from clinical care. The pace and the order of learning are individualized, to accommodate different learning styles, pathways, and experiences. The small scale of the program, with two to four students learning at each birth centre, contributes to the feasibility of this approach.

Each student maintains an ongoing portfolio of her completed modules and tests, birth evaluations, and skills checklists, as well as a birth journal. Once every month or two, students meet with midwifery mentors for an individualized review of the skills checklist and the learning portfolio. During this review the student is given the opportunity for self assessment and reflection on clinical experiences which have contributed to her learning. She is also quizzed by the midwifery mentor to consolidate and confirm knowledge and skills. Learning needs are identified and a plan is made which might involve a learning module, a practice session, planned clinical opportunities, or an assignment to be completed. The skills check list is signed off by a midwifery mentor when the student has seen, done, and mastered a competency. Mastery requires the signature of two different midwives. Students are also evaluated using detailed birth evaluation forms in the role of both primary and second midwife.

Figure 2: Proud Graduates of the INIA.



While the emphasis of the INIA is on learning in and from the clinical setting, one day per week is devoted to structured group learning sessions, guided by the core competencies. These sessions provide the opportunity for students to work on learning modules, participate in workshops, take tests, review clinical skills checklists, and address learning needs identified during clinical experiences. Structured learning modules and quizzes cover topics related to each of the competencies that students are expected to acquire during their schooling. As internet and other distance educational resources expand, INIA students benefit from online learning opportunities and more options to learn together despite the distance between the three birth centres.

Students develop supportive bonds and rely on one another for mutual feedback. Their close proximity to each other in the workplace provides both a challenge and an opportunity to learn in detail the dynamics of teamwork. Students are also encouraged to seek out and learn from Elders and community leaders. They attend Elders' gatherings and events related to community health. Through being actively involved in community events, students learn about social issues that affect maternal, child, and family health. Students are encouraged to invite Elders to attend births and share their wisdom. They are also expected to listen and to learn from the women in their care in order to understand the value and process of accompaniment and presence. The INIA is based on knowing that students are in a constant state of learning, and that the learning that takes place outside of academic and clinical settings, such as in the home, the community, or on the land, also contributes to the student's knowledge base and ability to act in her role as a midwife.

Most students study part-time according to personal and family circumstances. The education process usually takes place over four to five years and ends when students have acquired their required experience, knowledge, and competencies.

Learning and Teaching for Remote Northern Practice

Midwifery practice in a remote northern region such as Nunavik requires an expanded role and scope of

practice compared to Canadian midwifery outside of Nunavik. Inuulitsivik midwives and students are expected to acquire additional knowledge and ability in the areas of emergency skill, well woman and baby care, and community health and traditional knowledge. Midwives in Nunavik follow all women regardless of their medical history and risk status. Consequently, they care for women often screened out of midwifery care in other regions of Canada. This provides a rich context for students to have hands-on involvement in a wide range of perinatal conditions and complications. Students learn high level decision making and emergency skills as they participate in risk screening, stabilization, transfer, and medical evacuation. It also supports interprofessional collaboration, problem solving, and creative use of available resources.

Inuulitsivik has developed an emergency skills course adapting and expanding the Canadian Association of Midwives Emergency Skills course (Canadian Association of Midwives, 2009) to the challenges of remote practice. It is consistent with content from Advances in Labour and Risk Management (ALARM, Society of Obstetricians and Gynecologists of Canada, 2012), Advanced Life Support in Obstetrics (ALSO, The College of Family Physicians of Canada, 2008), and Neonatal Resuscitation Program (NRP, Kattwinkel, 2011). This course focuses on skills that are particularly pertinent to the North, such as the timing of transfer and the stabilization of the mother and/or the baby.

In this setting, students have many opportunities to learn from and with other members of the health and social services. Students work closely with family physicians and nurses in the health centres on a daily basis. Students learn to collaborate closely with social workers, youth protection workers, lab personnel, and sonographers, and to advocate for the women they are caring for. Working in a small health centre provides valuable opportunities to understand how the whole institution works, and to have direct relationships with staff in all departments.

Students learn about in-person consultations with physicians, and written and phone consultations with specialists outside of Nunavik. Perinatal Review Committee meetings provide a weekly opportunity for students to present cases and discuss

Figure 3: Students of the INIA Learning Umbilical tures, s



each woman's care and the full range of clinical problems and treatments with midwives from the other villages, physicians, and nurses. Protocols are also developed by this interprofessional team with student participation. Midwives and students orient new nurses and physicians to maternity care at Inuulitsivik and teach skills for assisting at births and in emergencies. The entire team learns together in workshops on neonatal resuscitation, obstetrical emergencies, and code simulations. Inuulitsivik's staff has also begun to participate in interdisciplinary training and emergency rehearsals through the Managing Obstetric Risk Efficiently (MORE^{OB}) program (MORE^{OB}, 2011).

Services at the Inuulitsivik Health Centre occur in three languages. The language of the province and much of the administrative staff is French, while the language of the communities and of midwifery care is Inutitut. Most local midwives and midwifery students speak English as a second language, and most learning resources and communications with other health care providers are in English. Students learn and become competent in the use of English midwifery and medical terminology. In this northern setting they also learn about working across language and culture, a complex process that involves far more than the simple translation of words. The students learn to translate concepts and different ways of seeing and understanding. Thus, they become liaisons between the community and the health care system. Since ways of understanding the world are often not the same in Inuit and in non-Inuit cultures, students must develop strong listening and communication skills to assist staff and community members in basic communication and exchange of ideas, perceptions, and vision. This role of bridging cultures helps ensure that communities receive better care since their members are more likely to be understood, respected, and accurately assessed, and information and instructions can be grasped and comprehended in an appropriate context.

STUDENT EVALUATION AND GRADUATION

Evaluation is integrated into the day to day learning experience through self-assessment, discussion, and monitoring and inventory of clinical competencies. Each student receives a written evaluation after each birth, and documents each birth in her clinical journal. By the end of the program, students must have followed the pregnancies, births, and six weeks of postpartum care for a minimum of sixty women and babies, and attend a minimum of forty births as the second attendant, where she takes responsibility for the immediate care of the newborn. Objective structured clinical exams (OSCE's) and simulations are used along with written exams at the end of each learning module. By graduation each student is certified in Emergency Skills, Neonatal Resuscitation, and Cardiopulmonary Resuscitation (CPR).

Nearing graduation, each student's learning portfolio is carefully assessed for the required number of births, acquired certifications, successful completion of all learning modules and exams, and mastery of all requisite clinical skills. An evaluation team including two senior midwives, one of whom has been educated in Nunavik, reviews the student's portfolio and conducts a final oral and written exam. One evaluator may be a long-term Inuulitsivik physician. Exams and modules are reviewed and updated for each sitting by the evaluation team to ensure they are consistent with current practice in Nunavik, and with evidence-based clinical guidelines that are applicable to northern remote practice. All evaluations used in the program are based on the INIA core competencies and are consistent with curricula and evaluation processes of midwifery education programs in Canada.

Upon successful completion of the exams, a summary report is sent to the provincial midwifery regulatory body as a record of graduation and as application for a practice permit in Quebec. New graduates work as midwives, and, for their first year, are assigned a mentor who remains on call should they need additional support. An added evaluation report is completed by the mentor and graduate at the end of the mentorship year.

Selection of INIA Students

Students of the INIA are selected by the community. The application process includes a letter, curriculum vitae, and a structured interview. The interview team consists of senior midwives, a student midwife, Elders and/or community leaders, and another long term member of the health care team. The team takes into account the applicant's educational background and life experience. The most important consideration is the applicant's personal qualities, including the ability to become a compassionate and skilled care provider, and be a role model and community leader. It is critical that the applicant be able to take on the responsibility of learning to be a midwife and to be on call with the support of her family. Midwifery in Nunavik is more than a health care career; it is a significant role in the community. Because students begin clinical care at the outset of their education, it is important that they enter the program prepared to take on the role of a community midwife.

Midwifery Mentors

The majority of mentors are now Inuit midwives who graduated from the INIA and are experienced midwives and teachers. Thus, both clinical education and midwifery services are now provided by Inuit midwives and take place in Inutitut. This development has evolved gradually from the beginning of the midwifery services when midwives from outside of Nunavik and Canada were recruited to provide care and education to local women. Although the Maternities are now staffed mainly by Inuit midwives, the midwifery service continues to involve midwives from outside of Nunavik both to cover local midwives during vacations and leaves, and to contribute to the education program. The majority of mentors coming from outside of Nunavik are clinical teachers affiliated with Canadian or international universities, many of whom have held academic teaching positions.

As is typical of health care in remote settings, there is a high turnover of midwifery staff from outside of Nunavik. Nonetheless, the team of midwifery mentors employed by Inuulitsivik has been dedicated to working with the community to create and operate a unique, flexible, and rigorous education suited to the needs of the midwives and the communities they serve. As the INIA has evolved over the years, continuity and overview of the program have been provided by the Inuit midwives and students, by community leaders, and by a small group of midwives from outside of Nunavik who have worked with the program over decades. A combination of long term involvement and regular input from new midwifery mentors has contributed to ongoing review and quality assessment of the INIA learning process and resources. During periods of high turnover, midwifery mentors communicate student progress and learning needs through written reports.

The students themselves take the responsibility for moving forward in their education through regularly reviewing their learning portfolios and discussing their progress and learning needs with the mentors. Each mentor is invited to focus on teaching in areas of their special interest or expertise. This dynamic interaction between needs and available resources has helped the program to grow to meet its many challenges, and often to benefit from them. The traditional Inuit values of making the best of what you have, of optimism, perseverance, and a recognition of the need for creative solutions in their regions, have transformed what are normally considered liabilities in northern and remote health care, such as high staff turnover, into assets.

Ideally, mentors from outside of Nunavik are selected according to their ability and willingness to listen and learn, or as one Inuit midwife and leader, Mina Tulugak stated, to "teach but not lead" (Van Wagner et al., 2007). The program recognizes the mutual benefits that have evolved out of partnerships between midwives from within and without Nunavik, and advocates ongoing collaboration.

Outcomes for the Inuulitsivik Midwifery Service

This collaborative, Inuit midwifery-led approach has excellent educational and perinatal outcomes. Research evaluating perinatal outcomes for the Innulitsivik midwifery services shows safe care and low rates of intervention with the majority of women giving birth in the region of Nunavik (Van Wagner et al., 2012; Van Wagner et al., 2007; Simonet et al., 2009; Houd et al., 2004) According to a 2012 article by Van Wagner et al., summarized in Table 1, the vast majority of women served by the Nunavik Maternities between the years of 2000-2007 birthed in Nunavik with an Inuk midwife, had very low interventions, and had key outcomes comparable to Canadian national averages (Van Wagner et al., 2012). Greater social cohesion that can result from keeping families together for birth is a positive social outcome of midwifery education and service in Nunavik (Van Wagner et al., 2012; Simonet et al., 2009; Van Wagner et al., 2007; Douglas, 2006; Chamberlain, 2000; Stonier, 1990).

Outcome	% of total births
Birth Location	
Nunavik	86.3
In home community	49
Outside of Nunavik	13.7
Total transfers	24
Total urgent transfers	9.1
Transferred within Nunavik	27 (of transfers)
Transferred outside of Nunavik	72.8 (of transfers)
Birth Attendants	
Inuit midwives	72.8
Midwives total	84
Other care provider (physician, nurse)	16.1
Birth Outcomes	
Spontaneous vaginal birth	97.1
Intact perineum (vaginal birth)	74.6
Cesarean section	2.1
Instrumental delivery	0.8
Induction of labour	8.6
Preterm births	10.6
Postpartum hemorrhage requiring	1.1
transfusion	1,1
Fetal/Neonatal Outcomes	
Average birthweight	3417g
Low birthweight	4.9%
Neonatal mortality	3.6/1000
Stillbirth	2.9/1000
Apgar <7 at 5 minutes	0.72% or 7.2/1000
Breastfeeding initiation	70%

Table 1

Conclusion

Inuit midwives are increasingly taking their place in Nunavik not only as clinicians and leaders, but also as educators. A current priority is to develop resources which support all midwives working in Nunavik in their role as mentors and teachers. This is essential if INIA is to maintain its goals to improve community health and nurture the wellness of its teachers and care providers. Midwives and students carry a heavy load in small communities that tend to have complex health and social needs and little infrastructure or funding for continuing education. Improved funding for education in Nunavik would help midwives to consistently renew knowledge and skills as clinicians and educators, and is essential to their full participation in the midwifery community locally, nationally, and globally. An annual gathering of the National Aboriginal Council of Midwives in Canada provides a chance for midwives and students to travel and meet other Indigenous and Aboriginal midwives working in different locations but often in similar circumstances. The International Confederation of Midwives also provides opportunities for Inuulitsivik midwives to meet other Indigenous and remote midwives from around the world. Even though midwives and students from Nunavik work remotely, they know, because of these links, that they do not work in isolation.

The INIA midwifery education program is an inspiration to Indigenous and Aboriginal midwives, and can inform health care workers and policy makers hoping to improve community health in Indigenous, Aboriginal, rural, or remote communities anywhere. Inuulitsivik midwifery is sustained by the commitment and enthusiasm of its communities and a health care team committed to providing birth and education locally within a cultural context. The return of birth to Nunavik is exemplary because it has engaged a community-led initiative capable of working creatively within the sphere of local conditions and resources to restore quality midwifery and perinatal services.

For Nunavik, the Inuit cultural perspective on birthing, community life, learning, and the nature of risk has shaped the evolution of the services and the education program. During the approval process for the Maternity in Salluit, one Elder, Jusapie Padlayat, exemplified this perspective when he said,

> I can understand that some of you may think that birth in remote areas is dangerous. And we have made it clear what it means to us for our women to give birth in our communities. And you must know that a life without meaning is much more dangerous. (Epoo et al., 2005)

Returning birth to remote communities is a means towards healing, capacity building, and strengthening Indigenous and Aboriginal communities. Inuulitsivik's success has come to represent much more than a model of maternity care services. At a time when reconciliation between Indigenous and Aboriginal peoples and governments with colonial histories is purported to be on the political agenda, support for initiatives that are communityled, self-determining, healing, and capacity building is as important as ever.

Although birth has been returned to a number of other remote and Aboriginal communities in Canada (National Aboriginal Health Organization, 2008), resistance from health professionals and policy makers to local care and to midwifery education in remote communities remains an obstacle. Despite research evidence about equal or improved outcomes (Van Wagner et al., 2012; Simonet et al., 2009; Van Wagner et al., 2007) and strong endorsement from Aboriginal groups such as the National Aboriginal Health Organization (2008) and professional organizations including the Society of Obstetricians and Gynecologists of Canada (2010; Smylie et al., 2001), the majority of women continue to be evacuated from rural and remote Canadian communities (Kornelson and Gryzbowski, 2004, 2005a, 2005b). The women who organized to demand change, and the Nunavik decision-makers and care providers who listened, have shown their innovative vision has tangible results and far reaching potential. For advocates of sustainable Indigenous and Aboriginal health services, the INIA midwifery education program demonstrates that the training of local health care providers in community-based education programs is a basic and deeply effective way to begin.

Appendix

CORE COMPETENCIES

The midwife's scope of practice is focused on normal pregnancy, birth, and postpartum. At Inuulitsivik the role and the scope of midwifery has grown out of Inuit culture and the realities of remote northern practice. Nunavik midwifery developed independently, but has made strong connections to southern Canadian midwifery. INAI has informed and been informed by southern Canadian midwifery and by international competencies and education programs. Both the education and the practice of midwifery at Inuulitsivik have evolved as a unique weave from deep within the fabric of Inuit culture, interlaced with approaches from other midwifery and health care traditions. .

The INIA core competencies are used as a basis for the education and qualification of midwives in Nunavik. They are consistent with, but extend beyond, those of southern Canadian midwifery and OSFQ scope, particularly in the areas of community health care, education, and promotion, and emergency skills. Inuulitsivik midwives act as team leaders in both normal and abnormal situations, including emergency care, within a context of close collaboration and consultation with other members of the health care team.

APPROPRIATE ATTITUDES AND CAPACITIES

- 1. Presence /mindfulness
- 2. Accompaniment/being with
- 3. Confidence in the process of childbearing
- 4. Confidence and trust in women
- 5. Capacity to support and nourish the abilities of women
- 6. Respect for others
- 7. Ability to listen/self-aware
- 8. Empathy
- 9. Autonomy
- 10. Creativity, flexibility and adaptability
- 11. Patience
- 12. Open-mindedness
- 13. Calm

- 14. Cool-headedness in emergency situations
- 15. Collaboration and team spirit
- 16. Humour
- 17. Discernment
- 18. Tact and diplomacy
- 19. Availability, commitment, and reliability
- 20. Ability to deal appropriately with stress
- 21. Ability to accept feedback
- 22. Ability to assess strengths and limitations of self and others
- 23. Discretion and ability to maintain confidentiality
- 24. Stick-to-it-ness/Perseverance
- 25. Maturity
- 26. Warmth
- 27. Professional behaviour/Responsibility
- 28. Capacity for analysis and synthesis

GENERAL STANDARDS OF COMPETENCY

The midwife:

- 1. Accompanies women throughout the childbearing period integrating knowledge, skill and presence.
- 2. Provides care in Inuktitut.
- 3. Practices midwifery within the legal framework for midwives in Quebec with an expanded role and scope appropriate to Nunavik, in accordance with the philosophy of Inuulitsivik, the Ordre des Sages-Femmes du Quebec, the Canadian Association of Midwives, and the National Aboriginal Council of Midwives.
- 4. Establishes a personalized and ongoing relationship with the woman based on confidence and mutual respect.
- 5. Advises women during the preconception period.
- 6. Encourages women to trust their own abilities in the childbearing process.
- 7. Carries out and interprets screening and diagnostic tests necessary during the childbearing process and knows when to consult with or transfer care to a physician.

- 8. Recognizes variations of normal, abnormal conditions, is aware of appropriate treatments and knows when to consult with another midwife and consult with or transfer to a physician.
- 9. Provides care that keeps birth as normal as possible, including offering counselling and interventions that bring variations and abnormalities back to normal.
- 10. Makes care plans for prenatal, intrapartum, and postnatal care based on the needs of each woman in collaboration with the woman, other care providers involved in the woman's care, and the Perinatal Committee.
- 11. Assesses risk factors and resources that may impact health and the course of care.
- 12. Assesses and makes recommendations about place of birth.
- 13. Administers, when appropriate, authorized medication and other products or therapeutic aids for the mother and newborn during the childbearing process.
- 14. Advises women on topics related to well woman health, including pregnancy, birth, breastfeeding, and parenting. Organizes and conducts prenatal and public health education activities.
- 15. Advises women on the effects of lifestyle on pregnancy and parenting, and refers to resources and services offered in the community where appropriate.
- 16. Advises women regarding different approaches to care and treatment so that the woman is able, as much as possible, to make decisions according to principles of informed choice.
- 17. Provides continuity of care.
- 18. Helps maintain the dignity of women in all situations.
- 19. Avoids the use of unnecessary intervention.
- 20. Assesses the progress of labour and the well-being of mother and baby by appropriate clinical and technical means.
- 21. Assists vaginal birth and immediate postpartum as primary care provider.
- 22. Protects the perineum, avoiding episiotomy and

minimizing lacerations. When necessary, carries out an episiotomy and repairs minor lacerations.

- 23. Applies emergency measures for the mother and the newborn.
- 24. Assesses the physical, psychological, and social factors that may affect pregnancy, birth, and the postpartum period.
- 25. Provides the care and treatments prescribed by a physician as part of a collaborative care plan.
- 26. Provides care and monitors the well-being of the newborn in the immediate postpartum, including a complete physical examination. When necessary, consults with a midwife or physician or transfers care to a physician, supporting the parents and keeping them informed.
- 27. Monitors the well-being of the mother and baby during the postnatal period and promotes breastfeeding.
- 28. Advises women with respect to family planning. Is knowledgeable about nonpharmacologic means of contraception, as well as appropriate use and side effects of oral and injectable methods. Administers contraception according to clinical guidelines.
- 29. Acts as an advocate for the woman and her baby. Communicates effectively with other midwives and community resources, and knows when to collaborate with other health or social services caregivers.
- 30. Keeps appropriate records, documents effectively, and conducts regular chart reviews.
- 31. Contributes to ongoing discussions and development of guidelines for practice.
- 32. Contributes to the ongoing improvement of the health service.
- 33. Participates in and contributes to Perinatal Committee and all other administrative and policy development issues related to maternal and child health.
- 34. Assesses and continues to develop midwifery competencies, knowledge, and skills.

- 35. Participates in continuing education activities such as NRP, CPR, ESW, and applies new skills in practice.
- 36. Supports fathers, family members, and/or significant others as defined by the woman, throughout the childbearing year.
- 37. Works to deepen the understanding of Nunavik midwifery within the community and among other health care workers through activities such as the orientation of health professionals new to the North, and promoting midwifery in the region.
- 38. Understands how to apply research to practice and participates in research activities.
- 39. Contributes to clinical teaching and mentorship.
- 40. Supports the woman and her family during pregnancy loss and grieving.
- 41. Works to preserve Inuit language, knowledge, skills, and culture.
- 42. Understands Inuit teachings about women's life cycle and family.
- 43. Understands Inuit ways of learning/teaching.
- 44. Is capable of providing care and working in a culturally diverse environment.
- 45. Acts as a resource for matters related to perinatal care for other health care providers and the community.
- 46. Acts as a liaison between the community and the health care system.

KNOWLEDGE

Education and counselling

- 1. Teaching and counselling methods for individuals, groups, and community action
- 2. Communication and listening skills, methods for supportive care
- 3. Principles of informed choice
- 4. Principles of preventive care
- 5. Appropriate prenatal, postnatal, and parent education
- 6. Counselling for labour and birth

- 7. Support for pregnancy loss and grief
- 8. Resources available in health, social, and community services
- 9. Alternative and complementary care
- 10. Self-awareness
- 11. Culturally sensitive care

Prenatal care

- 1. The role and purpose of prenatal care from Inuit and southern perspectives
- 2. Female anatomy and physiology
- 3. Physical, emotional, and social changes related to pregnancy
- 4. Physical, emotional, and social changes that can affect the process of pregnancy
- Principles of fetal development and the effect of certain drugs and alcohol on the development and well-being of the baby
- 6. Nutrition in pregnancy, significance of country food
- 7. Use of vitamin and iron supplements in pregnancy
- 8. Physiology and measures for treatment of common discomforts of pregnancy
- 9. Methods for determining pregnancy and due date, and for assessing the progress of pregnancy
- 10. Conducting prenatal care throughout pregnancy
- 11. History taking
- 12. Physical examination of the mother, including abdominal exam
- 13. Assessing gestational age, including history taking and bimanual exam
- 14. Screening and diagnostic tests used in pregnancy
- 15. Drugs that can be administered by midwives on their own responsibility, drugs used in pregnancy that are used by midwives on the order of a physician; side effects and self-care related to the use of medications
- 16. Environmental, social, and biological factors that may affect pregnancy

- Prevention, diagnosis, and treatment of sexually transmitted diseases and vaginal infections during pregnancy
- Prevention and monitoring for certain complications of pregnancy (i.e., prematurity, diabetes, toxoplasmosis, preeclampsia)
- 19. Recognition of abnormal situations in pregnancy, understanding of common causes and treatments, and when to consult another midwife or a physician
- 20. Principles and procedure of external cephalic version
- 21. Inuit traditional wisdom related to prenatal care

Labour and birth care

- 1. Normal process of labour, including the mechanics and physiology of labour, birth, and the immediate postpartum period
- 2. Assessment of maternal and fetal well-being
- 3. Assessment of the onset and progress of labour and birth
- 4. Comfort measures and support during labour and birth
- 5. Physiological and psychological methods to facilitate normal labour
- 6. Assessment of fetal position and station, including landmarks of the fetal skull
- 7. Fetal heart rate patterns, and when to consult a midwife or physician
- 8. Asepsis and universal precautions
- Variations of normal and abnormal situations during labour, and when to consult with a midwife or physician
- 10. Prevention, assessment and treatment of potential complications during labour, birth, and the immediate postpartum period
- 11. Methods for protecting the perineum, avoiding an episiotomy and minimizing lacerations
- 12. Conducting an episiotomy; indications and technique
- 13. Assessment and repair of lacerations, and when to consult with a midwife or physician.

- 14. Common drugs used during the intrapartum period; effects, administration, and when to consult and work with another midwife, nurse, or physician to administer and monitor them
- 15. Emergency measures, procedures, and interventions; procedures for stabilizing and transporting women and babies; organization of medevacs and accompaniment of women and babies during transport together with the health care team
- 16. Physiological, psychological, and social influences on the perception of pain; supportive care for women with labour pain.

Postnatal care of the mother

- 1. Anatomy and physiology of the postnatal and breastfeeding period
- 2. Postnatal changes in the woman
- 3. Emotional and psychological aspects of the postnatal period, breastfeeding, and early parenthood; promotion of the well-being of mother, baby, and family
- Common postnatal discomforts and relief measures
- 5. Nutritional needs of women in the postnatal period
- 6. Principles and issues related to breastfeeding; appropriate support and encouragement for breastfeeding; measures for dealing with common feeding problems
- 7. Appropriate stimulation and inhibition of breastfeeding
- 8. Identification and prevention of postnatal complications, appropriate treatments and when to consult a midwife or physician
- 9. Community resources for the woman and her family
- 10. Understanding of sexuality issues and contraception in the postpartum period
- 11. Issues related to adoption and support for the well-being of the biological mother and adopt-ive family
- 12. Appropriate bottle feeding, preparation, and precautions related to formula feeding

13. Feeding in the first year of life

Newborn care

- 1. Anatomy and physiology of the newborn
- 2. Neonatal transition and immediate care of the newborn
- 3. Assessment of the newborn and gestational age
- 4. Recognition of abnormal situations and when to consult a physician
- 5. Common screening and diagnostic tests for the newborn
- 6. Prophylactic medications commonly used for the newborn
- Nutritional needs of the newborn; properties of breast milk, appropriate complementary and supplementary feeds
- 8. Newborn care
- 9. Emergency newborn care, including neonatal resuscitation (NRP)
- 10. Preventive and complementary care for the newborn
- 11. Community, health, and social resources for referral and support as needed

Well woman care

- 1. Women's reproductive life cycles
- 2. Sexuality in the childbearing and menopausal years
- 3. Anatomy and physiology of the reproductive system and cycles
- 4. Anatomy and physiology of the female breast
- 5. Principles of breast exam
- 6. Common sexual problems, counselling and referral as necessary
- 7. Mechanisms, risks and benefits, and appropriate administration of birth control and family planning methods
- 8. Factors related to decision-making in the case of unwanted pregnancy; resources for counselling and referral
- 9. Variations in normal reproductive health; signs and symptoms of abnormal situations or gynaecologic problems and infections, and when to refer to a physician

- 10. Screening (i.e., pap test, STD, and vaginitis screening), prevention, medical and complementary treatment for common gynaecological conditions, and when to consult with a midwife or a physician
- 11. Wisdom of the Elders

Professional issues

- 1. Role and scope of practice of midwives in Nunavik, including expanded role and scope
- 2. Role of midwives as community leaders
- 3. When and how to consult community members, organizations and Elders
- 4. History and philosophy of midwifery in Nunavik
- 5. History and philosophy of Inuulitsivik
- 6. Legal aspects of midwifery in Nunavik
- 7. Understanding of the medical/legal context of the practice of midwifery in Quebec
- 8. Standards of practice for midwives in Nunavik
- 9. Understanding of ethical practice
- 10. Issues related to northern practice in Nunavik and across northern Canada
- 11. Understanding of evidence based practice and its relevance to northern practice
- 12. Data collection
- 13. Role of the Nunavik Midwifery Working Group, the Nunavik Regional Board of Health and Social Services, the National Aboriginal Health Organization, Pauktuutit
- 14. Role of the Ordre des Sages-Femmes du Quebec and Regroupement les Sages-Femmes du Quebec, the Canadian Association of Midwives, National Aboriginal Council of Midwives

Collaboration with other Health Professionals and Community Workers

- 1. Principles of collaboration and effective communication
- 2. Scope of practice of other health and social service providers in maternity care
- 3. Communication and networking with community resources
- 4. Teamwork and consultation with other midwives

- 5. Teamwork with health care and social service providers including when to consult and transfer care
- 6. Structure of services provided through Inuulitsivik and referral hospitals.

References

- Canadian Association of Midwives and Association of Ontario Midwives. (2009). *Midwifery Emergency Skills Workbook.* Toronto: Canadian Association of Midwives and Association of Ontario Midwives.
- Chamberlain, M. and Barclay, K. (2000). Psychosocial costs of transferring women from their community for birth. *Midwifery*, *16*, 116–122.
- College of Family Physicians of Canada and the American Academy of Pediatrics. (2008). *Advanced Life Support in Obstetrics.* Canadian edition. Fourth edition. Mississauga, ON: College of Family Physicians of Canada and American Academy of Pediatrics.
- Crosbie, C., and Stonier, J. (2003). To bring birth back to the community is to bring back life: Submission to the Quebec Minister of Health. Puvirnituq, QC: Inuulitsivik Health Centre.
- Douglas, V.K. (2006). Childbirth among the Canadian Inuit: A review of the clinical and cultural literature. *International Journal of Circumpolar Health*, 65, 117–132.
- Epoo, B., Nastapoka, U., and Stonier, J. (2005). Childbirth without fear: Stories from Nunavik. Presentation to the Canadian Association of Midwives, Halifax, Nova Scotia.
- Gherardi, J. (Producer and director). (2002). *Birth Rites.* Margaret River, Western Australia. JAG Films.
- Houd, S., Quinuajuak, J., and Epoo, B. (2004). The outcome of perinatal care in Inukjuak, Nunavik, Canada 1998–2002. International Journal of Circumpolar Health, 63 (Suppl 2).
- Iglesias, S., Gryzbowski, S.C.W., Klein, M.C., Gagne, G.P., and Lalonde, A. (1998). Rural obstetrics: Joint position paper on rural maternity care. *Canadian Journal of Rural Medicine*, 3(2), 75–80.
- Kattwinkel, J., ed. (2006). *Textbook of Neonatal Resuscitation.* Sixth edition. Elk Grove Village, IL: American Academy of Pediatrics and American Heart Association.

- Kornelson, J. and Gryzbowski, S. (2004). The costs of separation: The birth experiences of women in isolated and remote communities in British Columbia. *Canadian Women's Studies, 24*(1).
- (2005a). Rural women's experience of maternity care: Implications for policy and practice. Status of Women of Canada's Research fund.
- (2005b). Safety and community: The maternity care needs of rural parturient women. *Journal of Obstetrics and Gynaecology of Canada, 27*(6).
- Luo, Z.C., Wilkins, R., Platt, R.W., Kramer, M.S., and the Canadian Perinatal Surveillance System, Fetal and Infant Health Study Group. (2004). Risks of adverse pregnancy outcomes among Inuit and North American Indian women in Quebec, 1985–97. *Pediatric and Perinatal Epidemiology*, *18*(1), 40–50.
- More^{OB} Program. (2011). *More^{OB} Program*. Retrieved from <u>http://moreob.com/</u>.
- National Aboriginal Health Organization. (2008). Celebrating birth: Aboriginal midwifery in Canada. (pp 48-51). Ottawa: National Aboriginal Health Organization. Retrieved from <u>http://www. naho.ca/documents/fnc/english/2009-02-09</u> <u>Midwiferypaper_English_final.pdf.</u>
- Nunavik Regional Board of Health and Social Services. (2004). Nunavik Inuit Health Survey — Survey Highlights. Retrieved from <u>http://www.inspq.qc.ca/</u> pdf/publications/774_ESISurveyHighlights.pdf.
- (2012). The Institutions in Nunavik. Retrieved from <u>http://www.rrsss17.gouv.qc.ca/index.</u> <u>php?option=com_content&view=article&id=23<</u> <u>emid=35&lang=en</u>
- Royal Commission on Aboriginal Peoples. (1996). *Report* of the Royal Commission on Aboriginal Peoples. Retrieved from <u>http://www.collectionscanada.</u> gc.ca/webarchives/20071115053257/http://www. ainc-inac.gc.ca/ch/rcap/sg/sgmm_e.html.
- Simonet, F. Wilkins, R., Labranche, E., Smylie, J., Heaman, M., Martens, P., Fraser, W.D., Minich, K., Wu, Y., Carry, C., and Luo, Z.C. (2009). Primary birthing attendants and birth outcomes in remote Inuit communities – a natural "experiment" in Nunavik, Canada. *Journal of Epidemiology and Community Health*, 63(7), 546–551.
- Smylie, J., Lessard, P., Bailey, K., Couchie, C., Driedger, M., Eason, E.L., et al. (2001). A guide for health profes-

sionals working with Aboriginal peoples. *Journal* of the Society of Obstetricians and Gynecologists of Canada, 23, 255–261.

- Smylie, J., and Adomako, P., eds. (2009). Indigenous Children's Health Report: Health Assessment in Action. Toronto: The Centre for Research on Inner City Health. Retrieved from <u>http://www.stmichaelshospital.com/pdf/crich/ichr_report.pdf</u>.
- Society of Obstetricians and Gynecologists of Canada. (2012). Advances in Labour and Risk Management. Nineteenth edition. Ottawa: Society of Obstetricians and Gynecologists of Canada.
- (2010). Returning birth to Aboriginal remote and rural communities. SOGC policy statement No. 251. Journal of Obstetrics and Gynecology of Canada, 32, 1186–1188.
- Statistics Canada. (2006). 2006 Census: Aboriginal Peoples in Canada in 2006: Inuit, Metis and First Nations, 2006 Census: Inuit. Retrieved from <u>http://www12.statcan.ca/census-recensement/2006/as-sa/97-558/</u> p6-eng.cfm.
- (2008). Inuit in Canada: Select Findings of the 2006 Census. Retrieved from <u>http://www.statcan.gc.ca/</u> pub/11-008-x/2008002/article/10712-eng.pdf.
- (2012). Health Profile, June 2012. Statistics Canada Catalogue No. 82-228-XWE Retrieved from <u>http://</u> www12.statcan.gc.ca/health-sante/82-228/details/ page.cfm?Lang=E&Tab=1&Geo1=HR&Code1=2417 &Geo2=PR&Code2=24&Data=Rate&SearchText=pu virnituq&SearchType=Contains&SearchPR=01&B1= All&Custom.
- Stonier, J. (1990). The Inuulitsivik maternity. In J.D. O'Neil, and P. Gilbert, eds., *Childbirth in the Canadian North: Epidemiological, Clinical and Cultural Perspectives.* Winnipeg, MB: University of Manitoba, Northern Health Research Unit, pp. 61–74.
- United Nations Permanent Forum on Indigenous Issues. (2010). State of the World's Indigenous Peoples. Retrieved from <u>http://social.</u> <u>un.org/index/IndigenousPeoples/Library/</u> <u>StateoftheWorldsIndigenousPeoples.aspx</u>
- Van Wagner, V., Epoo, B., Nastapoka, J., and Harney, E. (2007). Reclaiming birth, health and community: Midwifery in the Inuit villages of Nunavik, Canada. *Journal of Midwifery and Women's Health*, 52, 384– 391.

- y in Nunavik: Evidence founding 1
- Van Wagner, V. (2012). Midwifery in Nunavik: Evidence for a cascade of normalcy. Presented at the 5th International Normal Birth Conference, Vancouver, BC.
- Van Wagner, V. Osepchook, C., Harney, E., Crosbie, C. and Tulugak, M. (2012). Remote midwifery in Nunavik: Outcomes of perinatal care 2000–2007 for the Inuulitsivik Health Centre. *Birth: Issues in Perinatal Care, 39*(3) pages not yet known.

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