

## PRENATAL CARE IN TWO NUNAVUT COMMUNITIES

PRENATAL CARE IN TWO NUNAVUT COMMUNITIES: THE BARRIERS,  
FACILITATORS AND MOTIVATORS TO UTILIZING CARE

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A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the Requirements  
for the Degree Master of Science

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McMaster University MASTER OF SCIENCE (2011) Hamilton, Ontario (Health Research Methodology)

TITLE: Prenatal Care in Two Nunavut Communities: The Barriers, Facilitators and Motivators to Utilizing Care

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SUPERVISOR: Professor I.L. Bourgeault NUMBER OF PAGES: vii, 116

## **Abstract**

**Objective:** Despite the known benefits of prenatal care, not all women access it equally.

Evidence suggests women in Nunavut utilize prenatal care less than in any other jurisdiction in Canada and there is an absence of literature that explains why. This study seeks to improve our understanding of the factors influencing utilization of prenatal care for women in Nunavut by exploring the barriers, facilitators and motivators to utilization.

**Methods:** A qualitative, descriptive approach was used. Community collaboration informed the research process. Data were analyzed from 21 semi-structured interviews conducted with pregnant and postpartum women and maternity care providers in two Nunavut communities. Using a socioecological model of health services utilization and inductive content analysis, transcribed interviews were analysed to determine the factors that influence prenatal care utilization.

**Findings:** Utilization of prenatal care was influenced by personal, situational and system-related barriers, facilitators and motivators. Personal and situational barriers, facilitators and motivators to care were similar among women from both communities. System-related barriers and facilitators, related to the model of prenatal care and its delivery, differed between the two communities with barriers including language, appointment scheduling and waiting times.

**Conclusion:** System-related barriers reduced access to prenatal care for women in one Nunavut community. Access may be improved in communities with low utilization by revising the current model of prenatal care to reflect care delivered in communities where care providers have dedicated prenatal care roles.

## **Acknowledgements**

This thesis would not have been possible without the guidance and support of my supervisor Ivy Lynn Bourgeault and committee members Patricia McNiven, Wendy Sword and Wendy Peterson and without funding from the Population Health Improvement Research Network and the Northern Scientific Training Programme. To these individuals and organizations, I extend my sincerest thanks for providing the combination of expertise and assistance that made this research possible.

I am very grateful to those individuals in Arviat who shared their wisdom and the commitment to see this project through from its infancy to its completion: Shirley Tagalik, Sarah Curley and Hilda Panigoniak. From Arviat I would also like to thank Winnie Malla, Diane Angma and Mark Kalluak. In Rankin Inlet, I am very grateful to John Ell and to the staff at the Pulaarvik Kablu Friendship Centre for assisting with this project in numerous ways: George Dunkerley, Angie Subgut, Amy Ikakhik and Bertha Nakoolak. I am indebted to the Rankin Inlet Birthing Centre staff for guiding this project with their knowledge, sound advice and passion for their work: Cas Connelly, Rachel Jones, Chris Siksik, Diane Tiktak, Amanda Tomkins and Uluyuk Sateana.

Thank you to my family and friends for their encouragement, patience and infinite support: Sandra Hunt, Joseph, Karen, Sophia, Elena and Michael Geraci and Laura Coulman. To Paul Dale, Andrew Geraci and Desmond Dale, I extend my most heartfelt thank you.

Finally, to the women in Rankin Inlet who inspired this thesis by sharing moments of their lives with me during the few short years I lived in their community and to the 21 women in Arviat and Rankin Inlet who shared their stories during the research, I am most grateful to have been a part of this. Thank You.

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## **Chapter 1: Introduction**

Evidence has shown that prenatal care provides numerous benefits that result from clinical and psychosocial interventions (Alexander & Kotelchuck, 2001; Enkin et al., 2000; Kirkham, Harris, & Grzybowski, 2005a, 2005b). By providing medical services, counselling, and referral, prenatal care can lead to improved health outcomes for women and their newborn infants (Kirkham et al., 2005a, 2005b). For populations at risk for poor health outcomes, the benefits of prenatal care may be particularly notable when it includes screening for clinical and social risk factors and addressing health care needs that might otherwise go unmet (Alexander & Kotelchuck).

Women in Nunavut may be a population at increased risk for poor pregnancy outcomes. Statistics for this territory point to higher rates of preterm births, neonatal and postnatal deaths than other Canadian provinces and territories (Public Health Agency of Canada [PHAC], 2008). Women in Nunavut also have the highest birth rate and highest fertility rate in the country (Statistics Canada, 2009a). In addition, Inuit women in Nunavut experience a higher proportion of pregnancies challenged by physical violence, exposure to smoking (PHAC, 2009) and food insecurity (Government of Nunavut, 2009) than non-Inuit women in Canada. The importance of prenatal care should be emphasized in this population in light of these disparities and the current body of evidence to show that it can moderate some of the challenges facing women in Nunavut.

Despite the potential benefits of prenatal care, Nunavut reports lower utilization of prenatal care than in other Canadian provinces and territories (PHAC, 2009). An audit of the Rankin Inlet Birthing Centre in the Kivalliq region of Nunavut from 1991-2004, for example, found that in some of the regional communities, inadequate utilization was as high as 49% (Macaulay & Durcan, 2005). Adequacy was measured using the Kotelchuck or Adequacy of

Prenatal Care Utilization (APNCU) index that takes into account the gestational age when prenatal care was initiated and the number of prenatal care visits attended (Kotelchuck, 1994). Such statistics suggest that there are unique barriers to prenatal care that have not yet been studied. In fact, there is no published research that has explored the factors influencing prenatal care utilization in Nunavut.

Research also has shown that women in Nunavut and Inuit women in particular have identified several unmet needs with respect to the content and delivery of prenatal care programs (National Aboriginal Health Association [NAHO], 2006; PHAC, 2009). Women in Nunavut have reported that there are gaps in the support and information provided in prenatal care (NAHO; PHAC) and less satisfaction with their experiences of prenatal care when compared with women from other Canadian jurisdictions (PHAC). *What Mothers Say: the Canadian Maternity Experiences Survey (MES)* highlights concerns among women in Nunavut who reported a lack of sufficient information concerning pregnancy related topics, primarily those related to the physical changes in pregnancy, and clinical tests and procedures (PHAC). A study on maternity care among Inuit women in Canada found that women reported gaps in prenatal care that included a lack of support and information about medical policies, medical procedures and traditional birthing practices (NAHO). Reducing the gaps between women's needs and available services and further understanding the barriers to access prenatal care are needed to address the regional disparities in utilization for this universally-funded service. Equally important is to gain an understanding of the facilitators and motivators to accessing prenatal care in order to generate practical recommendations to improve not only utilization but also the delivery of services.

This thesis addresses this important gap in the prenatal health services literature by examining the barriers, facilitators and motivators to accessing prenatal care in two Nunavut communities with documented disparate utilization of care. Using a qualitative descriptive approach, this research was informed by a *socioecological framework* – explained in more detail in the methodology chapter – and thereby highlighted the importance of individual characteristics, personal relationships, community and health services in influencing women’s attendance at prenatal care. A socioecological framework also supported the exploration of how the normative prescriptions for prenatal care might be incongruent with the lived experiences of women in Nunavut. This provided a starting point for determining the relevance of the current model of care and the potential for improving access to care.

### **Contextualizing the Importance of the Proposed Research**

The regional disparity in utilization of prenatal care in Nunavut and the broader context of maternity care nationally and internationally highlight the importance of the research. Prime Minister Stephen Harper’s January, 2010 address at the World Economic Forum emphasized the need to look at maternal and child health globally in order to achieve the Millennium Development goals 4 and 5 (Government of Canada, 2010), which aim to reduce child mortality and improve maternal health (United Nations, 2010). This speech was delivered the same month that media attention was given to an article in the Canadian Medical Association Journal citing poorer birth outcomes for Canadians living in northern and Inuit regions (Luo et al., 2010). Less than 6 months later, the Globe and Mail’s headline story focused on maternity care in an Inuit community in Canada:

Arviat has one of Canada’s highest birth rate[s] in a region where babies are three times more likely to die. Money has been spent and strategies exhausted to improve their chances, but little has worked. The challenge remains: How do you bring effective maternal health care to the remote north? (White, 2010; A1)

If Canada's commitment to respond to global disparities in maternal and child health is to be taken seriously, national disparities in maternal and child health must also be addressed. As such, health care programs and policies must reflect the health inequities that exist between Inuit women and their newborns and their non-Inuit counterparts in Canada. Rohan (2003) suggests that these health inequities will be addressed only with a revised and relevant approach to the provision of health care in remote Aboriginal<sup>1</sup> communities. I set out to explore this topic with the hope that the findings could be used to inform a more accessible and appropriate model of prenatal care for Inuit women in Nunavut.

In the sections that follow, I first provide some background contextual information about the general health of women in Nunavut and outline why a specific focus on pregnancy and neonatal outcomes in these communities is warranted. This is followed by a review of the literature on the benefits of prenatal care and the influences on utilization patterns including barriers, facilitators and motivators to access. I summarize what is presently known and not known in the current literature to clarify the key contributions that my thesis research is intended to make.

### **Selecting the Literature**

The Canadian constitution recognizes three distinct groups of Aboriginal peoples in Canada: Inuit, Métis and First Nations, each with distinct languages, cultures and contexts (Adelson, 2005; Government of Canada, 2002). While sharing a common history of being colonized, there are considerable differences between Canada's Indigenous populations that are not generally considered in health data (Adelson; Luo, 2010). While Inuit are recognized as one

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<sup>1</sup> The term Aboriginal will be used throughout this work to denote the first peoples of Canada because it is the most common term used in the health services literature from Canada.

of Canada's first peoples, there is nothing intrinsic about being Inuit that merits collective health outcomes data with that of First Nations or Métis, an approach that is prevalent.

An illustrative example of the error in making generalizations about Aboriginal populations in Canada occurs with diabetes. In 2011, *Diabetes: Canada at the Tipping Point - Charting a New Path* was released by the Canadian Diabetes Association. This document suggests Nunavut merits careful consideration because of the high proportion of Aboriginal residents, the high prevalence of diabetes in Aboriginal populations in Canada and the increased risk faced by Aboriginal women for diabetes in pregnancy (Canadian Diabetes Association, 2011). This document echoes previous reports referring to diabetes in Aboriginal communities in Canada as *pandemic* (PHAC, 2005). In fact, Nunavut has the lowest prevalence of diabetes than any other province or territory in Canada and the prevalence of gestational diabetes is essentially unknown (Paul & Sobol, 2011).

In addition to obscuring the health status of Inuit by using the collective term *Aboriginal*, similar challenges are posed by research that assumes Inuit comprise a homogenous population. In Canada, there are four Inuit regions: Inuvialuit, Nunavut, Nunavik and Nunatsiavut, and four recognized languages (Inuit Tapiriit Kanatami [ITK], 2009). These regions extend from the Northwest Territories to Labrador, covering more than 30 % of the Canadian land mass (Statistics Canada, 2006). Important differences between the regional populations based on geography and language make generalizing about Inuit also challenging. In light of these challenges and a body of quantitative data on health outcomes of Inuit in Nunavut, the literature review has focussed on the health outcomes specific to Nunavut, drawing from the larger body of research about Inuit populations where applicable.

## **Nunavut Specific Data**

Data from 2009-2010 suggest women in Nunavut had some of the most favourable intrapartum statistics in Canada. Women in Nunavut had the lowest rates of assisted vaginal births, epidural analgesia and primary and repeat caesarean sections (CIHI, 2010). In contrast, women in Nunavut had some of the least healthy outcomes for their newborns with the highest rate of low birth weights (CIHI, 2010), the highest rate of preterm births between 32-36 weeks and the highest neonatal and postnatal death rate in Canada (PHAC, 2008). Included in these high postneonatal death rates is a higher rate of Sudden Infant Death Syndrome (SIDS) and prematurity (Macaulay et al., 2003). Data suggest women in Nunavut have the highest birth rate, highest fertility rate (Statistics Canada, 2009a) and the highest proportion of live births to teenage mothers in the country (PHAC, 2008). Women in Nunavut also face the highest rates nationally of the most common sexually transmitted infections in Canada (PHAC, 2011). In addition to physical markers of health, women in Nunavut experience pregnancies disproportionately affected by a number of social challenges including physical violence and smoking (PHAC, 2009). Data from 2006 to 2007 suggest that in Canada, Nunavut had the highest proportion of women smoking during the last three months of pregnancy (63.8% compared with just over 10%) (PHAC, 2009). Food insecurity also disproportionately affects women in Nunavut (Government of Nunavut, 2009) with almost 32% of households experiencing food insecurity compared with less than 10% nationally (Statistics Canada, 2010).

In summary, when compared with other jurisdictions in Canada, evidence suggests women and their newborns in Nunavut are disproportionately disadvantaged by a number of social determinants of health and rate lower on some important health status indicators. These comparisons situate the health of women and their newborns in Nunavut within the broader

context of health nationally, illustrating the importance of targeted policies and programmes to address the disparities. Addressing these disparities requires an understanding of the factors that influence utilization of health services that includes prenatal care.

### **Review of the Prenatal Care Literature**

Prenatal care is one of the most universally accessed health care services with the expressed goal of preventing and managing conditions that may compromise the pregnancy or postpartum health of the mother and her newborn infant (Banta, 2003). To meet this objective, the Society of Obstetricians and Gynaecologists of Canada (SOGC) has developed recommendations for prenatal care providers in Canada to deliver prenatal care throughout a woman's pregnancy. According to these recommendations, early prenatal care should include visits every 4 to 6 weeks. From 30 to 36 weeks gestation, women are encouraged to receive prenatal care every 2 to 3 weeks and beginning at 36 weeks, it is recommended women see their health care provider every 1 to 2 weeks (SOGC, 1998). Also according to the SOGC (2008), women should be offered their first prenatal appointment within 4 weeks of a positive pregnancy test to be eligible for early prenatal screening tests. The National Institute for Health and Clinical Excellence (2008) similarly suggests that the first visit should ideally be initiated by 10 weeks gestation with an average of 10 visits for an uncomplicated first pregnancy, a schedule that can be reduced to 7 visits for subsequent pregnancies without complications.

While there are elements of prenatal care that have been shown to provide numerous maternal and newborn health benefits (Alexander & Kotelchuck, 2001; Banta, 2003; Enkin et al., 2000; Kirkham et al., 2005a), the extent of these benefits for different communities of women has been debated in the published literature. A number of clinical examinations, such as routine fundal height measurements (Kirkham et al; Neilson, 1998), urine screening for protein and

glucose, abdominal palpation to assess fetal presentation prior to 36 weeks gestation and measuring blood pressure at every visit are routinely conducted without supporting evidence of their effectiveness (Kirkham et al.). Research promoting improved outcomes resulting from prenatal care utilization has also come under scrutiny in the past decade. For example, the link between inadequate utilization and an increased risk for preterm birth is not well substantiated by research (Alexander & Kotelchuck; Heaman, Newburn-Cook, Green, Elliott, & Helewa, 2008).

Despite the absence of evidence to support some components of routine prenatal care, there are a number of benefits conferred to women and their newborns based on the available evidence. Routine prenatal care that includes screening for and administration of anti-D during pregnancy to prevent rhesus isoimmunisation has been shown to be effective (Crowther & Middleton, 1999). Screening for rubella (Dontigny, Arsenault, & Martel, 2008) and syphilis (Walker, 2001) is effective in reducing the transmission of serious infections to the newborn. In addition, routine prenatal ultrasound examinations prior to 24 weeks are associated with a reduction in labour inductions for misdiagnosed post-term pregnancies by providing an accurate assessment of gestational age when dating using the last menstrual period is not possible (Whitworth, Bricker, Neilson & Dowswell, 2010).

Two systematic reviews found screening and treatment for sexually transmitted infections, including chlamydia and gonorrhoea, reduces the risk of mother-to-child transmission, thereby reducing the risk of related infections that include ophthalmia neonatorum (Brocklehurst, 2000; Brocklehurst & Rooney, 1998), systemic infections (Brocklehurst) and pneumonia (Brocklehurst & Rooney). Evidence also shows that screening and treatment for other lower genital tract infections prior to 20 weeks gestation reduces the incidence of preterm births, preterm low birth weight and preterm very low birth weight and their associated

morbidities (Kiss, Petricevic & Husslein, 2004). Screening and treatment for symptomatic and asymptomatic urinary tract infections in pregnancy reduces the complications that can arise from untreated infections including prelabour rupture of membranes, preterm birth (Vazquez & Abalos, 2011) and low birth weight (Smaill & Vazquez, 2007). Early detection and treatment of potentially serious complications such as proteinuric gestational hypertension and intrauterine growth restriction (IUGR) also provide opportunities to improve maternal and neonatal outcomes (Moos, 2006).

In addition to the clinical interventions that are made possible through early detection, prenatal care can include educational and counselling opportunities regarding the risks associated with the use of substances during pregnancy that include alcohol, drugs and tobacco (Kirkham et al., 2005a). The SOGC recently developed the *Alcohol Use and Pregnancy Consensus Clinical Guidelines* that reflect the current evidence regarding alcohol consumption and pregnancy (Carson et al., 2010). This document recommends that all women be screened for alcohol use at intervals throughout their pregnancy and that health care providers carry out brief interventions for pregnant women who exhibit at-risk alcohol consumption. These recommendations are based on clear links between alcohol consumption in pregnancy and maternal and newborn complications, and evidence that brief interventions are effective in reducing alcohol intake (Carson et al.). There also is evidence to show that interventions aimed at smoking cessation during pregnancy can lead to reductions in smoking during pregnancy, reducing the risks of preterm birth and low birth weight (Lumley et al., 2009).

Other educational and counselling opportunities involve the benefits of breastfeeding (Kirkham et al., 2005a) and the risk factors for SIDS (Carroll & Siska, 1998). A Cochrane Review showed that more women initiated breastfeeding with health education interventions and

peer support in the prenatal, intrapartum and postpartum period than those without health education interventions (Dyson, McCormick, & Renfrew, 2005). A more recent systematic review looked at breastfeeding interventions in primary health care settings. The review found that interventions, including breastfeeding education, professional and lay support, and counselling must be conducted during the prenatal period in order to see a statistically significant increase in the rate of short-term breastfeeding (Chung et al., 2008). There is some evidence indicating that counselling women about the risk factors for SIDS has reduced the incidence of this cause of infant death (Carroll & Siska). Raydo and Reu-Donlon (2005) suggest that parents are not necessarily receiving reliable information about reducing the risk factors for SIDS and health care providers can play an essential role in sharing this information.

In summary, interventions in prenatal care with demonstrated effectiveness specifically address some of the risk factors affecting Inuit women and their newborn infants. Screening for and treating lower genital tract infections such as chlamydia and gonorrhoea can help reduce the number of preterm births associated with these infections while counselling and education about smoking may effectively decrease the number of pregnant women and their newborns affected. For women in Nunavut communities where medical evacuation is routinely conducted for planned births, accurate estimation of gestational age by early dating scans can decrease the amount of time spent in an out-of-community setting awaiting the birth. In addition, prenatal care that includes counselling and education about postpartum home safety and SIDS will increase awareness about risk factors for newborn infants as part of addressing the national disparity related to post neonatal mortalities and the highest rate of SIDS in Canada.

## **Utilization of Prenatal Care**

Despite the documented benefits of prenatal care and a system of universal health insurance that includes prenatal care, not all Canadian women access it equally. Using indices that determine adequacy of prenatal care using the gestational age when prenatal was initiated and the subsequent number of visits, Canadian research has found that women living in poverty are more likely to receive inadequate care (Heaman, Green, Newburn-Cook, Elliott, & Helewa, 2007; Heaman, Gupton, & Moffatt, 2005; Mustard & Roos, 1994). A Canadian trial found women living in households below specified income cut-offs are more likely to leave prenatal care prematurely (Tough, Siever, & Johnston, 2007). This study found that women who dropped out of a prenatal intervention study were more likely to be living in households with a yearly income under than \$40,000 (Tough et al., 2007). Other demographic characteristics related to inadequate care include unemployment, low educational attainment and coming from a single parent family (Heaman et al., 2007; Tough et al.). Studies also have shown that women receiving inadequate care are more likely to be teenagers (PHAC, 2009) and to come from racially or ethnically marginalized populations described as non-Caucasian (Tough et al.), Aboriginal (Heaman et al., 2005) and new immigrants (Heaman et al., 2007).

Individual characteristics related to inadequate care and difficulties retaining women in care include smoking (Heaman et al., 2007; Tough et al., 2007), low levels of self-esteem (Heaman et al., 2005) and low social support (Tough et al.). Stressful life circumstances have also been linked to inadequate utilization (Heaman et al., 2005), circumstances which are associated with those characteristics shown to affect utilization that include young maternal age, women with lower incomes and women with lower educational attainment (PHAC, 2009).

Women in Nunavut experience a number of the challenges related to inadequate utilization of prenatal care including low educational attainment, low income, poverty, young maternal age and smoking. Using Canada census data, NTI (2008) shows Nunavummiut experience low graduation rates from secondary school (25%) and high unemployment rates (20.8%). Challenges resulting from living in poverty and being marginalized as a population are evident in the income disparity between Inuit and non-Inuit in Nunavut (\$13, 090 compared with \$50, 128) in one of the most expensive jurisdictions in Canada. In addition, Inuit women in Nunavut report high rates of smoking (PHAC, 2009) and high rates of pregnancies among teenage women (PHAC, 2008).

#### **Utilization of prenatal care in Nunavut.**

When comparing utilization of prenatal care across Canadian jurisdictions, women in Nunavut are less likely to receive adequate prenatal care than women in the other Canadian territories and provinces (PHAC, 2009). According to the *MES*, Nunavut also had the highest proportion of women who entered prenatal care late (17.3 %), compared with Saskatchewan's national low of 3.0% of women who entered care late. This percentage reflects a high proportion of women in Nunavut who entered care late by choice, as the percentage of women in Nunavut receiving care as early as they wanted was 91%, slightly higher than the national average of 88.7% and much higher than other jurisdictions including Manitoba and the Northwest Territories where 81.4% and 73.6% of women, respectively, received care as early as they wanted (PHAC).

The only other study examining adequacy of prenatal care utilization in Nunavut used the Kotelchuck Adequacy of Prenatal Care Utilization (APCNU) to determine utilization of prenatal care at the Rankin Inlet Birthing Centre. This study found that utilization was adequate in 87% of

women in Rankin Inlet but was adequate in only half (51%) of the women living in the surrounding communities who gave birth in Rankin Inlet (Macaulay & Durcan, 2005). In both the Rankin Inlet Birthing Centre Audit and the *MES*, adequacy of prenatal care was determined using quantitative measurements of the number of prenatal visits and the gestational age when care was initiated (Macaulay & Durcan; PHAC, 2009). Adequacy, as a measurement, was not able to capture the factors that influenced utilization of prenatal care. In addition, methodological issues were noted by researchers from both studies that included a low response rate for Nunavut in the *MES* (64% compared with the national average of 80%) and a small sample size in the Rankin Inlet Birthing Centre Audit (Macaulay and Durcan). These findings prompted recommendations from both studies to improve our understanding of women's experiences with prenatal care in Nunavut. That is, while the broader prenatal care utilization literature and that specific to Nunavut attempts to explain who avails themselves of prenatal care and who does not, it does very little to explain why.

## **Barriers, Facilitators and Motivators to Care**

### **Defining Concepts.**

Barriers to utilizing prenatal care are defined in many ways but generally are understood to be factors that impede or discourage women from initiating or continuing to attend prenatal care (Johnson et al., 2007; Lia-Hoagberg et al., 1990; Milligan et al., 2002). Barriers to care are further categorized by numerous researchers without standard definitions. Teagle and Brindis (1998) describe personal barriers (including demographic and psychosocial characteristics) and system-related barriers. Johnson et al. describe psychosocial, structural, attitudinal and cultural barriers and Phillippi (1999) describes structural, maternal, societal and medical barriers to accessing prenatal care.

Researchers also apply different categories to what might be considered the same barrier. For example, Teagle and Brindis (1998) refer to poverty as a personal barrier, Phillippi (2009) categorizes finances as a societal and maternal barrier and Johnson et al. (2007) consider financial constraints a structural barrier. Other researchers use the term *barrier* to describe sociodemographic characteristics such as age and gender (Scheppers, van Dongen, Dekker, Geertzen, & Dekker, 2006); characteristics that are associated with utilization of prenatal care behaviour rather than barriers to it.

The lack of a consistent definition also applies to motivators to utilizing care. Motivators have been described as those factors that support or encourage prenatal care (Lia-Hoagberg et al., 1990) and stimulate initiation of prenatal care (Johnson et al., 2007). A more detailed definition is provided by Milligan et al. (2002) who define motivators as internal factors that cause a woman to seek and attain prenatal care or those factors external to the individual that enhance the opportunity for prenatal care. Further challenges to defining motivators come from the lack of an agreed upon definition of motivation itself and how it contributes to behaviour (Kleinginna & Kleinginna, 1981). In contrast to these variations in definition, Phillippi (2009) provides one of the only definitions of facilitators to prenatal care utilization describing them as external factors, the individuals, policies and institutions that improve access to prenatal care

In the absence of universal definitions, this thesis will present the barriers, facilitators and motivators to utilizing prenatal care using broad categories that describe barriers as factors that discourage or prevent utilization and motivators and facilitators as factors that encourage and support utilization of prenatal care. A motivator will be distinguished from a facilitator based on the work of Ryan and Deci (2000) who describe motivation as an impulse that produces a result. Motivators then include those influences in an individual's life that encourage utilization of

prenatal care based on internal urges resulting from personal commitment to attend or based on external pressures to attend (Ryan & Deci). Motivators are distinct from facilitators in that the former help explain the reasons why women attend prenatal care visits (i.e., the motivation for doing so), whereas the latter help explain factors that encourage attendance (i.e., how care is facilitated). Each of the barriers, facilitators and motivators are further categorized according to the socioecological framework to include the personal, situational and system-related factors (related to the health care system and its delivery) that influence utilization of prenatal care.

It is important to note that the findings from the research literature will also be presented in this thesis according to the definitions provided in the preceding paragraphs rather than those prescribed by the cited works. This does not change the broad concepts that capture the factors that encourage or discourage utilization of health services but rather fits them into the more discrete categories provided above. For example, Milligan et al. (2002) describe the positive attitude of the service staff as a motivator to utilization because their definition of motivator includes both a woman's internal and external factors. This thesis however, considers the attitude of the service staff as a system-related facilitator because positive staff attitudes create a welcoming environment that facilitate utilization rather than exert an external pressure to attend

### **Barriers to accessing prenatal care.**

There is a large of body of international literature about the barriers to utilizing prenatal care for women. Because of the extensive research literature, this review has focussed on the literature from high-income countries only. Many of these studies have sought to answer questions about why certain populations do not utilize care according to a regular schedule of visits. As a result, much of the research has focussed on specific demographic groups. The American literature describes factors influencing utilization in low income American women

(Fuller & Gallagher, 1999; Sunil, Spears, Hook, Castillo, & Torres, 2010), African-American women, (Bennett, Switzer, Aguirre, Evans, & Barg, 2006; Daniels, Noe, & Mayberry, 2006; Johnson et al., 2007), Hispanic women (Shaffer, 2002), urban vulnerable populations of women (Milligan et al., 2002; Nepal, Banerjee, & Perry, 2010) and adolescent women (Teagle & Brindis, 1998).

With the exception of financial costs associated with the prenatal care visit, numerous barriers described in the international literature might be applied to a Canadian context. Barriers that occur as a result of a woman's personal life or situational factors include a lack of transportation (Johnson et al., 2007; Rogers & Schiff, 1999; Shaffer, 2002; Sunil et al., 2010; Teagle & Brindis, 1998), challenges with childcare (Johnson et al.; Rogers & Schiff; Sunil et al.) and getting time away from work or school to attend care (Shaffer; Teagle, & Brindis). Stressful circumstances that include depression (Daniels et al, 2006; Johnson et al.; Teagle & Brindis), not wanting to be pregnant or not wanting others to know they are pregnant (Daniels et al.; Friedman, Heneghan, & Rosenthal, 2009; Johnson et al.; Teagle & Brindis), a lack of social support (Daniels et al.; Nepal et al., 2011) and lifestyle factors such as drug use (Friedman et al., 2009; Milligan et al., 2002) also can pose barriers to utilization. Some women do not utilize prenatal care because they do not believe prenatal care is important or they have negative feelings about it (Daniels et al.; Rogers & Schiff), because they fear procedures or medical treatment (Fuller & Gallagher, 1999; Teagle & Brindis) and because they have negative feelings about going to a doctor (Rogers & Schiff).

Barriers posed by the prenatal care program also influence utilization such as long wait times (Daniels et al, 2006; Sunil et al., 2010; Teagle & Brindis, 1998), interactions with the prenatal care staff that including communication problems (Bennett et al., 2006), negative

attitudes of staff (Daniels et al.; Milligan et al., 2002; Teagle & Brindis), the perception of poor treatment (Milligan et al.; Teagle & Brindis), a lack of cultural sensitivity and language barriers (Schaffer, 2002). Novick's (2009) review of the literature notes that additional barriers are faced by women from "minority backgrounds" who face particular challenges in prenatal care owing to racial and ethnic discrimination (p. 233).

Canadian research has found similar barriers to utilizing prenatal care including lack of childcare, a demanding schedule of visits (Sokoloski, 1995) and language barriers for women who do not speak the same language as their care-providers (NAHO, 2006; Reitmanova & Gustafson, 2007). Several studies have shown that the needs of pregnant women are not necessarily reflected in prenatal care programs (Reitmanova & Gustafson; Sword, 2003; Tough et al., 2007). Tough et al. suggested barriers may be posed by programs that do not consider the unique needs of women with respect to their "cultural traditions, psychosocial variables and lifestyle factors" (p.5). These findings support the earlier work of Sokoloski (1995) who found that First Nations women viewed pregnancy as a normal event that did not require routine monitoring. The concept of culture and lifestyle factors also was supported in a study of immigrant Muslim women in Newfoundland where religion was an important barrier to accessing maternity care (Reitmanova & Gustafson).

In addition to barriers inherent in prenatal programs, Canadian studies have found that the nature of the relationship between a woman and her care providers also can pose barriers (Reitmanova & Gustafson, 2007; Sword, 2003). In a study of prenatal care utilization among low-income women in Ontario, Sword identified five categories that comprised barriers to care based on the approach and interaction of the care providers. These included *credibility* (care-provider characteristics that prevented meaningful interactions with women), *attitude* (a negative

attitude or lack of respect for women) *interaction style* (engaging with women in an insulting or disrespectful way), *conduct of power* (approaching the woman with an assumption of power implicit in the role of care-provider) and *relationship capacity* (care provider's inability to develop relationships with women owing to differences in expectations or ideals as they relate to her experiences).

Owing to the remote locations of Nunavut communities, an examination of the rural and remote health services utilization literature is also warranted. While the body of literature is limited, factors that discourage utilization identified by the rural and remote research include situational barriers posed by transportation (Baldwin et al., 2002; Omar, Schiffman, & Bauer, 1998; Tarlier, Browne, & Johnson, 2007), difficulties obtaining childcare (Tarlier et al., 2007) and personal problems (Omar et al., 1998). Sutherns and Bourgeault (2008) found financial concerns posed barriers to accessing care as they related to the costs associated with travelling long distances to care including gas, parking and taking time off from employment. System-related barriers to care have also been identified and include inflexible hours of operation and relationships with health care providers (Omar et al.). An additional concern mentioned in the rural and remote literature that is absent from the urban literature is related to the barriers posed by inclement weather when women had long distances to travel to prenatal care (Omar et al.; Sutherns & Bourgeault).

### **Motivators to accessing prenatal care.**

There is much less literature on motivators to accessing prenatal care. Concern for the baby's health is often cited as the most important motivator for attending prenatal care (Fuller & Gallagher, 1999; Johnson et al., 2007; Rogers & Schiff, 1996; Teagle & Brindis, 1998). Concerns about the woman's own health (Fuller and Gallagher; Johnson et al.; Lia-Hoagberg et

al., 1990), feeling physically unwell and personal health problems also are cited (Teagle & Brindis). Additional motivators include encouragement from friends and family (Johnson et al.; Teagle & Brindis), a positive attitude about the pregnancy and feeling that prenatal care is important (Daniels et al., 2006). For some women, initiating care is simply a matter of timing and they utilize care when they feel it is the appropriate time to start (Rogers and Schiff).

### **Facilitators to accessing prenatal care.**

In terms of facilitators, Phillippi (2009) suggests that they are the least documented in the literature and that there is a need to conduct further research to explore what constitutes a facilitator to prenatal care. The research has shown convenient clinic hours, transportation, childcare (Johnson et al., 2007) and a welcoming and helpful attitude of the staff (Milligan et al., 2002) facilitate utilization of prenatal care.

Novick (2009) reviewed international literature on women's experiences of prenatal care and found factors that encouraged women to attend prenatal care included receiving information about their baby's health, the opportunity to socialize with other women, and the opportunity to learn positive health habits. Her review, however, defined these factors as benefits of care rather than facilitators to utilizing care. In one of the only published Canadian studies documenting facilitators to care, Sword (2003) found that use of prenatal care was facilitated when care providers were believed to be credible, respectful and attentive to the needs of women.

### **Barriers, facilitators and motivators to accessing prenatal care in Nunavut.**

For Inuit women, challenges accessing health care services are posed by culture and language (Archibald & Grey, 2004; Douglas, 2006; NAHO, 2006; O'Neil, 1989; Nunavut Tunngavik Incorporated [NTI], 2008). O'Neil describes barriers inherent in what he considers a colonial model of health care provision that does not understand the cultural values or the

language of the community it is serving. This is supported in more recent research that suggests barriers posed by language and cultural differences between Inuit and non-Inuit care providers are still prevalent (Archibald & Grey). Specific to prenatal care, Smith (2002), suggests that for Inuit women living in communities where medical evacuations for birth are the standard protocol, pregnant women may initiate care late. In Nunavut, the medical travel for birth policy has removed birth from the majority of communities, forcing women to give birth in out-of-community hospitals (Douglas; Gold, O'Neil, & Van Wagner, 2007; Jasen, 1997; Moffitt, 2004). The threat of evacuation may thus serve as a barrier to care for women who enter care late, or not at all, believing they may avoid this eventuality if the health centre staff is unaware of their pregnancy.

There is limited literature specific to the barriers, facilitators and motivators to accessing prenatal care for women in Nunavut and no published literature exploring the factors contributing to prenatal care utilization in the territory. What the research has shown is that Inuit women and women in Nunavut have identified several unmet needs with respect to the content and delivery of prenatal care. A study on maternity care in the four Inuit regions of Canada found that women reported gaps in prenatal care that included a lack of support and information about medical policies, medical procedures and traditional birthing practices (NAHO, 2006). The study also found that women wanted more information about parenting, nutrition and travelling during pregnancy (NAHO). The *MES* highlights similar concerns among women in Nunavut who reported a lack of sufficient information concerning pregnancy-related topics, primarily those related to the physical changes in pregnancy and clinical tests and procedures (PHAC, 2009). This survey also found women in Nunavut were less satisfied with their experiences of maternity care than women from other Canadian territories and provinces. In *Evaluation of Models of*

*Health Care Delivery in Inuit Regions*, Archibald and Grey (2004) found gaps in service delivery related to a lack of Inuit health care providers and traditional Inuit knowledge and language.

While the studies suggest these gaps and unmet needs contribute to dissatisfaction with care (Archibald & Grey; PHAC), it is unclear what role they may play in terms of posing barriers to care.

## **Summary**

Disparities exist between women in Nunavut and women from other Canadian jurisdictions related their health and the health of their newborn infants. The literature shows that prenatal care may effectively address some of the risk factors that contribute to these disparities. While the evidence suggests Inuit women identify areas of unmet need and express dissatisfaction with elements of prenatal care, there is a lack of research examining the factors that influence utilization. Addressing the unmet needs and ensuring the benefits of prenatal care are available to all women in Nunavut requires a detailed understanding of these influences. This study is focused on addressing this critical gap in our knowledge by identifying the barriers, facilitators and motivators to accessing prenatal care among women in two Nunavut communities.

## **Chapter 2: Methods**

The purpose of this study was to identify the barriers, facilitators and motivators to utilizing prenatal care in two Nunavut communities. A qualitative, descriptive approach was used to meet this objective and to build on the existing quantitative findings that suggest women in Nunavut are at risk for low utilization of prenatal care (Macaulay & Durcan, 2005; PHAC, 2009). Using a socioecological framework for prenatal care utilization (Sword, 1999), this qualitative approach explored how the relationship between women's personal and situational

factors and the characteristics of the health care program and service delivery contribute to utilization of prenatal care in two Nunavut communities. A qualitative approach was best suited to this study because it framed utilization within the context of women's lives and the various influences that impact utilization of prenatal care. Qualitative description, as described by Sandelowski (2000), also addressed the need expressed by some researchers to better understand and appreciate the barriers to utilizing prenatal care for this population of women (Luo et al., 2010; Macaulay & Durcan, 2005). For research conducted in Inuit communities, a qualitative approach has been recommended as a valuable approach because it provides opportunities for participants to identify solutions in addition to identifying the problems being investigated (Kenny, 2004). A qualitative design also provided the flexibility considered desirable by Aboriginal communities for commenting on their primary health care systems (Kenny).

Perceived challenges with interpreting data from participants whose culture and first language may be different from my own influenced the decision to use a qualitative descriptive approach. As the "...method of choice when straight descriptions of phenomenon are desired," a qualitative descriptive approach allowed the analysis to stay close to the data with minimal interpretation (Sandelowski, 2000, p.1). Minimizing interpretation also addressed some of the challenges posed by data translated from Inuktitut to English. Tsai et al. (2004) suggest that translated data have already been filtered once when the language of the participant is translated into the language of the researcher. A qualitative descriptive approach reduced threats posed by a second round of filtering and supported the recommendations of Tsai et al. to avoid using research approaches such as phenomenology and discourse analysis when analyzing translated data. A descriptive approach also was considered best suited to address the informational needs

of the community collaborators who were interested in understanding what the barriers, facilitators and motivators to care were rather than theories or essences of the phenomenon.

### **Conceptual Framework**

There is literature describing the negative impact of policies that require medical evacuation for birthing services for women in Nunavut, (Ernerk & Kusugak, 1990; Kaufert & O'Neil, 1990; Smith, 2002) and studies that examine the prevalence of cultural and language barriers (NAHO, 2006). The literature also suggests women in Nunavut are dissatisfied with prenatal care (PHAC, 2009). In light of these previous findings, an exploration of utilization behaviour in this population of women required an approach that considered the context in which women access care. The socioecological model of health services utilization was specifically chosen to frame the data collection and analysis processes to consider these influences. This model, developed by Sword (1999) describes utilization of prenatal care as the interplay between a woman's "personal and situational factors" and the delivery of health programming and services. In this model, a woman's personal factors (including the feelings she has towards her pregnancy) and her situational factors (such as access to transportation) are influenced by her social networks and her community. The delivery of programmes and services is influenced most closely by the characteristics of service providers, the characteristics of the health care system and financial resources. The next level of influence on programme and service delivery includes the skills and experience of service providers and factors that influence funding priorities. Public policy is the outer level of influence related to both personal and situational factors as well as health services factors as they impact utilization of care (see Appendix A).

The socioecological model supported the objectives of the study by providing the framework within which the focus shifts from an individual's sociodemographic characteristics,

as they impact utilization of prenatal care, to a system of related factors that contribute to the behaviour. This is an important framework in a population of women for whom the research literature suggests are at risk for low utilization based on sociodemographic characteristics that include high unemployment and low educational attainment (Heaman et al., 2007; Tough et al, 2007).

### **Position of Researcher to the Research Topic**

My experiences providing midwifery care to women and their newborns in Rankin Inlet, with occasional visits to the other Kivalliq communities to provide prenatal care, left me feeling that the model of prenatal care was not meeting women's needs. I was confident that the Rankin Inlet Birthing Centre was providing clinically competent care to women and their newborns but questioned the relevancy of some of the components of care and the importance of these components from the woman's perspective. My concerns about the relevancy of the model of care were supported by the findings of the *Maternity Experiences Survey* (PHAC, 2009) and *Exploring models for quality maternity care in First Nations and Inuit communities* (NAHO, 2006) that showed women were not satisfied with certain elements of prenatal care. This combination of personal experiences and the available evidence informed my academic pursuit of this subject matter and influenced how I approached the research.

### **Approvals and Licenses**

In compliance with *Negotiating Research Relationships with Inuit Communities: A Guide for Researchers*<sup>2</sup> (Inuit Tapiriit Kanatami [ITK] & Nunavut Research Institute [NRI], 2007),

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<sup>2</sup> *Negotiating Relationships with Inuit Communities* is a guide for researchers conducting research in Inuit Communities in Canada. It leads the researcher through the steps of community engagement and collaboration, applying for a research license from the Nunavut Research Institute (NRI) and disseminating the findings to the communities. As one of the two cited authors of the document, Inuit Tapiriit Kanatami (ITK) is a national organization that advocates on behalf of Canadian Inuit regarding numerous issues including social, cultural, political and environmental. The second cited author, Nunavut Research Institute (NRI) is the licensing body for research conducted in Nunavut and provides information and advice regarding aspects of research and funding in the territory.

community collaboration informed the methodology. Community collaborators worked with me to develop the interview guides for women and care providers, oversaw participant recruitment and contributed to the data analysis. These collaborative efforts will be explained in greater detail in the following sections. This research also was approved by the Hamilton Health Sciences/McMaster University Faculty of Health Sciences Research Ethics Board (see Appendix B). Letters of information and consent forms were provided for individuals in their language of choice, Inuktitut or English. The study was explained to interested participants by the Friendship Centre staff in Rankin Inlet or the research assistants in Arviat; two women from the community who were employed by the local Hamlet and trained by staff from the Arctic Health Research Network (AHRN) to provide research support. I explained the study and the content of the consent forms again prior to obtaining participants' signatures and conducting the interviews. Informed consent was obtained from all participants in Inuktitut or English. In compliance with the Nunavut Research Institute's *Negotiating Research Relationships with Inuit Communities: A Guide for Researchers* (ITK & NRI, 2007), community approval was documented by both the Health Committees in Rankin Inlet and Arviat leading to the licensing of the project through the Nunavut Research Institute in October, 2010 (see Appendix C).

### **Study Settings**

Two communities were selected for this study: Arviat and Rankin Inlet. Both communities are on the west coast of Hudson Bay. The Kivalliq region is one of three administrative regions in Nunavut (Archibald & Grey, 2004). It is possible to travel by boat and snowmobile between some Nunavut communities but air travel is most common (ITK, 2009); this includes travel to Rankin Inlet and Arviat. Table 1 provides information about these two communities.

**Table 1 Population Profile according to the 2006 Census (Statistics Canada 2009b)**

	<b>Arviat</b>	<b>Rankin Inlet</b>
<b>Population</b>	2,060	2,358
<b>Percent of population who self-identify as Inuit</b>	92%	81.6%
<b>Percent of population who speak an Aboriginal language at home*</b>	94%.	52.6%
<b>Median Age</b>	18.4	19.9
<b>Women</b>	17.8	19.5
<b>Men</b>	19	20.3
<b>Median income in 2005 of all private households</b>	39,296	58,624
<b>Percent of population 15 or older</b>	58.7%	62.6%
<b>Percent of population 15 or older with at least high school education</b>	23%	34%
<b>Unemployment rate</b>	16.5	13.3
<b>Women</b>	11.8	10.2
<b>Men</b>	20.8	16.5

\*Statistics Canada refers to speakers of an Aboriginal language. The dominant Aboriginal language in this region of Nunavut is Inuktitut (ITK, 2008).

### **Arviat.**

Arviat was chosen as it is one of the Kivalliq communities contributing to the 49% attrition rate from prenatal care (Macaulay & Durcan, 2005). Arviat is Nunavut’s third largest community according to the 2006 census with a population of 2,060, of whom 1905 (92.5%) self identify as Inuit (Table 1). Over the past 30 years, Arviat has had one of the highest per capita birth rates in the country, 35 per 1,000 people versus a national average of 10.3 per 1,000 (Arviat Hamlet Council, 2009). Decades of lobbying for the option to give birth in the community (Gold et al., 2007), as well as a recently renovated birthing centre, have yet to result in an operational birthing unit and women must fly to one of the local referral centres for planned births.

According to Arviat’s Community Wellness Strategy (2009-2014), recent attempts to provide birthing facilities in the community have suffered from poor planning and implementation with midwives eventually reallocated to Rankin Inlet. Despite the focused efforts of the community to

achieve community-based, comprehensive maternity care, support from decision-makers and funding agencies has not been sufficient to achieve this goal (Arviat Hamlet Council).

The health centre in Arviat provides primary care to the community. Seven registered nurses, one community health representative (CHR) and one home care nurse are allocated to Arviat for primary health care. The prenatal program is embedded within this health care setting and manages all aspects of prenatal and postpartum care. For maternal and newborn care specifically, there is one maternity care worker who is trained to provide support and education to women throughout pregnancy and postpartum (James, 2010) and a visiting midwife who is designated to spend 2 to 3 days a month supporting the maternity care delivered by the nurses. The health centre has an average of 44 prenatal visits a month (Arviat Hamlet Council, 2009).

### **Rankin Inlet.**

Rankin Inlet was selected as the only community in this region with adequate utilization of prenatal care (84%) when compared with the other communities in the region (Macaulay & Durcan, 2005). Rankin Inlet is the largest community in the Kivalliq region of the territory with a population of 2,358, of whom 1,925 (81.6%) self identify as Inuit according to the 2006 census (Table 1). Rankin Inlet has the only birthing centre in the Kivalliq region. The Rankin Inlet Birthing Centre is staffed by registered midwives who are able to provide women with the option of intrapartum care in their own community. The Rankin Inlet Birthing Centre was established in 1993 as a pilot project for providing community birthing for women considered low risk (England, 2007). It now provides the option of birthing services for women considered low risk in Rankin Inlet and the surrounding Kivalliq communities (Couchie & Sanderson, 2007). In addition to registered midwives, one maternity care worker supports the maternity care programme. Despite the frequently cited challenges of retaining staff, women in Rankin Inlet are

able to receive midwifery-led maternity care in their own community (Couchie & Sanderson).

The recent registration of two Inuit midwives from Rankin Inlet means that midwifery care can be provided in both Inuktitut and English.

All other primary health care is provided by registered nurses who are the first care providers to assess and treat individuals when they present at the health centre. Primary care physicians practicing in Rankin Inlet will see individuals once a nurse or midwife has identified the need to do so (NTI, 2008). In 2005, a 10 bed hospital was opened in the community providing inpatient services for some of the community's health care needs. Births are conducted in the three dedicated maternity care rooms at the hospital but prenatal and postpartum care is conducted in a separate location in a facility shared with the Public Health and Home Care programs.

## **Participant Eligibility**

### **Sample size.**

The sample size for this study was not predetermined. Sandelowski (2000) suggests that determining sample size in a qualitative, descriptive study should be based on developing an improved understanding of the phenomenon under investigation. Rankin Inlet and Arviat have only one facility each providing prenatal care. As a result, all prenatal women and service providers within each community utilize the same model of health care programming and delivery. In addition, both communities share similarities in culture and language. It was felt that the relative homogeneity of experiences related to prenatal care services may allow a smaller sample size than might be required for a population with access to multiple and varied delivery systems. With this in mind, it was felt that a sample of 8-10 participants from each community (5-7 prenatal care clients and 3 maternity care providers), for a total of 16 – 20 interviews, would

provide the information required to develop an improved understanding of the barriers, facilitators and motivators to utilizing prenatal care.

### **Women.**

Women were eligible to participate in the study if they were over the age of 18 years, lived in Rankin Inlet or Arviat, and were either pregnant or had given birth in the previous 6 months. Women were excluded from participating if they were not fluent in either Inuktitut or English, had not experienced at least one trimester of a pregnancy in either Arviat or Rankin Inlet, or were unable to consent based on diminished capacity as defined by *Ethical Conduct for Research Involving Humans (CIHR, NSERC & SSHRCC, 2010)*. No one who expressed an interest in participating was excluded based on these criteria.

Women from Arviat and Rankin Inlet were purposively sampled. Maximum variation sampling, both with respect to demographic variation and phenomenal variation, was originally proposed (Sandelowski, 1995). It was anticipated that women of different ages and parities would be recruited using demographic variation while phenomenal variation would seek participants with diverse experiences with the phenomenon of interest, utilization of prenatal care. Specifically, the sample selection criterion was chosen to reflect a range of experiences regarding utilization of prenatal visits. This included those who followed the current recommendations regarding the scheduling of prenatal visits and those who attended irregularly or not at all. In consideration of small community sizes and limited numbers of prenatal clients, snowball sampling and convenience sampling strategies were to be used where insufficient numbers were achieved through the initial sampling strategy.

While maximum variation sampling and phenomenal variation were the goal, all eligible women who expressed an interest in the study and appeared for their scheduled interview were

included. This approach was more reflective of a convenience sample (Patton, 2002). Given the small pool of potential participants, there were concerns that there may not be enough women interested in participating to achieve maximum variation as proposed. Respecting the time and efforts of the community recruiters and the availability of interested participants, a convenience sample was adopted. The sampling strategy was able to capture the desired range of participants in regards to diversity in experiences with respect to utilization of prenatal care.

### **Maternity care service providers.**

Maternity care providers were eligible to participate if they had worked with pregnant women in either Rankin Inlet or Arviat for at least 6 weeks as a registered midwife, maternity care worker, community health nurse or Canadian Prenatal Nutrition Programme worker. High staff turnover rates among service providers in some Nunavut communities influenced the decision to include the minimum of 6 weeks of practice. It was important to include willing participants without long term experience both to achieve the proposed sample size as well as to benefit from the perspectives of providers less familiar with utilization of prenatal care specific to these communities. Service providers were excluded if they were not fluent in one of the two languages, Inuktitut or English. No one who expressed an interest in participating was excluded based on this criterion. A convenience sample, seeking participants based on their willingness to participate (Patton, 2002) was utilized owing to a small pool of potential participants.

### **Recruitment.**

All recruitment and consent materials were translated into Inuktitut in accordance with the Nunavut Research Institute. English documents were translated into Inuktitut by a local translator recommended by a member of the Arviat Health Committee. This translator was

chosen both for his skills and experiences as a translator as well as to keep the research funds within the communities.

Invitations to participate in the study were posted in English and Inuktitut in public places including local grocery stores and the Wellness and Friendship centres. In Arviat, an invitation to participate also was broadcast over the local radio using the information from the recruitment poster. With permission from the Government of Nunavut Department of Health and Social Services, women attending prenatal or postpartum visits with midwives in Rankin Inlet were provided with a letter of information about the study. These recruitment strategies reflected the recommendations of the community collaborators based on how they believed information about the study would be best received.

All interested participants contacted the individual or individuals in their community who were responsible for recruitment. The administrator at the Pulaarvik Kablu Friendship Centre in Rankin Inlet and the research assistants in Arviat were informed of the sampling strategy and compiled a list of the names and contact information of interested participants. All potential study participants received information about the study and my contact phone number and address as well as that of my research supervisor should they have any further questions. Interviews were then scheduled with interested participants during the week I planned to be in each community. The names of these individuals and their interview times were given to me when I arrived to orient myself to the interview locations.

The Nunavut Research Institute recommends financial compensation for all research participants in Nunavut (ITK & NRI, 2007). Participants received a \$50.00 gift card for one of the local groceries stores, the Northern or the Co-op, prior to or at the conclusion of their interview. Participants were eligible to receive taxi vouchers to cover the cost of transportation to

the interview and had access to complimentary childcare and refreshments. Two of the participants in Rankin Inlet and three in Arviat did not arrive for their scheduled interviews and did not participate. One potential participant in Arviat arrived several hours late and received the gift card despite not participating in an interview. I chose not to interview her because interview responses at that time were no longer providing new information and I felt the primary interview objectives had been met.

### **Data Collection**

Data collection in qualitative descriptive studies usually includes some form of semi-structured individual interview or focus group (Sandelowski, 2000). Using interviews in qualitative enquiries provides the opportunity to learn from participants what they think and feel about particular topics (Patton, 2002). The interview's potential to explore perceptions and collect the personal stories of participants supported the objectives of this project. In addition, collaborators from both communities recommended that individual interviews would be the most valuable way to gather information since previous attempts to gather maternity care information in a group forum had been unsuccessful. Individual interviews were chosen to gather information from women and service providers regarding utilization of prenatal care. Focus groups with service providers were not conducted because community collaborators suggested that care providers might feel more comfortable disclosing information during individual interviews.

An interview guide was developed to ensure that all of the interviews followed the same general format with the same "basic lines of enquiry" (Patton, 2002). Interview guides were developed for the specific group of participants, either prenatal care clients or service providers, and were informed by the socioecological framework. As such the guides were designed to probe

how personal factors, social networks, community and health services influenced utilization of prenatal care.

The initial drafts of the interview guides were revised based on recommendations from collaborators in Arviat and Rankin Inlet and the Research Ethics Board. Collaborators in Arviat added questions to the interview guide to address gaps in knowledge about the delivery of prenatal care in their community. These questions addressed the information provided in prenatal care, how this information influenced decision-making in pregnancy and some brief questions about women's choice of birthplace and other pregnancy related services in the community such as the Canadian Prenatal Nutrition Programme. These questions were asked in both communities to standardize the interview guide.

#### **Interview guide for women.**

The interview guide for women (see Appendix D) included a brief sociodemographic questionnaire that was completed by the interviewer at the conclusion of the semi-structured guide. The questionnaire was included to gather basic information about the participant's background and characteristics as they related to the sampling strategy; information that may not have emerged in the context of the interview. A literature review was used to identify the factors associated with utilization of prenatal care and associated factors were included in the questionnaire such as age, income and educational attainment.

Participant responses yielded further revisions to the guide throughout the data collection phase and these changes were documented on the guide itself. Some of these changes were content related and some were context related. For example, concerns women had about their service providers maintaining confidentiality came up as a salient issue during the first few interviews and led to a question being added to the interview guide about this topic. Conversely,

questions that required women to hypothesize or contemplate potential changes in prenatal care were dropped from the guide as women had difficulties responding to them.

### **Interview guide for service providers.**

The interview guide for service providers included a brief questionnaire (see Appendix E). These seven questions were related to the participant's language used at home, length of time in the community and their education and experience related to prenatal care. The questionnaire was designed to gather background information that addressed the socioecological framework. The interview guide was focussed on similar topics as the interview guide for women but was framed for the service providers specifically.

### **Interview process.**

Collaborators felt participants in Rankin Inlet would prefer to be interviewed in English thereby eliminating the need for interpreters. In Arviat, collaborators felt there would be participants who would require interpreters. The proposal reflected this by including the option of interviews in either English or Inuktitut. Originally, interpreters were to be sought through Nunattinni Katujjiqatigiik Tusaajinut. In consultation with community collaborators, a decision was made to employ the community-trained research assistants for this purpose because they are both bilingual and members of the community. Working with the research assistants in this capacity was critical to the research process because it encouraged ongoing and detailed conversations about the interview questions and participant responses at the end of each interview. In turn, including the research assistants during the interviews supported the recommendations for research in Nunavut by providing learning opportunities throughout the various stages of the interview process and contributing to their experiences as emerging researchers (Healey, 2008). To address potential concerns with confidentiality, participants

could choose who would attend the interviews with them. The research assistants were present in this capacity for four interviews in Arviat.

Although audio recording of interviews was preferred for this qualitative research approach, participants could decline having their interviews recorded. For the interviews where participants chose not to be recorded, handwritten notes were taken and subsequently reviewed immediately after the interview and entered into a Word document at the end of the day. These revised notes included the content of the interviews as well as some of the contextual factors such as the reasons for declining to be recorded. The hand recorded interviews were disadvantaged by not having a verbatim account of participants' responses. I recall on several occasions during these interviews feeling disappointed by the loss of data that would not be captured by a verbatim account of the participant' stories. As a result, these interviews lack the breadth of information that was captured during the audio recorded interviews and may be prone to bias by the selection of what was ultimately written down. There were, however, some advantages to hand-recording the data. Handwriting the notes encouraged more reflection throughout the interviews as observations and comments were used to detail as accurately as possible the conversation between the participant and myself. In addition, considerably more reflection occurred during the almost immediate rewriting of the interviews when compared with reviewing the more cursory notes that accompanied the recorded interviews. These periods of reflection were beneficial in that they began the initial stage of data analysis.

Thirteen of the digitally recorded interviews were transcribed verbatim by the interviewer. This was done to further immerse myself in the research process and ensure that expressions and words that may be misunderstood by a transcriptionist unfamiliar with Inuktitut were captured in the transcription. In the interest of time, four recorded interviews from

participants who were fluent in English were sent for transcription by a professional. These transcripts were cleaned and I completed and added the words that were omitted by the transcriptionist. Owing to the brief answers provided by participants, some of the transcripts were “thin” (Miles & Huberman, 1994). This term suggests that the thick descriptions desired in an interview transcript were not captured during some of the interviews. This affected the analysis in that some of the transcripts read more like surveys in the absence of rich descriptions. While the detail is absent from many respondent answers, the responses were able to capture the factors that influence utilization of prenatal care as experienced by the participants.

### **Data Analysis Method**

Qualitative content analysis was used to derive meaning from the data. Sandelowski (2000) suggests qualitative content analysis is the most appropriate for a descriptive study and remains as close to the actual data as possible with minimal interpretation. In essence, qualitative content analysis provides a summary of the “informational contents of the data” (Sandelowski, p. 338) by developing broad categories that capture the phenomenon of interest (Elo & Kyngas, 2008). Hsieh and Shannon (2005) suggest that qualitative content analysis provides the researcher with a richer understanding of the phenomenon of interest and is a suitable approach when there is limited research on the phenomenon. With the expressed purpose of generating knowledge, presenting factual information and providing practical recommendations regarding the phenomenon under investigation (Krippendorff, 1980, as cited in Elo & Kyngas, 2008), qualitative content analysis was determined to be the best suited for this study.

Qualitative research often benefits from an iterative analysis that involves coding data concurrently with field work (Miles & Huberman, 1994). Travel to Nunavut and accommodation in the communities is very expensive. Limited funding did not support extended periods of time

in Arviat and Rankin Inlet and an iterative process, specific to coding and analysis of the data was not possible. Each interview, however, was reviewed at the end of the day and detailed notes were taken. Discussions with collaborators and research assistants also provided valuable input about the interviews and interview process, which I was able to reflect on. Consequently, the interview guide was revised to include the relevant feedback from these discussions.

### **The coding process.**

Interview transcripts and hand recorded notes were imported into NVivo 8 computer software. NVivo computer software was chosen to manage the volumes of data because of its ability to develop emergent codes, establish non-hierarchical and hierarchical categories, organize demographic information, retrieve and organize coded data and record memos (Silver & Lewins, 2009). While a considerable number of handwritten notes also were taken during the data collection and analysis phase, the organization provided by computer software was invaluable as a constant reference point.

Qualitative content analysis requires the identification of a unit of analysis prior to immersing oneself in the data (Elo & Kyngas, 2008; Graneheim & Lundman, 2004). Individual interviews were used as the unit of analysis, as recommended by Graneheim and Lundman, because they can be considered in their entirety as well as their smaller units of meaning. In keeping with the research approach, data were analysed and were presented as descriptions rather than numbers (Sandelowski, 2000).

The absence of available literature specific to utilization of prenatal care for women in Nunavut supported an inductive process. Rather than employ a deductive approach using a priori codes developed from the current knowledge base to code and categorize the data, an inductive approach allowed emergent ideas to surface and code names to be derived from the data (Elo &

Kyngas, 2008; Hsieh & Shannon, 2005; Miles & Huberman, 1994; Sandelowski, 2000).

Transcripts were read over several times until I felt sufficiently immersed in the data that a general understanding was held. Data were placed into meaning units to which codes, derived from the data, were applied (Graneheim & Lundman, 2004). Some of these codes were named using my own language to describe the coded text while other codes were *in vivo*, using the words of participants to name the code (Strauss & Corbin, 1990). *In vivo* codes were commonly used to describe experiences related to personal barriers and motivators to prenatal care. *In vivo* codes such as *I don't feel like it* and *too busy* were often able to capture the meaning of the coded text better than something developed using my own language. This inductive process of generating codes meant that they were prone to revisions, deletions and additions with subsequent readings of the transcripts or the coded data (Miles & Huberman, 1994).

Categories were then used to organize the codes into more discrete chunks of data related by their descriptive content (Graneheim & Lundman, 2004). These categories were developed to provide structure to the large number of codes based on a recognized relationship or commonality. Abstracting the codes into categories encouraged more comprehensive examination regarding the relationships between the codes in order to ensure they were placed in categories that captured their content. The categories were chosen this way to stay close to the data. One category that illustrates this point is *negative feelings about pregnancy*, which was used to categorize the codes that were initially thought to describe specific negative feelings women experienced about a pregnancy such as fear, unhappiness or disinterest.

While developing the codes and categories, there was continual reflecting back on the research question and the conceptual framework to ensure they aligned with the objectives of the research. It was helpful to think about the coding, recoding and category development with

respect to the barriers, facilitators and motivators to care and how these fit within broader influences that included social networks and community. As analysis progressed, some of the categories contained large volumes of data and were subsequently divided to differentiate the data into sub codes or text was moved to a more fitting code or category. Other more discrete in vivo codes such as *I forgot* and *it's family issues* were abstracted into a sub category called *life circumstances* which would later belong to a category related to situational barriers to care. One in vivo code that underwent several revisions was *gossip*. There was a similar code *confidentiality*, both of which dealt with women's perceptions of a lack of confidentiality among service providers. As a deeper understanding was achieved during analysis, it became clear that the two codes essentially described the same phenomenon, the difference being that *gossip* was the term participants used to describe what I described as *confidentiality*.

A final level of abstraction was conducted whereby broad conceptual categories or themes suggested by the socioecological framework were applied to the data. These themes included the personal factors, situational factors and system- related characteristics that influence utilization of prenatal care. The category describing system-related characteristics required sub themes or categories that included the characteristics related to the health services agency and those related to the service providers. All themes were further divided by the factors that discourage and encourage utilization of prenatal care. These themes captured the findings in a way that fit within the conceptual framework.

Throughout the analysis, memos were written to document the emergent ideas and decision-making processes regarding the various stages of data analysis (Birks, Chapman, & Francis, 2008). As largely conceptual notes (Miles & Huberman, 1994), memos contributed to developing the categories that best captured the codes and their meaning units. Memos were

attached to the code name or coded text and were used to reflect the content of that particular segment of data. An excerpt from the memo related to the code *confidentiality* highlights the need for further exploration into a possible relationship between confidentiality, trust and utilization of prenatal care.

*So it seems that the small town, community as it is part of the socioecological framework, impacts views of care because of trust/confidentiality -maybe confidentiality more than trust but [I] need to figure out this relationship. So while community might not impact utilization a lot... it impacts feelings of trust and confidentiality, but [how do] these feelings... impact utilization?*

### **Coding confirmation.**

Three interview transcripts, ranging from thin description to thick description, were sent with a preliminary coding scheme to the members of the thesis committee. There were concerns among some committee members about prompting during the interviews and a lack of relevant information to meet the research objectives. These concerns further supported the need to provide rationale for the prompting and thin transcripts and confirmed the need to conduct check-coding with the research assistants. Check-coding ensured the coding scheme was a plausible representation of the data by having more than one researcher “code the same data set and discuss their initial difficulties” (Miles & Huberman, 1994; p. 64). My thesis supervisor reviewed the transcripts and confirmed the accuracy of the initial coding scheme as well as a subsequent coding scheme. Further discussions with my supervisor occurred while writing and reviewing the analysis with revisions made that reflected this process. Check-coding also was carried out with the research assistants in Arviat to minimize threats to credibility posed by the use of translated data, to minimize the potential for lost or even absent concepts from one culture to another (Tsai et al., 2004) and to ensure that meaning could be derived from the thin

descriptions in some of the transcripts. The research assistants also were able to provide feedback regarding their perceptions of the interview process and the preliminary findings.

The initial coding scheme was used by the research assistants to code the same three interviews and was consistent in the majority of the codes and categories relevant to the findings. This consistency in coding is likely, in part, related to the nature of the data in that the responses were often straightforward without elaboration. The few inconsistencies were related to coding that would have required some interpretation on my part. One difference occurred with the coding of responses related to a first pregnancy or an unwanted pregnancy. The research assistants coded these under *teenagers* believing that these experiences must be related to being a teenager. The code *teenagers* was initially developed to capture responses specific to teenage pregnancies, something service providers noted was a barrier to care. The code was eventually reorganized with some of the coded data relocated to barrier-specific codes and the remaining data providing context under the pre-existing code. This divergence in coding was not meaningful in the findings. Another difference was with the coding of *importance of prenatal care* under which I coded elements of care women identified as important. The research assistants coded similarly but with the addition of all references to prenatal blood work. The perception of blood work as an important component of prenatal care is reflected in numerous interviews as well but was coded as such only where it was explicitly stated to be important by the participant. Coding all references to prenatal blood work under *importance of prenatal care* is somewhat more interpretive than other coding and so the interpretation of the research assistants is included as it supports the responses from others.

Both research assistants had a detailed understanding of the perceived barriers, facilitators and motivators to care based on their own experiences of pregnancy in Arviat, having

been present during some of the interviews and having grown up in the community. To benefit from this knowledge, one of the research assistants was available to provide feedback on the summary of the findings. Similar to the coding, there was general agreement regarding the findings with one notable exception: the research assistant did not feel women had concerns about service providers maintaining confidentiality. This finding, however, was so prevalent that it remains in the final research findings with the acknowledgement that it was not supported by the research assistant. Another issue that must also be acknowledged is the possibility that the research assistants approached the research and analysis with assumptions based on their own experiences with the health care system. These assumptions are considered part of any qualitative research project and are not considered more or less significant than those of the other community collaborators or of myself. Corroboration of the coding scheme and the findings among the members of the research team suggest that any potential assumptions we had did not cloud the analysis process since similar information was found in the data.

### **Data display.**

Data display was undertaken to provide a comprehensive and visually concise way to draw conclusions from the data (Miles & Huberman, 1994). Numerous attempts were made to organize the data with models through NVivo software. I found, however, that hand-drawn displays were more beneficial to me. I adopted this approach because the considerations and decisions required for developing the hand-drawn displays provided additional reflection and clarity that I was not able to achieve with the NVivo generated displays. This need to manually conduct parts of the analysis to develop and test relationships without the computer software is illustrated in almost 100 pages of hand-written notes, diagrams and visual representations that make initial relationships and seek confirmation of these relationships.

A final step in data display involved using tables to determine if there were differences between the communities in terms of the barriers, facilitators and motivators to utilizing prenatal care. Miles & Huberman (1994) suggest a number of different data displays to draw comparisons in a qualitative study. While a comparison of prenatal care between two communities was not the objective of this study, looking at two communities with disparate utilization warranted recognition of the different patterns of utilization that may exist between the two sites. To meet this objective, a table was designed that included the barriers, facilitators and motivators to care. I returned to the coding scheme and inserted the relevant codes and categories into this table according to which factors were present in the communities (see Appendix F). Counts were done to learn about patterns that existed in the data, a part of content analysis supported by Sandelowski (2000). Each count represents a participant who has one or more segments of coded text related to the specific factor identified. Counting how many participants experience the specific factor and differentiating these responses by community and by service provider provides a thoughtful and accurate breakdown of the barriers, facilitators and motivators to care for each community. The service providers were included in these counts to contextualize the barriers, motivators and facilitators to care for the women. Their responses, while included in the table, remain separate from the responses of pregnant and postpartum women as they provide a perspective on the factors that influence utilization rather than a personal experience with them.

## **Chapter 3: Findings**

### **Participants**

Twenty-one semi-structured interviews of prenatal and postpartum clients and maternity care service providers were conducted in November and December, 2010. Thirteen interviews were conducted in Arviat and 8 interviews were conducted in Rankin Inlet, 8 participants were

pregnant, 7 were postpartum and 6 participants were service providers. Most interviews were conducted in-person at the Pulaarvik Kablu Friendship Centre in Rankin Inlet, the Wellness Centre in Arviat or in women's homes; locations that were chosen by the participants. Some interviews with service providers occurred at their place of employment. While this was not initially anticipated, some service providers were unable to take time away from their employment setting to meet at a separate location. Their supervisors were aware the interviews were occurring and provided the time for them to be interviewed. Of the 21 interviews conducted, 17 were digitally recorded. These interviews ranged from 20 – 52 minutes in length. Four participants declined to be recorded for reasons that included feeling shy about speaking into a recorder and feeling uncomfortable about having their English recorded.

Of the 15 pregnant and postpartum women, the age range was from 20-34 years. Six women were primipara and 2 were grand multipara. Seven women had 2 or 3 children each. The pregnancies spanned a range of gestational ages (8 to 35 weeks) and postpartum months (2-5). Ten women had partners and 5 were not in relationships at the time of the interview. Eight women had graduated from high school, 5 of whom also had completed a post-secondary education. Ten women resided in Arviat and 5 in Rankin Inlet. Nine women spoke Inuktitut at home, 5 spoke Inuktitut and English and 1 spoke English at home. A total of 6 service providers participated in the study. Three provider participants resided in Arviat and 3 resided in Rankin Inlet. The service providers included 3 regulated health professionals (registered midwives and registered nurses) and 3 prenatal care workers who did not belong to a regulatory body (maternity care workers and workers in the prenatal nutrition programme). All service providers had been involved with prenatal care in their communities for at least one year.

Concerns about disclosing the identities of participants limit the ability to provide more detailed descriptions of the participants as well as to use verbatim quotes to tell their personal stories. Personal characteristics or elements of the story that might make them recognizable have been anonymized. The changes do not affect the content or meaning of the quote.

## **Barriers, Facilitators and Motivators to Care**

### **Motivators for initiating prenatal care.**

The most notable motivator for initiating care was to obtain a pregnancy test. Women who suspected they were pregnant based on physical signs or a positive home pregnancy test went to the health centre or birthing centre to confirm their pregnancies. With a positive pregnancy test, women were then scheduled for follow-up care, which is how they entered into the routine scheduling of prenatal visits. For some women, their partners encouraged them to initiate care to confirm their positive pregnancy test or to initiate care. Once the test was confirmed, the schedule comprised a visit every 4 weeks until 28 weeks gestation, every 2 weeks from 28-36 weeks and weekly from 36 weeks until the birth or planned medical evacuation for birth. Of the 15 women participants, 6 claimed to have missed visits after their initial appointment, infrequently attend or never attend prenatal care. According to the women, they received phone calls or reminders about their appointments and some chose not to attend their scheduled appointments. All of the participants who missed scheduled visits or did not attend prenatal care resided in Arviat. Ten participants claimed to usually go or always attend their prenatal visits. The factors influencing women's ongoing attendance is described below.

### **Motivators for continuing prenatal care.**

#### ***Personal motivators.***

The reasons women gave for continuing to attend prenatal care were to monitor the health of their babies<sup>3</sup> and sometimes that of themselves. For most women, this motivation was based on positive feelings about the pregnancy. As one participant explained,

I enjoyed it, it was something to do...see new people, and it was nice to know that my baby was growing and [sex of baby]'s healthy...and it was nice to know that. I like how they feel where the baby's position is...and how my blood pressure is. I wanted to go for the health of both of us (P20)

For others it was based on having experienced a health scare during a previous pregnancy or birth and the need to know that this pregnancy was healthy. One participant described a previous experience that affected how she approached prenatal care:

The reason why I go a lot now is because when I was going to breastfeed [sex of baby] for the very first time in [place of birth] I ended up blacking out and I lost a lot of blood. So from there I had to stay in [place of birth] for another week after [sex of baby] was born, so when I came back here I was always going to my appointments now, um checking up on my iron that was low or high. So I... always go to my appointments now and its more important after my youngest [child] was born. (P17)

For this participant, regular attendance in prenatal care served as a way of detecting any potential problems related to her pregnancy. For women who did not regularly attend prenatal care, confirmation that their baby was healthy or reassurance that everything was fine was also the primary motivation to attend. The difference between these participants and the women who regularly attended prenatal care was that they attended prenatal visits when they felt it was time to attend instead of following a routine schedule of visits. One participant said she went to her initial prenatal appointment to find out how many weeks pregnant she was and attended again close to her due date to make sure the baby was “okay”. Participants stated that if they had felt there were problems with the pregnancy, they would have attended prenatal care to have their

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<sup>3 3</sup> The term *baby* is used to describe what is clinically referred to as a fetus to reflect the language of the participants.

concerns addressed. One participant described not attending prenatal care during the “middle” of her pregnancy but noted that she would attend during this time if she felt there were any problems. This participant commented, “When you have normal pregnancies, it’s not a big deal not to go to prenatal care” (P12). Another participant who felt it was not important to attend prenatal care for a normal pregnancy said she attended when she thought she might have a health problem such as a urinary tract infection. Attending prenatal visits for suspected health concerns was described by women experiencing a first pregnancy and women experiencing subsequent pregnancies so was not necessarily related to negative experiences in a previous pregnancy. Some of the service providers said that women who had experienced previous bad outcomes were more likely to regularly attend prenatal care visits and less likely to be motivated by their own perceived need for care. One care provider described this phenomenon when asked about women with pregnancies considered “at risk”:

Those seem to be the women who come even more because now they’re scared... Or they know that something is wrong if they had big obstetrical issues with their past births or pregnancies. They know. Those are the ones that tend to attend more...because they think that something is going to go wrong with this baby too, like the last one, so they want to make sure, so they come to every visit or come even more than their schedule of visits just to make sure that everything is okay. Those are the women who will walk in and say ‘Can you just listen to the heartbeat?’ (P21)

***Situational motivators.***

The influence of friends and family, including the partner or father of the baby, also was a motivator for continuing prenatal care. When women discussed these influences, it became apparent that they often acted as motivators by encouraging her attendance or supporting her decisions to attend. As one participant said, “My family encouraged me to go just for the health. My boyfriend would come along with me to see and hear the heartbeat and see how far I am and he encouraged me to go... and he would come with me”(P16). Most women, however, made the

decisions about prenatal care attendance independent of family and friends who acted more as a supporter of prenatal care rather than a motivator to obtaining care.

Another situational motivator discussed by both women and care providers in Rankin Inlet was that attending prenatal care gave them a destination and a break from the home or work environment. Some participants lived in houses with more than 10 people and might have been responsible for a number of children. For these women, the home environment motivated them to attend so they could get out of the house for a while, to “give the kids some free time” and to “get a break from the house” (P17).

***System-related motivators.***

Some women and service providers described “*having to go*” as a motivation for attending prenatal care. For some women, feeling they had to go because of a scheduled visit or because they had received a call from the health centre or birthing centre informing them of their appointment was enough to motivate attendance. This motivation, coded as, “*I have to go*” and “*I’ll have no choice*”, was also described by service providers who stated that it was usually younger women or women with a number of children who come because they feel they have no choice. One of these service providers captured this motivator, among others, for attending prenatal care as follows:

Some they come because they want to, because they’re new mothers and excited about the pregnancy and looking forward to having the baby, but others might because they were called and were told they have an appointment so they come. It’s like their fourth pregnancy so they know everything so some come only when, because they’re told to.  
(P9)

## **Barriers to prenatal care.**

### ***Personal barriers.***

Barriers related to a woman's psychosocial and emotional state that prevented initiation of care included difficulties accepting her pregnancy and indifference about her pregnancy. Some of the reasons given were feeling the need to hide the pregnancy, disinterest in the pregnancy and not wanting to be pregnant. The women who described these as barriers were more likely to be experiencing a first and unexpected pregnancy. The only other participants to note this as a barrier were service providers. For women, the negative or indifferent feelings about the pregnancy did not necessarily reflect how they felt about the baby but rather reflected a situation in their personal lives that prevented them from fully accepting or openly acknowledging their pregnancy. One service provider discussed custom adoption as a personal situation that can lead to difficulties accepting or acknowledging a pregnancy when a woman is expected to adopt out her baby when she may not want to. One participant described missing her first few scheduled appointments because she was "terrified" of being pregnant and becoming a mother, something which she had hoped not to experience at this point in her life, "I didn't like the fact that I was pregnant so I didn't bother going right when I found out I was pregnant, like I made an appointment right away but I missed a couple of appointments purposely...because I was terrified" (P14).

Other women did not attend regularly because they felt that "*everything is fine*" with their pregnancies and that there was no need to attend prenatal care. Feeling that everything was fine was more common among women who had previously experienced an uneventful pregnancy though women who were pregnant for the first time also described this. Some of the women who felt that everything was fine also noted that they did not feel like going to prenatal care. These

findings were unique to the pregnant and postpartum participants in Arviat yet service providers from both communities described this as a reason for women to miss appointments. One service provider from Rankin Inlet described it this way: “When it’s a no show, it’s because people are so free here it will be like ‘What the heck happened to her?’ ‘Oh it’s because she knows pregnancy is not an illness. Maybe everything is going perfectly fine with her” (P21). This care provider noted that she did not think women felt prenatal care was unimportant but that an uneventful pregnancy was not viewed as something requiring routine monitoring. Another service provider stated that sometimes it was the younger women who did not yet know the potential risks of pregnancy who would not arrive for their scheduled appointments.

*Situational barriers.*

Situational barriers are defined as factors related to one’s individual circumstances that posed challenges to accessing prenatal care. The situational barriers for women in Arviat and Rankin Inlet included caregiving for children, lack of transportation, scheduling conflicts with employment or school and challenging life circumstances.

Caregiving for children was experienced as a barrier in several ways, including the lack of available childcare, the presence of an ill child whom the mother did not want to take out of the house and the logistics of getting children out of the house given the time and energy it can take to get several children dressed and ready to go outside. The latter was noted by service providers to be more of a barrier to attendance for women with several children or young pregnant women who may be looking after someone else’s children. Some women had difficulties getting to their prenatal care appointments because of a lack of transportation though this was not described frequently. While being responsible for children and the lack of transportation were noted individually, the barriers posed by these factors were exacerbated by

weather. It was more difficult to bring children to a scheduled appointment when the weather was cold and there were several children to get dressed in winter clothing. One of the service providers provided her perspective on these related factors as follows: “Um, I think it’s often that they have a lot of kids at home and don’t want to have to drag them out in the middle of the winter, getting them all dressed” (P19).

Work and school commitments also posed barriers for some women though it was more relevant as a consideration rather than a barrier. One participant described the difficulties she had trying to get time away from work to attend her appointments and the disapproval of her co-workers when the visits took longer than she had anticipated. In general, however, women were able to secure time away from work or attend their prenatal visits after school.

*Life circumstances* captured the responses of multiparous women who forgot to attend, felt they were too busy to attend or were distracted or prevented by their home environment from attending. These barriers were deemed situational rather than personal because the responses did not necessarily reflect a lack of motivation or personal challenge attending but rather there were other things happening in their lives that posed barriers to care. There was a sense from service providers that women who were prevented by their home environment from attending were often the ones that needed support the most but that barriers experienced by these woman were difficult to isolate and even more difficult to address. Since there are few available resources for women in both communities, some service providers felt responsible for encouraging women experiencing these barriers to attend prenatal care as it provided them with the opportunity to support women with family and social challenges. As one provider said:

We have a few of them and those are the scary ones too, because they’re the ones that are isolated or it feels like they need the most care and they don’t come ...it’s their family issues, we can’t, they have to solve it themselves you know ... we offer home visits, we offer taxi chits, everything, everything we throw out to them still doesn’t work. (P15)

*System-related barriers.*

The most notable barriers to care described by women were in the system of health care and its delivery. These barriers are described according to the conceptual framework with the influences of the characteristics of the agency and the characteristics of the health care provider. While it was not always clear how to distinguish between what to identify as service provider characteristics and agency characteristics, it was clear that the barriers were related to the system, which is heavily influenced by the characteristics of the agency and the care providers working within it.

*Agency characteristics.*

*Characteristics of the agency* is the only influencing factor where notable differences were found between the two communities. The barriers posed by the agency characteristics were reported more by participants from Arviat than by those in Rankin Inlet and included challenges posed by the hours of operation, waiting times for an appointment, the manner in which visits were scheduled, the environment of the health centre, routine clinical care, health information provided during prenatal care and the language spoken by the service provider.

Hours of operation and scheduling of visits were barriers to care for some participants in Arviat. Prenatal visits in Arviat are generally scheduled by the health centre staff with little or no input from the women who are notified of these appointments on the morning of the visit. Women expressed the desire to be able to choose when their prenatal visits would be both with respect to the day and time. The limited availability of prenatal care appointments, from 1:30 p.m. to 3:30 p.m. on Thursday afternoons, was not convenient for some participants. This was noted to be more of a barrier for women attending school or who were employed. A number of participants in Arviat, however, did not find that the hours of operation or scheduling of visits

posed problems to utilizing care. Hours of operation and scheduling of appointments were not identified as barriers for women in Rankin Inlet.

Waiting time at the clinic was identified as a barrier for some women who did not like waiting to be seen. Waiting for a scheduled visit was more likely to be noted by women who felt their prenatal visits were short and unimportant. One participant described how she felt about having to wait for her prenatal appointments as follows: “They just check pee, check blood pressure and that’s about it. All that waiting, long waiting, for a few minutes with a nurse... [I] we have to wait a long time and all of them go late...” (P4).

Another aspect of the agency that served as a barrier to care was the atmosphere in the waiting area. Some participants described the atmosphere as “nosey” because other women in the waiting room asked unwelcomed questions about their pregnancies. As one woman said, “Some people, some ladies can ask a lot of questions about your pregnancy...They just invade your privacy and start asking all these questions so I don’t go” (P7). Since all prenatal visits in Arviat are scheduled for one afternoon a week, most people in the waiting room on that particular afternoon are there for prenatal care. The environment of the waiting room was not noted to be a concern in Rankin Inlet perhaps reflecting the fact that Rankin Inlet has scheduled visits throughout the week limiting the number of potential clients in the waiting area at any given time.

Another barrier that was described by women in Arviat was the perception that the health facility was unwelcoming and unresponsive to the women’s needs. The nurses in Arviat are responsible for all aspects of health care, including managing chronic diseases, primary health care and handling medical emergencies. For some participants, interactions with the health centre staff for a non-pregnancy related concern became a reflection of the overall health care

environment that includes prenatal care. One participant described calling the health centre when she had a health concern but noted, “Sometimes they get mad...they say why didn’t I call earlier or during the work time” (P2). Several participants of varying ages and parities described being dissatisfied with health-related advice from service providers. As one woman expressed, “I’m always worried about calling the health centre because they pretty much say, ‘Just take some Tylenol’ or whatever they want us to take at home” (P5). In comparison, the midwives in Rankin Inlet are housed separately from the health centre and are responsible for prenatal, intrapartum and postpartum care only and the nurses in the community manage non-pregnancy related enquiries and appointments. While one participant in Rankin Inlet experienced what she felt were unwelcoming responses from one of the midwives regarding a pregnancy-related situation, this interaction was not a barrier to utilizing care for her.

Specific components of clinical care provided as part of routine prenatal care were noted to be a barrier for some women. The clinical components of care women explicitly mentioned were pap tests, blood tests and the 50 gram glucose drink that screens for gestational diabetes. Two participants noted they avoided attending regularly scheduled prenatal visits because they were afraid they might get a needle and did not feel they could refuse.

Providing information and counselling about general health and pregnancy- related topics were included as part of routine prenatal care in Rankin Inlet but were not always part of the prenatal visits in Arviat. Some women in Arviat noted that the absence of information about elements about prenatal care could prevent them from attending. One participant who described being afraid of needles said she did not always go because she did not know what to expect from prenatal care and what would happen during the visit.

Language of prenatal care services was identified as a barrier by a number of participants

in Arviat who were more comfortable speaking Inuktitut than English. Language was included as a structural barrier because the communities are primarily Inuktitut speaking but the health and birthing centres have traditionally been staffed by non-Inuktitut speaking service providers. So while language is specific to the service provider, it was noted here to be a function of the system rather than the individual provider.

Some participants found English-speaking service providers to be a barrier because they simply felt more comfortable speaking Inuktitut. For other women, language posed a more considerable barrier because limited English language skills prevented effective communication with the service provider. One participant discussed the barriers posed by non-Inuktitut speaking service providers as follows:

When you see an Inuk nurse they understand you more and can talk to you more. They understand you better... when you understand you're more willing to participate in the prenatal [visit] and when you don't understand it just doesn't work. (P12)

*Service provider characteristics.*

Barriers to care posed by the characteristics of the service provider were related to her role as a health care provider, which at times was incompatible with her role as a member of the local community. Women expressed concerns about service providers breaching confidentiality, a previous negative relationship with the provider and having a member of the community provide prenatal care. A number of participants expressed concerns about service providers breaching confidentiality. This was largely a function of living in a small town as the term most often used to describe this concern was “*gossip*”. Participants recounted having heard stories about service providers sharing personal information about women in their care with individuals outside of the health centre staff. For some women, this led to a lack of trust in a specific service provider and for other women it led to concerns about all service providers who were from the

same community. One woman commented:

Well I heard a long time ago when [name] just started working, well she drank lots at that time I guess and, and I'm afraid...like I heard, I don't know if it's true or not but I just heard that she tells people about, you know..... when they're pregnant and so I was... just because I heard that I was uncomfortable with [names of community providers] (P16).

For some women, concerns about confidentiality posed a barrier to utilization and for others it diminished their trust in the particular care provider but did not impact utilization.

Women participants also described barriers to care posed by having had a previous negative encounter with one of the service providers. One participant described her feelings about attending prenatal visits having experienced a previous negative interaction: "I don't usually go. I never go...I really don't like going to the [centre]...um, a few years back, um, one of the staff at the centre did something stupid and, just other reasons, I don't like going there" (P7).

A further barrier posed by service providers was related to being a member of the same community. This concern was voiced by women who were not comfortable seeing a care provider who they may have grown up with or who may participate in recreational activities they did not support. More than one participant was clear that I would not understand what they meant by this because I was not from the community. One participant summarized it well in her response:

If you're from here, if you've got to know the people here you would know how it is and how you'd feel about it. Because once you get to know everybody here, everybody here knows everybody and things get really bad sometimes. People talk a lot and so that's how I feel. I wouldn't see [a service provider from her community] (P7).

While concerns could be related to gossip, similar to the concerns about confidentiality, they differed in that they were not specific to the service provider's clinical role but rather to her membership in the community and a lack of trust that emanated from this. One service provider

described these concerns as women may perceive them:

... there are some who will not see me or any [Inuit service provider] because we're part of the community...if I went to grade eight with this girl and we used to pull each other's hair and argue in grade seven then she may be still hanging onto that and thinking 'I can't trust her.' So it's those dynamics too" (P21).

The concept of trust was noted by other service providers in Rankin Inlet, one of whom stated, "I honestly believe the biggest reason that women don't come is (a) because they don't trust us and (b) they feel that we're judging what they do" (P19). Trust, from the perspective of these service providers, was related to the perceived lack of confidentiality, previous adverse relationships, women's perceptions that their behaviour is being judged and a history of mistrust in the community.

Women participants from both communities also mentioned a lack of trust and feeling judged but did not elaborate on the meaning of these concepts and how they influenced attendance. One participant felt service providers judged women who were not "educated" and another participant did not trust any of the service providers because she believed they shared confidential information with one another.

A common theme relevant to system-related barriers to care was related to the size of the community as described by some women and service providers and the resultant lack of available choices with respect to care. One service provider described the rationale behind women's discomfort seeing a community member for prenatal care in the following way:

And because of how small it is [the town]. You don't have that down south because you have 50,000 people and that's a small city...And you can choose who you're going to see. You probably never saw that person in your life. Who cares? But here these are people that you went sliding with in grade two and maybe lost your virginity to them when you were 16, that's the nurses, and you know, that's too much. And then you're related. A town of 3,000 you're related to 1,000 of them. Or your partner is related to the other 2,000 so, you know, it's going to take time (P21).

### **Facilitators to accessing prenatal care.**

It was initially challenging during the analysis to distinguish between a facilitator and simply the absence of a barrier. When looking at scheduling of prenatal visits, for example, it was unclear whether a flexible schedule of visits provided in one location was a facilitator that was addressing potential barriers or simply reflected the lack of a barrier. As the analysis progressed, it became clear that flexible scheduling was identified by both service providers and women as an important feature of prenatal care. Similarly, the other facilitators noted were factors that encouraged women to attend prenatal care.

#### ***Personal and situational facilitators.***

Most women felt it was easy to get to prenatal care because they did not experience any situational barriers. The responses of these women were largely influenced by living in a community where the health centre or birthing centre is relatively close and children can attend prenatal visits with their mother or care provider. Some participants noted it was easy to attend because prenatal care was within walking distance from their home or place of employment. Some participants were able to attend easily because they had their own vehicle to drive to the appointment or the father of the baby or their partner would drive them in his vehicle. When probed about potential facilitators and asked specifically about how transportation and childcare might facilitate utilization, many women simply stated these would not facilitate care because it was easy to attend.

#### ***System-related facilitators.***

##### ***Agency characteristics.***

Participants overwhelmingly felt that health was the most important reason for attending prenatal care. Thus, factors that encouraged utilization were some of the clinical tests that

reassured women about the health of the baby or themselves. Women noted blood pressure, fundal height measurements, urinalysis and hearing the baby's heart rate as important. Service providers described how women often enjoyed listening to the baby's heart beat during the prenatal visit. None of these factors were specifically noted to be facilitators to care, however. In fact, some participants from both Arviat and Rankin Inlet said there was nothing particularly important or helpful about their prenatal care visits.

A large, encompassing theme was *meeting individual needs*, which included the elements of the agency that responded to the unique circumstances of each woman. Meeting individual needs was noted to be an important focus for the health care providers in Rankin Inlet, all of whom mentioned that addressing the barriers to care necessitated an individualized approach. One service provider described a number of ways the delivery of services was able to overcome barriers experienced by women and meet their individual needs:

So you really do need to find out why they're not coming and then to work around that. You know, maybe it's home visits or maybe it's, um, get a taxi chit for them so they can bring all the kids. Maybe it's making it okay for them to bring the kids as well. I think it's important that you find out why they're not coming. Sometimes you'll never know. Sometimes it might be because they don't want to be seen, they don't want people to know that they're pregnant. And we've had a couple of those lately. And that's fine too, you know. We do as much for them. We say 'Okay, this we need to do. When everybody knows then you can start coming for regular checks.' Or if they're going to have a termination for instance they may not want to come in. (P19)

For some women, meeting individual needs meant providing transportation to the appointment. For service providers from Rankin Inlet, providing taxi vouchers to women who identified transportation as a barrier was noted to be a facilitator. Women from Arviat also mentioned that taxi vouchers would make it easier to utilize care, especially in the winter months; however these are not provided to women in Arviat. Taxi vouchers help address the issue of transportation as well as, to some degree, weather and barriers posed by lack of childcare

and sick children because transportation makes it easier to get the children to the prenatal visit and is a welcoming option during bad weather. A service provider from Rankin Inlet described this facilitator:

In the wintertime we do offer taxi chits because that's another thing that some women don't show up for, if they have ...two to five small children at home. Some of them are in half day school, some of them aren't. They have a hard time getting here especially in the wintertime so we do offer taxi chits to those women to try to get them here. (P15)

Providing taxi vouchers illustrates how a system-related initiative that acknowledges women's individual needs can address some of the situational barriers they may experience. When questioned about what might facilitate utilization specific to the barriers posed by being responsible for children, home visits and childcare at the health centre or birthing centre were mentioned by women and care providers from both Arviat and Rankin Inlet. At present, however, babysitting is not available in either community and home visits are not routinely conducted.

Another system-related facilitator was the option of scheduling and rescheduling prenatal appointments according to both service providers and women in Rankin Inlet. In Rankin Inlet, women could choose their own appointment times from a range of days and times that are not typically offered in Arviat. Service providers from both communities discussed setting aside certain appointment times for women who may have difficulties attending their prenatal visit due to work or school schedules, children or life circumstances. Some women participants described their own strategies for scheduling that met their needs. One participant described booking every prenatal appointment for the same day and time to help her remember when she had to go and another participant described how she would call first thing in the morning to try to get the earliest appointment of the day. One participant noted that being able to schedule her own appointment was what she liked most about prenatal care.

Being given appointment cards and phone reminders also helped women to maintain their scheduled appointments. One participant noted that she always knew when her appointments were: “... I know when to go, I have, they give me a little slip... and say this is the time and date you’re supposed to come back” (P14). This is a routine practice at the birthing centre in Rankin Inlet but because of the way appointments are scheduled in Arviat, a similar reminder system is not in place.

Having a choice of service providers was a facilitator in both communities according to women participants. Providing women with this choice addressed the barriers posed by concerns about the service provider that included her membership in the community, a previous negative relationship with her or about an individual service provider breaching confidentiality. Choosing the service provider also addressed language barriers that existed between Inuktitut speaking women and non-Inuktitut speaking service providers. Thus Inuktitut speaking service providers were also an important facilitator for women who spoke Inuktitut as their primary language. Participants did not provide detailed descriptions of this facilitator but responded in a number of ways. One participant stated, “It would be helpful to have a nurse who speaks Inuktitut”, (P2) while other participants described the value of having an Inuit service provider is for “speaking Inuktitut, yeah. It’s my first language so it would be, it would help a lot,” (P7) and “I want to see an Inuk nurse because I don’t speak very much English” (P6). Some women participants felt it was important to have an Inuktitut speaking service provider because it was easier to speak Inuktitut despite being fluent English-speakers. Speaking Inuktitut meant they did not have to think about what or how they were going to say something.

When participants expressed the desire for service providers who were interested in them and provided information, as a facilitator noted below, language competency influenced the

degree to which these could be achieved. A bilingual service provider described how speaking Inuktitut to women facilitates care:

Women will say, 'It was so nice to not have to think about what I'm going to say' ...because if it's not their first language they have to think about what it is they're trying to ask or say. And they didn't have to pretend they understood something when they didn't..... to avoid looking stupid and it's not looking stupid. It's not understanding a language. (P21)

Understanding the same language as the service provider creates an environment where the purpose of prenatal care and its relevance to the health of the woman and her baby can be understood, thereby facilitating not only utilization of the service but access to what the service potentially provides. The same service provider described how speaking Inuktitut can facilitate greater understanding during a prenatal care visit:

It's when they don't understand and things are not explained to them. And I found that in the other communities that things aren't explained to them very well. It's just kind of this routine machine stuff that once it's explained to them they get the 'Oh yeah' moment and they understand why and then the woman that wasn't explained to before, like when we get some women from the other communities they come in and some of them will say 'Is it ever weird to sit here and have my prenatal done in Inuktitut. This is weird but cool' and whatever. And they'll ask questions and say 'I never knew that's why. I never...' and all kinds of things and they think that's a bonus. (P21)

#### *Service provider characteristics.*

Women wanted service providers who were open to and responded to questions and provided information during prenatal care. They also wanted service providers who were aware of what they were experiencing both in terms of the clinical history of their pregnancy and the personal or social challenges they faced; often described as having the same service provider for every visit. One woman described what she liked about having the same nurse for her prenatal visits:

... I liked it because I didn't have to explain so much about what I'm going through or what she has to tell me. It was pretty much like she knew my pregnancy or what I was

going through because I would tell her how I feel or what problems I'm going through so it was... I liked it. (P7)

Another participant described a similar sentiment: "I wanted just the same person because it's more focused on my, you know, pregnancy and what's going on instead of having one different person every visit [that] just makes it kind of confusing" (P16).

An additional facilitator was community membership of the service provider. Some participants were encouraged to seek care when community members were providing prenatal care. For some women, this was related to a positive relationship with the service provider and for others it was related to the service provider's membership in the community. "It's nice having people serve you or public service that are part of the community" (P4).

One facilitator noted by a small number of women and service providers in Arviat was the provision of food through the *Healthy Moms, Healthy Babies Program*. Workers from this program, which is funded by PHAC through the Canadian Prenatal Nutrition Program (CPNP), provide nutritious food for women waiting for their prenatal appointments at the health centre on Thursday afternoons. Some service providers in Arviat mentioned that they felt the introduction of the CPNP on Thursday afternoons has actually improved attendance in prenatal care. One provider had this to say: "I heard [service provider] saying that they are happy that the Healthy Moms and [Healthy] Babies are back to the health centre Thursday to give out snacks. They are showing up more [and] they want them to have good health" (P13).

## **Summary**

The findings show that personal, situational and system-related factors both encourage and discourage utilization of prenatal care. Motivators to utilizing care were most notably related to the health of the woman and her baby and support from the father of the baby whereas barriers were most notably posed by health care programming and delivery and included long waiting

times for appointments and the language of the service provider. The findings also show that facilitators to utilizing prenatal care can be found in a number of health services characteristics belonging to both the agency and the service providers. These facilitators encourage utilization by meeting the individual needs of women through prenatal care programming and service delivery.

## **Chapter 4: Discussion**

This study provides the first opportunity to understand specific barriers, facilitators and motivators to utilizing prenatal care among women in Nunavut, a population for whom the literature suggests is at risk for inadequate utilization (Macaulay & Durcan, 2005; PHAC, 2009). The findings from this study support the large body of literature on prenatal care utilization and show that women in Nunavut experience similar barriers, facilitators and motivators to utilizing care as other populations of women. Moreover, the findings provide additional insight into the factors that facilitate utilization and the barriers that discourage it among women living in Nunavut and depart from the published literature by showing women in one Nunavut community utilize care adequately. In addition to shedding light on factors influencing utilization of prenatal care for women in Nunavut specifically, the findings provide new understanding regarding the broader influences of geographic location and the health care system on utilization of prenatal care for women in remote communities.

### **Initiation of prenatal care**

Most women were initially motivated to seek care to obtain a pregnancy test at the health centre or birthing centre. Despite being almost universally cited by participants in the study, this motivation has not been described in other studies on prenatal care utilization. This may reflect a component of routine prenatal care that is unique to the models of care in these communities or

has simply not been captured in other studies on prenatal care utilization. Most of the research on initiation is part of the motivation literature where researchers describe the reasons for initiating prenatal care when a woman has a confirmed pregnancy, comparing early initiators with later initiators. Rogers and Schiff (1996), for example, found that women who initiated care early did so because “it was the right time to start” and women who initiated care late tended to do so “for the health of the baby” (p. 27). Findings on initiating care for women in this study remain distinct from the motivation literature because initiation was based on obtaining a clinical test to confirm a suspected pregnancy rather than a personal motivation related to a known pregnancy.

### **Motivation for continuing prenatal care**

Women in Arviat and Rankin Inlet experienced similar motivators to obtaining care as those described in the published literature, including assurance that the baby is healthy (Fuller & Gallagher, 1999; Johnson et al., 2007; Lia-Hoagberg, et al., 1990; Rogers & Schiff, 1996; Sokoloski, 1995; Teagle & Brindis, 1998), concerns about the health of the mother (Johnson et al., 2007; Lia-Hoagberg, et al., 1990) and encouragement from family, friends and the father of the baby (Johnson et al., 2007; Lia-Hoagberg, et al., 1990; Teagle & Brindis, 1998; Milligan, et al., 2002). These findings are not surprising given their frequent mention in the literature related to women with diverse experiences and backgrounds including women from rural and urban communities (Baldwin et al., 2002; Omar et al., 1998; Nepal et al., 2011) and different cultural backgrounds (Reitmanova & Gustafson, 2007; Sokoloski, 1995; Baldwin et al., 2002).

For participants who did not utilize prenatal care regularly, most obtained care at some point in their pregnancies describing the same motivators. These participants, however, attended when they felt it was important rather than based on a schedule of visits prescribed by the health

centre, noting that they would attend if they experienced problems. The findings are similar to Sokoloski's (1995) study with First Nations' women that found participants felt they should be able to attend prenatal care based on their own needs and that the routine scheduling of prenatal care visits was unnecessary for women experiencing a normal pregnancy. Other motivators for utilizing care included women's perceptions of *having to go* or wanting to go to get out of the house. Both are noted in the literature (Lia-Hoagberg et al., 1990; Sword, 2003) but with considerably less frequency than the motivators related to the baby's or mother's health.

## **Barriers**

### **Personal barriers.**

Personal barriers were experienced by participants from both communities and are supported by studies that similarly found that women might not attend prenatal care regularly if they do not want to be pregnant or feel the need to hide their pregnancies (Daniels et al, 2006; Friedman et al., 2009; Johnson et al., 2007; Mikhail, 1999; Teagle & Brindis, 1998) or if they feel indifferent towards the pregnancy (Daniels et al.). Participants who described these barriers were more likely to be experiencing a first and unexpected pregnancy. The belief that *everything is fine* was a personal barrier to care experienced only by women in Arviat and described by service providers from both communities. Though noted in the literature on utilization of prenatal care (Mikhail, 1999; Rogers & Schiff, 1999; Sokoloski, 1995), the perception of everything being fine has not thoroughly been explored.

Sokoloski (1995) found that some study participants did not regularly attend prenatal care because they had not experienced any past or current pregnancy related problems. Participants in Arviat who did not regularly attend because they felt *everything was fine* did not cite this barrier in isolation. They also were experiencing system-related barriers to care, which suggests that a

pregnancy defined as normal and healthy by the woman may pose a barrier to care only in combination with other barriers or in the absence of system-related facilitators to care. Further research is needed to understand how women define normal pregnancy and how they define a problem that would encourage them to seek care in this context. This improved understanding could help structure initial conversations and provide anticipatory guidance to women who have received a positive pregnancy test at the health centre.

Despite descriptions of depression as an important personal barrier to utilizing prenatal care (Daniels et al., 2006; Johnson et al., 2007; Lia-Hoagberg et al., 1990), it was not noted by any of the participants in this study. While women described stressful life circumstances, this was neither defined as depression nor necessarily related to adequate utilization.

#### **Situational barriers.**

While few women described situational barriers, their descriptions were consistent with the literature and included lack of transportation (Baldwin et al., 2002; Johnson et al., 2007; Mikhail, 1999; Omar et al., 1998; Rogers & Schiff, 1996; Shaffer, 2002; Sunil et al., 2010; Tarlier et al.; Teagle & Brindis, 1998), challenges with child care (Johnson et al., 2007; Mikhail, 1999; Rogers & Schiff, 1999; Sokoloski, 1995; Sunil et al., 2010; Tarlier et al., 2007) and inability to get time away from work or school to attend prenatal care visits (Shaffer, 2002; Teagle & Brindis, 1998). Weather as a complicating factor is consistent with the literature regarding utilization of maternity care in rural areas where weather is a concern for women who have considerable distances to travel for health services (Kornelsen & Grzybowski, 2006; Omar et al.; Sutherns & Bourgeault, 2008). For the participants in this study, the distances to travel are relatively short and prenatal care is often within walking distance. This diverges somewhat from the literature in that the influence of weather did not pose challenges to transportation but rather

was noted as complicating some of the other situational barriers. Another departure from the literature was the barrier posed by caregiving for children rather than just the lack of available of childcare.

Challenging life circumstances is a more difficult theme to substantiate in the literature because it captured a number of responses that included forgetting to attend, feeling too busy to attend and being distracted by their home environment. The participants in this study did, however, commit to participating in an interview and were able to meet their commitment, conflicting with the accounts of service providers who described individuals with challenging life circumstances as difficult, if not impossible, to reach. This description by care providers may be more similar to the barriers noted by Mikhail (1999) who found utilization of prenatal care was affected by women with “too many other problems” to attend (p. 342) and by Milligan et al. (2002) who found that the need for prenatal care can be subsumed by the complexity of life for women living in vulnerable situations. For participants in this study, their ability to manage these vulnerabilities is evidenced by their attendance at a scheduled interview. It is unlikely then that the sample captured the truly vulnerable women described by service providers.

Utilization of prenatal care is the result of the influences of personal, situational and system-related factors; the more favourable the influences are the more likely utilization is to occur (Sword, 1999). Similar motivators and situational barriers among the participants in both Arviat and Rankin Inlet suggest that differences in utilization are related to a woman’s personal barriers and her experiences with the system-related barriers and facilitators to care. In Arviat, where women utilized care less regularly than in Rankin Inlet, utilization was influenced more by system-related barriers and less by system-related facilitators. Participants in Rankin Inlet did not necessarily feel that prenatal care was any more important than participants in Arviat but

were motivated to attend regularly. This finding demonstrates the importance of the system's role in adequate utilization and points to the need to further explore the relationship between motivators and the system-related barriers and facilitators to care. An improved understanding of how motivators, barriers and facilitators influence each other might provide answers for improving utilization in women with few motivators to attend, including women with limited support systems and women who are not invested in their pregnancies.

### **System-related barriers.**

Participants in Arviat experienced more system-related barriers and fewer facilitators than participants in Rankin Inlet. These barriers and facilitators were functions of the distinct models of prenatal care provided in the communities and were influenced by their geographic location. The remote nature of both Arviat and Rankin Inlet means there is only one location where prenatal care is delivered in each community and no road access to other prenatal care providers. Women do not have a choice in the model of care or of the profession of the care provider. Similar to women in many rural and remote communities, women in Arviat and Rankin Inlet cannot choose between having midwives, family physicians or obstetricians but rather receive care from the health care professional responsible for delivering prenatal care in their particular community.

In Arviat, community health nurses provide the full range of primary health care, chronic care and acute care services as needed. Delivering prenatal care is part of this vast array of clinical responsibilities and is provided one afternoon a week at the health centre. A maternity care worker is employed at the health centre but her role was not recognized by women to be related to prenatal care. Participants' experiences with the maternity care worker were generally related to her role as an interpreter and assistant to the nurses rather than as a dedicated maternity

care provider. In Rankin Inlet, registered midwives deliver prenatal care mornings and afternoons throughout the week from a location separate from the health centre. The role of the midwives is to provide prenatal, intrapartum and postpartum care and their background and training reflect this. The maternity care worker in Rankin Inlet was perceived by participants to be part of the maternity care team with a dedicated role attending women and newborns. From a health services perspective, the Rankin Inlet Birthing Centre is able to provide women with the time, physical space, specialized training and perhaps even professional interest that are not built into Arviat's routine system of prenatal care.

The divergent models of prenatal care are, in part, the result of influences at the policy level that have supported and maintained an operational midwifery-led birthing centre in Rankin Inlet and that have been unsuccessful in establishing a similar model of midwifery-led local maternity care in Arviat. The models also are, in part, related to health services at the community level and are reflected in some of the barriers and facilitators to care experienced by women in Arviat and Rankin Inlet.

Women in Arviat experienced barriers posed by the hours of operation and long wait times, which both have been reported in the utilization literature (Daniels et al., 2006; Mikhail, 1999; Johnson et al., 2007; Sunil et al., 2010; Teagle & Brindis, 1998). Inconvenient hours of operation (Johnson et al., 2007) and the desire for extended hours of operation have been cited as barriers (Shaffer, 2002). For the participants in this study, inconvenient clinic hours were most notably related to the limited time when prenatal care was available rather than the need for extended clinic hours. When long wait times were described by participants, it was both as a frustration and a barrier. Combined with visits that felt short and unimportant, the issue of wait

times was exacerbated. This is supported by Novick's (2009) literature review that found reduced wait times were associated with increased satisfaction with prenatal care.

The lack of choice regarding scheduled appointment times and the environment of the waiting room also were unique to the experiences of women in Arviat as they were not noted by women in Rankin Inlet. The literature does not make explicit mention of these barriers. When scheduling of visits is noted in the literature, it is related to having to wait a long time to get a prenatal appointment (Johnson et al., 2007) rather than having limited or no choice about the scheduling time and date of an appointment. With only one afternoon of dedicated time for prenatal care in Arviat, available appointment times are limited. It also means in the context of this environment that every woman scheduled for a prenatal visit in any given week will be in the waiting room at some point during the same afternoon and her reason for attending is known by the other individuals in the waiting area. This contributed to the “nosey” environment that some women described.

The prenatal care setting is important to women as evidenced by nine studies in Novick's review (2009) referring to either the physical environment or the atmosphere of the prenatal care environment. While one study found women did not appreciate a lack of privacy, none indicated the environment was a barrier to care (Proctor, 1999 as cited in Novick, 2009). The importance of privacy is noted by Sutherns, McPhedran and Haworth-Brockman (2003) who found that the lack of anonymity experienced by women in rural and remote communities can be a barrier to accessing health care in general. Despite similar reasons for being in the waiting room in Rankin Inlet, concerns with the waiting room environment were not noted to be barriers to care, which may reflect the limited number of women in the waiting room at any given time and a more generous schedule of visits.

An additional barrier related to the environment at the Arviat health centre was a perception of the health facility as unwelcoming and unresponsive to the needs of women. Nunavut presents a somewhat unique case whereby all the communities' primary health care needs are initially addressed by the local health centres and nurses. It may well be a characteristic that is known to other remote locations in Canada where primary health care is available during regular working hours and all after-hours enquiries are vetted by the nurse on call. In this case, the negative interactions related to non-pregnancy related health concerns, either for themselves or family members may have influenced feelings about prenatal care.

The lack of consideration for Inuit culture is cited as a concern for Inuit when accessing health care services from non-Inuit care providers (Archibald & Grey, 2004; NAHO, 2006). The influence of culture however, has not been described in meaningful way in the prenatal care utilization literature. As such, it is difficult to compare the published literature to the findings from this study where the culture of the service user, often distinct from that of the service provider, was not noted to be a barrier to care. This may, in part, be owing to increasing numbers of Inuit service providers delivering prenatal care in the communities but is more likely owing to the challenges articulating what constitutes a cultural barrier. A study of this scope was not designed to examine individual culture as it influences utilization of prenatal care and would be better suited to examining the culture of the health care setting and the barriers inherent in a system that has had limited success incorporating traditional Inuit culture and values (ITK, 2004).

For participants in Arviat, language was one of the most important barriers to utilizing prenatal care, which is a barrier noted in the literature related to accessing health services in general (Bowen, 2001; Fiscella, Franks, Doescher, & Saver, 2002; Gregg & Saha, 2007; Jacobs,

Chen, Karliner, Agger-Gupta, & Mutha, 2006; Reitmanova & Gustafson, 2007; Shaffer, 2006; Timmins, 2002) and health services in Inuit communities (Archibald & Grey, 2004; Couchie & Sanderson, 2007; O’Neil, 1989; 1986; Penney, 1994; NAHO, 2006). According to the BC Centre of Excellence for Women's Health (BCCEWH) (n.d.), in remote locations where there is limited, if any, choice of health care provider, barriers posed by language can result in women avoiding health services altogether unless they feel their health is seriously compromised. There also is literature that suggests language barriers can negatively affect clinical outcomes (Divi, Koss, Schmaltz, & Loeb, 2007; Greg & Saha, 2007; Timmins, 2002). While the applicability of this body of research is limited by its focus on American populations with limited English proficiency, there may be some value in further exploring what role language has to play in the health outcomes of women and their newborns in those Nunavut communities where the language of the service providers is different than the language spoken by the community.

Language barriers also have been found to not only discourage utilization of health services but to affect the ability to access the information provided during health care interactions. Schyve (2007) suggests that when individuals and health care providers speak different languages, there are a number of threats to effective communication. For some participants in Arviat, the lack of communication left them feeling that they were receiving insufficient information about the content of prenatal care, regardless of the language in which it was delivered. Thus for some women, ineffective communication was a barrier to care. Similar to the participants in this study, a British study of communication styles in prenatal care among women of different sociocultural backgrounds found that women were frustrated by the lack of clarity regarding the objectives of prenatal visits and the repetitive nature of each visit. The participants in the British study exhibited a “reluctance to attend appointments which appeared to

serve little purpose or to meet their needs” (Raine, Cartwright, Richens, Mahamed, & Smith, 2010, Results, para. 23).

It should be noted that in this study it was difficult to distinguish between what to identify as service provider characteristics and agency characteristics. While a service provider’s perceived indifference to a client’s situation might be considered a personal characteristic, it may more fittingly be seen as an agency characteristic in this context. For example, the indifference might result from time constraints imposed by the system or a service provider with limited training and background in prenatal care; thus a perceived disinterest that is rooted in unfamiliarity with delivering prenatal care rather than of the prenatal care client. Regardless of the categorization, service provider characteristics were noted to pose barriers to care for women in both Arviat and Rankin Inlet.

The barriers posed by service provider characteristics were largely the result of the small size of the community which resulted in limited or no choice regarding prenatal care services. Concerns about service providers breaching confidentiality, a previous negative relationship with the service provider and barriers posed by not wanting a member of the community providing prenatal care can all be found in the rural and remote literature to some extent (BCCEWH, n.d.; Leipert & George, 2008; Leipert & Reutter, 2005; Sutherns et al., 2003).

Lack of confidentiality was described by a number of participants as a concern or a barrier to utilizing care. This again was owing to small community sizes where “everybody knows everybody”. The issue of confidentiality has been noted in the literature on rural and remote health care related to sensitive health issues that women may not want disclosed such as mental health problems (Leipert & Reutter, 2005; Sutherns et al., 2003), contraception, abortion (Sutherns et al.) and health care for adolescents (BCCEWH, n.d.). Studies show that in small

communities, a lack of anonymity may compromise confidentiality because it is difficult to seek care without others knowing about it (Leipert & Reutter, 2005; Sutherns et al.), similar to the waiting room environment in Arviat. A more salient concern among study participants, supported by Sutherns et al. was the feeling that service providers breached confidentiality. Other concerns about confidentiality have been shown in women's hesitation to disclose confidential information to service providers who may be related to the person to whom they are disclosing the information (Leipert & George, 2008).

Barriers to care that result from a previous negative experience with a health care provider have been described in a study, *The determinants of women's health in northern rural and remote regions* (BCCEWH, n.d.). This study by the BC Centre of Excellence for Women's Health found that for Aboriginal women in northern BC, negative experiences with service providers may create a barrier to accessing care. These barriers are important because for many women living in geographically remote regions, it is virtually impossible to access an alternative health care provider (BCCEWH).

Barriers posed by participants' discomfort seeing a care provider with whom they grew up or one who may be involved in community activities with which they did not feel comfortable, such as drinking alcohol, were not found in the published literature. This lack of available literature points to the need to improve our understanding of these community-related barriers in order to address them. It also points to the need to better understand the challenges experienced by nurses and midwives practicing in remote locations as they balance the expectations of being a health care provider with the expectations of being a community member. This new insight would add to the limited research that begins to explore this issue by

highlighting the inseparable nature of the personal and professional lives of nurses in small communities (Macleod et al., 2004).

### **Facilitators**

Facilitators specific to utilization of prenatal care are less frequently described in the research literature. Phillippi (2009) suggests facilitators directly related to the delivery of care might involve extended clinic hours and continuity of care provider, factors that are noted in the literature related to satisfaction with prenatal care (Handler, Raube, Kelley, & Giachello, 1996; Biro, Waldenstrom, Brown, & Pannifex, 2003). The findings from this study provide some evidence to support the assumptions of Phillippi regarding facilitators to care as well as suggest that factors that increase satisfaction to care described in the literature may also serve as facilitators.

#### **Situational facilitators.**

Facilitators related to a woman's situational factors included living within walking distance to the prenatal care facility and personal transportation to the facility, also cited by Fullerton, Bader, Nelson, & Shannon (2006) as facilitators to utilizing prenatal care. While these supported participants' use of prenatal care, situational factors are difficult to modify and are distinct from facilitators that may be addressed by the system of prenatal care. For example, the proximity of the facility to a woman's place of residence is unlikely to change but the system of care can provide taxi vouchers to women who have difficulties attending care because of lack transportation. For similar reasons, childcare provided by the facility and home visits were cited as potential facilitators for participants who felt these would improve utilization of prenatal care since neither currently is available in either Rankin Inlet or Arviat.

### **System-related facilitators.**

The hours of operation were an important facilitator for the participants in Rankin Inlet as they provided enough available appointment times that participants could schedule time away from work or school to attend prenatal care as well as providing the flexibility to work around their schedules. Another facilitator for participants was being provided with appointment cards and telephone reminders. While reminders, including text messages and phone calls, have been shown to improve attendance in primary health care services (Perron et al., 2010), the hours of operation and the use of telephone reminders and appointment cards as facilitators are not found in the prenatal care utilization literature. Improving our understanding of how these facilitators can be implemented might lead to enhanced utilization of prenatal care for some women in Nunavut communities.

### ***Meeting individual needs.***

Responding to the needs of individuals is a theme that includes a number of health services characteristics that encourage or facilitate utilization of prenatal care by respecting and responding to a woman's individual circumstances. Some of these exist as characteristics of the agency itself and some as characteristics of the service provider.

The agency characteristics that encouraged prenatal care utilization included convenient appointment times, the ability to book one's own appointments, the provision of taxi vouchers and having food provided by the Canadian Prenatal Nutrition Program (CPNP). Some were unique to Rankin Inlet, some to Arviat and some were experienced by women in both communities. Convenient appointment times were noted to be a facilitator and one supported in the literature on utilization of prenatal care (Fullerton et al., 2006). By setting aside certain appointment times for participants who may have difficulties attending at alternative times of

day, care providers from both communities felt it facilitated access to care. For example, providers noted that they would save the four o'clock appointment for women who might sleep until late in the afternoon or for teachers who could attend this appointment time without taking time away from work. Specific to Rankin Inlet, the ability to routinely book one's own appointment not only provided individuals with the opportunity to choose a convenient time but supported their decisions to rebook appointments when needed. This may have contributed to more favourable utilization and less "no shows" in Rankin Inlet compared with Arviat. Taxi vouchers provided in Rankin Inlet to women who identified challenges attending prenatal care because of transportation issues were noted only by service providers in Rankin Inlet as facilitators to care. This may reflect the sample of prenatal care users from Rankin Inlet who did not identify transportation as a barrier to care.

The food and support supplied by the CPNP during the weekly prenatal clinic was specific to Arviat and was noted by the service providers more than by the service users as facilitating utilization of prenatal care. The value of this practice may move beyond the provision of nutritious food for pregnant women towards creating an atmosphere that moderates the clinical environment in support of a more social one. It is important to understand the significance of this program and its potential place as a component of weekly prenatal clinics.

Facilitators inherent in the agency characteristics are, in part, reflected in the approach of the health care provider. This is illustrated most noticeably in Rankin Inlet where taxi vouchers and appointment bookings result from provider responses to women's unique circumstances rather than from policy directives. All of the service providers in Rankin Inlet described adapting routine prenatal care to meet the individual needs of women, an approach that both reduced the barriers and facilitated utilization of the service. Providers in Rankin Inlet believed that, with the

exception of listening to the baby's heart beat, a predefined series of routine clinical tests was not the most important element of prenatal care for women, a sentiment not found in the descriptions from Arviat. This difference in participant responses may reflect the distinct approaches to delivering prenatal care based on the skills and training of the providers. While a Cochrane Review suggests that women in midwifery-led models of care report greater satisfaction with care (Hatem, Sandall, Devane, Soltani, & Gates, 2008), there is not a body of published literature that describes utilization of prenatal care in terms of the health care profession delivering it. Though the findings from this study suggest there may be important facilitators inherent in the provision of midwifery care in Rankin Inlet, it is unclear what these are. Hatem et al. (2008) note in their review that "midwife-led care is a complex intervention, and it is impossible to unpick the relative importance of philosophy and continuity of care" (p. 16). Further research therefore is needed to understand the facilitating characteristics specific to the system of midwifery care in Rankin Inlet and what role midwives and maternity care workers have on utilization of prenatal care in communities where they exist as the only prenatal care providers.

Despite remaining uncertainties regarding potential facilitators in distinct service provider-led models of prenatal care, the findings from this study show that there are a number of provider characteristics that encouraged utilization of prenatal care. Participants wanted service providers who were open to and responded to questions and provided information during prenatal care. These support the findings of Sword (2003) who found that prenatal care utilization was encouraged when participants had their "information needs met" (p. 324). For women who avoided care because they feared clinical tests, their concerns could be alleviated by providing information about what to expect at the next visit, the reasons for the tests and offering choices about testing. Women also wanted providers who were aware of what they were

experiencing, both in terms of the clinical history of their pregnancy and the personal or social challenges they may be facing, supporting the responses of women in Sword's study that found service providers who were sensitive to women's situations and responded to their needs facilitated utilization of care.

The findings from this study suggest that there are important facilitators related to the characteristics of the service provider. As such, having a choice of service provider was an important facilitator in both communities because participants could specifically choose a service provider with whom they were comfortable and who could speak the same language.

Interestingly, Inuktitut speaking service providers were noted to be facilitators to utilizing care in Rankin Inlet despite language being absent as a barrier to care for participants from this community. Another facilitator was having a member of the community provide care; an interesting finding given that it was also described as a barrier to care. While having a choice of service provider as a facilitator is largely absent from the published literature, Sutherns et al. (2003) found that in rural areas, some women liked the personal care they received by having health care providers they knew. For the women in this study who described community members providing care as a facilitator, perhaps the advantages of having the personal relationship as noted by Sutherns et al. outweighed the potential negative aspects that were described by women who found community members a barrier to care.

## **Policy Implications**

### **Conceptualizing the problem.**

How a problem is conceptualized helps determine how solutions are approached. When the problem, defined as inadequate utilization, is conceptualized as belonging to the population, the focus goes to mediating risk factors associated with it such as poverty, education and

belonging to an Aboriginal community. Social determinants of health become the overarching theme and solutions are found in eliminating social inequities, a necessary but daunting undertaking at best. Furthermore, conceptualizing the problem as related to the population was not supported by the findings from this study. In the remote communities of Arviat and Rankin Inlet, the problem more fittingly belonged to the health care system which was not always meeting the needs of the community it was intended to serve. This effectively shifts the focus from the characteristics of the population to the characteristics of the health care system, encouraging health policy to consider the influences of the agency and the service providers in the provision of health services in these communities.

#### **Future policy directions.**

The importance of community wove its way through the findings, reflected in the situational and system-related barriers and facilitators to care. Thus, it is essential that community also is considered in the development and delivery of prenatal care. Twenty-five years ago, O'Neil (1986) commented that the primary health care system in the Canadian Arctic, “which by most standards could be a model for the rest of the world, is failing because it continues to exclude its clients from a fundamental involvement in its structure” (p. 126). It might be argued that community involvement in the development of the Rankin Inlet Birthing Centre supports more favourable utilization than the system in Arviat though literature cites challenges with this assumption and suggests that the Rankin Inlet Birthing Centre has actually suffered from a lack of community involvement (Douglas, 2011; Gold et al., 2007). Douglas (2011) notes that the model of midwifery care delivered in Rankin Inlet is unlikely to work in a more “traditional” community like Arviat because it embraces a biomedical model that is typical of southern systems. While this merits careful consideration, the model of prenatal care delivery

in Rankin Inlet is a model that women are willingly attending. A model of care that incorporates this new information about barriers and facilitators to utilizing prenatal care remains a valuable starting off point for a community like Arviat. In addition, identifying what the challenges to implementing the birthing centre in Arviat were five years ago will provide further insight into what roles the community, the local health care system and the larger policy environment played in the initiative and the barriers that hindered its success. With this additional information, community involvement is likely to achieve greater success in developing prenatal care programming that meets the unique needs of the community.

Any future directions also must consider the service providers, that is, the registered nurses, midwives and maternity care workers delivering prenatal care in the majority of Nunavut communities. If these service providers are expected to provide a model of prenatal care that is based on community directives, they require the necessary resources in terms of time, skills and training to do so. More research is needed to understand the specific needs of care providers without specialized maternity care training as well as the policies necessary to support them in integrating a community-directed model of prenatal care into their multiple and varied clinical responsibilities. This requires a shift in current policy direction, which has prioritized the training of local midwives and maternity care workers with little acknowledgment of the role of the largest group of maternity care service providers in the territory. In addition, strategies focussed on maternity care services must consider the potential psychosocial as well as physical health benefits of prenatal care. The fact remains that all women residing outside the three Nunavut communities with birthing services will be required to fly to another community until the option of local birthing services is available. For some communities, the likelihood that this will ever happen is remote and for women considered at risk for poor pregnancy and birth

outcomes, the choice of local birth will never be provided. For these women, relational and competently delivered prenatal care can support them in having the healthiest pregnancies and births possible, wherever they may live. Policy needs to recognize the importance of prenatal care as a service that is available to women in all Nunavut communities and not only those communities with local birthing services.

Similarly, postpartum care is a service that is available in all Nunavut communities as a component of comprehensive maternity care. If barriers to postpartum care exist for women and their newborn infants, opportunities for counselling about risks factors for SIDS, breastfeeding support and identification of health concerns early in the postpartum are being lost. More research is needed to better understand utilization of postpartum care within the continuum of maternity care and the impact of current programming and services.

Finally, health services in Nunavut must be delivered in the language of the community members and be rooted in the principles of *Inuit Qaujimajatuqanginnut* (IQ). IQ is comprised of guiding principles that set out “the Inuit way of doing things: the past, present and future knowledge, experience and values of Inuit Society” (Government of Nunavut, 2002, p. 7). In fact, it may be that utilization of prenatal care is more favourable in Rankin Inlet because a midwifery-led model of care embraces some of these guiding principles. For example one of the principles, *Pijitsirniq*, which is the idea or concept of serving, is more of a focus in Rankin Inlet where the delivery of prenatal care is oriented towards meeting the needs of each woman by working around her individual and family circumstances. By providing a service-oriented model of care that is flexible and respectful, utilization of prenatal care is facilitated. Further, according to the First Annual Report of the IQ Task Force in 2002, the Government of Nunavut was not successfully integrating IQ into their programs. At that time, the Task Force stated that IQ was

not a high priority for this relatively new government that was busy establishing services and systems. Now, almost 10 years later, much could be learned from understanding what, if anything, has changed regarding IQ in health care programming in order to begin addressing individual and community needs that are not considered in the current biomedical system of health services in much of the territory.

### **Study Strengths**

There is a growing body of literature specific to conducting research with Aboriginal communities that articulates the need to consider the effects of colonization on individuals and communities using appropriate research methods and approaches (CIHR, 2007; Kenney, 2004; Smylie et al., 2004). The value of these must be considered alongside the knowledge that culture cannot be deconstructed or teased out of individual or collective experiences but must be included as part of the research process. With any research that includes interviews, focus groups and other methods of documenting experiences, the researcher is guiding the process with the expressed goal of gathering data defined as important by the research team. Researchers must understand how to incorporate, rather than mitigate, the complexities and the subtleties of culture in the research process which can only be accomplished with members of the community. Thus, the key methodological strength of this study was the knowledge and insights provided by community members. The research process and findings were informed by the wisdom and experience of the community members who were able to shape the research into something meaningful for the community and add credibility by corroborating the findings.

While my experiences living and working in Rankin Inlet are not necessarily strengths of the study itself, I believe the research benefited from my personal history with this community. My experience working in Rankin Inlet allowed me to better anticipate some of the research

challenges, improved my understanding of the verbal and non-verbal communication of participants and respect women's contributions in ways that were appropriate for them.

Another important strength was the diversity of participants interviewed. This study was able to learn from the experiences of participants who utilized prenatal care regularly as well as from those who did not utilize care at all. While transferability of the findings to all settings is not advocated based on the sample alone, the variation provided a breadth of participant insight into the factors that influence utilization.

Inuit women's health literature has generally been kept separate from the literature on rural and remote health care and health services. The findings from this study add to that limited body of research on health services for both Inuit women in Nunavut and the delivery of health services in remote regions of Canada, suggesting the health of Inuit communities is part of the larger picture of remote health and remote health services. The findings also add to the literature on language barriers and how it can impact utilization of health services in Nunavut. The findings from this study expand on the literature regarding the influence of the midwifery model of care and suggest there may be components of the model that facilitate utilization of prenatal care for women in one Nunavut community. Thus the findings also add to the limited body of research on facilitators to prenatal care showing that the delivery of health care can be modified to encourage utilization in remote Nunavut communities.

### **Study Limitations**

The limitations of the study largely result from the methodological challenges posed by conducting research in a remote location with women whose experiences were vastly different than my own. The most notable of these challenges was related to the interview process. The

following describes the challenges experienced during the interview process as well as attempts made to address them.

During the interviews, a number of participants did not provide the detailed responses that generally are viewed as the value of qualitative enquiries. Few women provided detailed answers to any of the open-ended questions and the need arose to continue to adapt questions during interviews in order to elicit a response. Omura (2005) describes his experience interviewing hunters in Nunavut who had difficulties responding to questions seeking generalized knowledge. Omura revised the interview approach based on his new understanding and found these same hunters provided informative responses when the questions were asked in a more direct way. Despite offering more direct questions, many participants in this study continued to respond with yes or no answers and a great deal of prompting often was necessary to elicit any response at all. This resulted in a number of the interview questions and responses reading more like those of a survey. When asked if there were differences in how she understood her service provider, for example, one participant responded “yes”. When asked if she could speak more about that, the same participant simply responded “no”. In addition, asking open-ended questions or “why” as a follow up to a yes or no answer often resulted in a “no” response.

In response to the challenges in gathering more detailed information from participants, I initiated a discussion with the research assistants about how this might be achieved. The research assistants suggested that seeking more detailed responses from participants after they felt the question had been answered may be uncomfortable for some. My concerns with conducting an interview process that demanded detailed responses at the risk of upsetting participants led to a shift in my own expectations. The needs of the participants superseded the need to gather a

predefined quality or quantity of information and I came to view the research as a process that was equally important as the result, with interviews that reflect this.

In addition, the rapport that developed during in-person interviews also affected how I approached the interview guide. The participants' with the interview process was an important consideration and when women hesitated or seemed uneasy or confused by the questions, I changed the focus. An excerpt from my reflective journal in November, 2010 examines this issue:

The second interview today was not so good – she did not want to be recorded and I found it really difficult to ask questions and write the answers. She seemed a little uncomfortable and would almost stop herself when she went to say things... I also find that I skip over certain things when I feel women have already touched on the subject even though there may be more information for them to share. I remember as a midwife when you mentioned the same subject trying to develop an understanding of it in a different way – women would just kind of shut down or say amai [I don't know]. So I don't want to create an environment where women shut down.

While this approach added to the more cursory responses to some of the questions, it was essential to respect the participants and conduct interviews this way. The need to develop and maintain a respectful rapport with research participants is critical and must be given careful consideration in Aboriginal communities where researchers have historically conducted research that did not respect the needs of the participants (Smylie et al., 2004). The lack of respect in Aboriginal communities can diminish the value of the research and create an environment of mistrust that is difficult to reverse (Martin, Macaulay, McComber, Moore, & Wien, 2006).

Analyzing the interview recordings rather than the transcribed notes, together with the research assistants, would likely have improved the quality of the data. The audio recordings included silences, pauses and laughing that may have contributed to our understanding of the meaning of prenatal care for the participants. Analyzing these data with the research assistants

would have provided greater insight about the community or cultural context of participant responses and added to the credibility and confirmability of the findings. Including a focus group interview may also have provided important information that was not as forthcoming during individual interviews though this is difficult to substantiate. It would be interesting to compare the quality of data gathered during a focus group interview compared with the individual interviews. When speaking with the research assistants months after the interviews were completed, they suggested that interviews be conducted with older women rather than younger women as older participants were more willing to speak about their experiences. A focus group would have needed to reflect this by considering the ages of participants in the sample.

Other limitations were posed by conducting research in Nunavut when my permanent residence is in Ontario. The high costs associated with food, transportation and accommodation prevented extended periods of time in the sample communities. All of the interviews were initially conducted in Rankin Inlet and then I travelled to Arviat to conduct the next round of interviews. The budget did not allow me to travel back to Rankin Inlet to clarify questions that came up during the interviews in Arviat. It would have been beneficial to return to Rankin Inlet and interview a small sample of participants with the new insights gained through the responses from Arviat participants. Costs also prevented more comprehensive collaboration with the communities. A more inclusive research approach, perhaps using participatory action research, would have benefited the research process through increased ownership by, and continuous involvement with, the communities.

Another limitation of the study resulted from the challenges posed by working in a small community where “everybody knows everybody”. One of these challenges was maintaining confidentiality during the research process. Concerns about maintaining confidentiality presented

themselves at numerous stages in the research from choosing interview locations where women would be seen, to working with community members thereby expanding the pool of people with access to confidential information, to choosing quotes and describing participant characteristics during the writing stage of the thesis. “Everybody knows everybody” not only makes the identification of participants stories likely but also means that the descriptions or stories of care providers may be linked directly back to individuals, even in the absence of identifiers. While these challenges have not influenced the analysis in a meaningful way, they have affected the choice of verbatim data that have been presented.

## **Conclusion**

The findings from this study show that utilization of prenatal care is influenced by the characteristics of health services that can both pose barriers to, as well as facilitate utilization of prenatal care for women in Arviat and Rankin Inlet. While women from these communities experienced some similar barriers, facilitators and motivators to care, the findings show barriers were present for women in Arviat that were not experienced by women in Rankin Inlet, while facilitators were experienced by women in Rankin Inlet that were not present in the system of prenatal care delivered in Arviat. These are important findings that show the characteristics of prenatal care programming and services can effectively reduce barriers and facilitate utilization of prenatal care for women in Nunavut communities. The need for community developed and delivered prenatal care that is designed to meet the unique needs of each community might successfully improve access to health services as a way of ensuring that the benefits of prenatal care can be received by all women and their newborn infants in Nunavut communities.

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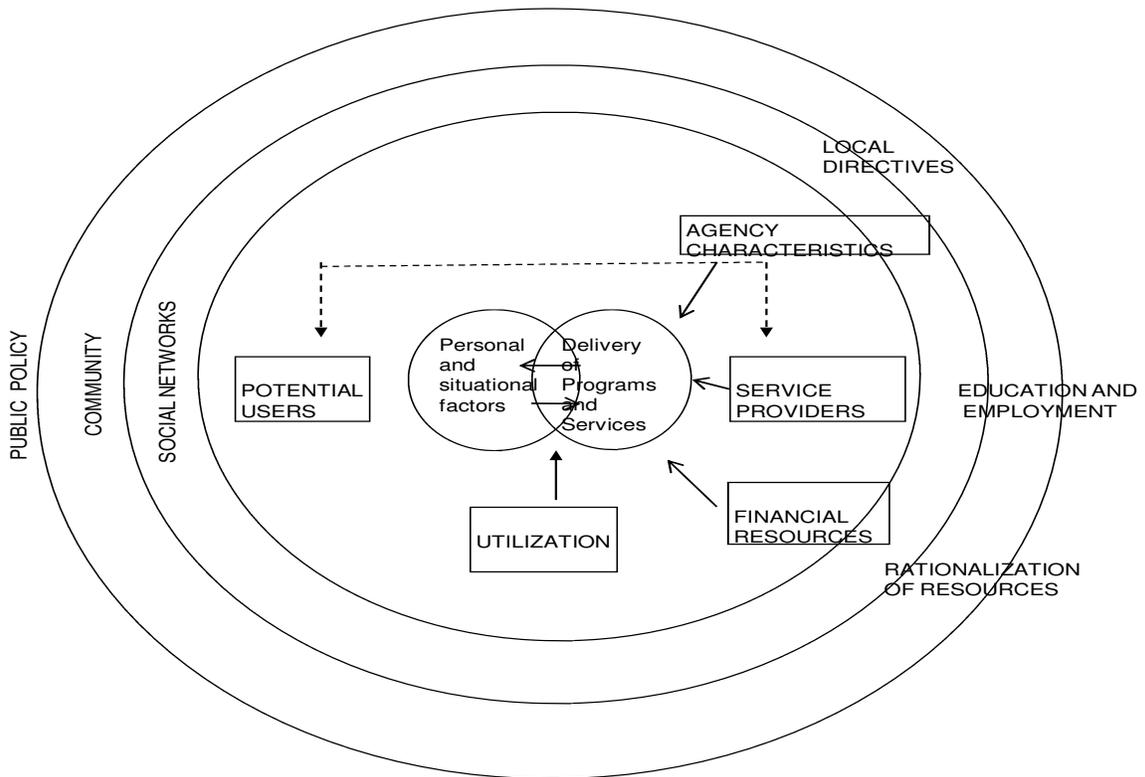
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### Appendix A: Socioecological Framework



Reproduced from Sword, 1999, p. 1174

## Appendix B: Hamilton Health Sciences/McMaster University Faculty of Health Sciences Research Ethics Board Approval



HHS/FHS REB: Student Research Committee

### Final Approval

Date:	Sept 30, 2010
REB Number:	10-388-S
Title of Study:	Prenatal Care in Two Nunavut Communities: What are the Barriers, Facilitators and Motivators to Accessing Care?
Student PI:	Geraci, J
LPI:	Bourgeault, I
Version date:	Document:
July 28 2010	Application
Sept 13 2010	Protocol
Sept 13 2010	Email Script
Sept 30 2010	Consent Forms (4: Rankin and Arviat versions, for women and health care providers)
Sept 13 2010	Interview Guides (2 - Health Care Providers; Clients)
Sept 13 2010	Recruitment Posters

Dear Johanna:

We have completed our review of your study and are pleased to issue our final approval. You may now begin your study.

All recruitment and consent material must bear an REB stamp. You may pick up the stamped forms from our office.

Any changes to this study must be submitted as an amendment before they can be implemented. Amendment forms are available on our website.

This approval is effective for 12 months from the date of this letter. If you require more time to complete your study you must request an extension in writing before this approval expires. Please submit an Annual review form with your request.

Please cite the REB number in any correspondence.

Good luck with your research,

Marie Townsend BA, MBA

Chair, HHS/FHS Student Research Committee  
Health Research Services, HSC 1B7, McMaster University

The HHS/FHS SRC complies with the guidelines set by the Tri-Council Policy Statement: *Ethical Conduct for Research Involving Humans* and with ICH Good Clinical Practice.

## Appendix C: Nunavut Research Institute Scientific License

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**Nunavummi Qaujisaqtulirijikkut / Nunavut Research Institute**  
Box 1720, Iqaluit, NU X0A 0H0 phone:(867) 979-7279 fax: (867) 979-7109 e-mail:  
musha.cote@arcticcollege.ca

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**SCIENTIFIC RESEARCH LICENSE**

LICENSE # 03 047 10N-A-Amended

ISSUED TO: Johanna Geraci  
McMaster University  
89 Hearn Avenue  
Guelph, Ontario  
Canada  
L8S 4L8  
519 763 6845

TEAM MEMBERS: J.Geraci,I.Bourgeault

AFFILIATION: McMaster University

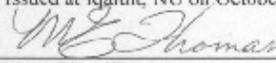
TITLE: Prenatal care in two Nunavut communities: What are the barriers, facilitators and motivators to accessing care?

OBJECTIVES OF RESEARCH:  
The purpose of this study is to understand why women choose to attend, or not to attend, prenatal care in two Nunavut communities with different rates of attendance. The research will look at how individual characteristics, personal relationships, the woman's community and the health care system influence her decision to attend prenatal care. A descriptive, qualitative research design will use interviews to collect information from pregnant and postpartum women, and nurses, midwives and maternity care workers who live in Arviat and Rankin Inlet. Community members have been working with the researcher to develop a research proposal and interview questions that are relevant to prenatal care in their communities. Interviews will be offered in Inuktitut and English. Information from the interviews will be analyzed using content analysis, which looks for common and related ideas from the interviews. A summary of the research results will be written describing the factors that encourage and discourage women from attending prenatal care.

TERMS & CONDITIONS:

DATA COLLECTION IN NU:  
DATES: November 15, 2010-December 15, 2010  
LOCATION: Arviat, Rankin Inlet

Scientific Research License 03 047 10N-A-Amended expires on December 31, 2010  
Issued at Iqaluit, NU on October 20, 2010

  
Mary Ellen Thomas  
Science Advisor



## **Appendix D: Interview Guide for Prenatal Care Clients**

### **Brief participant history**

1. If you are pregnant – how many weeks?
2. Are you going to prenatal care? If Yes – when did you start going?
3. Where are you planning to have your baby?
4. Where would you like to have your baby?
5. Is this a wanted pregnancy/happy about pregnancy?
6. Are you planning to keep the baby?
7. If you are postpartum – how old is your baby?
8. Where did you have your baby?
9. Where would you have liked to have had your baby?
10. Was it a wanted pregnancy/happy about pregnancy?
11. Did you go to prenatal care? Y/N – If yes – when did you start going?

### **Questions**

1. When you found out you were pregnant, what made you start prenatal care?
2. Do/did you go to prenatal care when your visits are/were scheduled and why?
3. What reasons do you have for continuing to attend/not attending prenatal care?
4. What makes/made it easy for you to go to prenatal care and what makes it difficult?
5. What do you learn about in prenatal care?
6. Did you make any changes based on what you learned? Why/why not?
7. Can you tell me the parts of prenatal care that are helpful/important to you?
8. Can you tell me about your regular prenatal care worker?

9. How does your relationship with your prenatal care worker affect how you use prenatal care?
10. Have you seen any other prenatal care workers during your pregnancy? If so, how were these visits the same or different than visits with your regular worker?
11. How important is it to have a service provider from this community? A service provider that speaks Inuktitut?
12. What kinds of choices are you given about what you want in prenatal care (e.g. screening tests, place of birth) and how important are these choices?
13. How easy is it to get information/help from the birthing/health centre when you are worried about your health or your baby's health?
14. Have you ever worried that private information about pregnant women is being talked about outside the health/birthing centre by the prenatal workers? Can you talk more about that?
15. What have your family/friends/partner said about prenatal care?
16. In what ways does what your family/friends/partner say influence your use of prenatal care?
17. Is there anything you can think of that your family or friends could do to that would make it easier for you to get to your prenatal care appointments?
18. Which community programs for pregnant women have you been referred to and how has this helped your pregnancy or other areas of your life? If not- do you know why? Would you like to have been referred?

19. Can you tell me a bit about what it is like to live in this community and in what, if any ways the community influences your use of prenatal care?
20. Who made the decision about where you could have your baby and did this decision affect your visits to prenatal care?
21. How does having to leave the community for the end of your pregnancy/birth affect your attendance in prenatal care?
22. Is there anything else that you would like to tell me about prenatal care?

### **Demographic profile**

1. How old are you?
2. Are you common-law/ married/ living with a partner/ single (never married)/divorced/widowed?
3. Where were you born?
4. How long have you lived in Arviat/Rankin Inlet?
5. What language do you mostly speak at home?
6. Did you finish high school?
7. If Yes – Did you graduate from a college or university?
8. If No – what grade did you finish?
9. How many babies have you given birth to?
10. How many children do you care for?
11. How many people live in your house?
12. Are you working?
13. If Yes - What kind of work do you do?
14. If No – Would you like to be working?

15. Are you happy with your housing situation?

16. Would you say you have enough money to live comfortably?

## **Appendix E: Interview Guide for Service Providers**

### **Demographic profile**

1. How long have you lived in this community?
2. What is the language you speak most often at home?
3. What is your current role with respect to prenatal care in this community?
4. What is your training or background related to prenatal care?
5. How long were you involved with prenatal care prior to your work here?
6. How long have you been involved with prenatal care in this community?
7. Have you ever received prenatal care in this community?

### **Interview questions**

- 1) Do you feel women attend prenatal care willingly and why?
- 2) What do you think encourages/discourages women to attend prenatal care?
- 3) What do you think are some of the most important aspects of prenatal?
- 4) Can you briefly describe a situation when a client seemed really happy or unhappy with prenatal care?
- 5) What are some of the important things you offer as a provider of prenatal care?
- 6) Do you feel you have sufficient time and resources to provide these?
- 7) What kinds of information and counselling do you provide and in what ways is this counselling effective/ineffective in changing behaviour?
- 8) Do you feel the information you provide is easy to understand for women?
- 9) How would you describe your relationships with your prenatal clients and how do you think this relationship influences their attendance in prenatal care?

- 10) Can you talk about the influence of Inuktitut speaking care providers from this community who speak Inuktitut on attendance in prenatal care?
- 11) How does having a community/out-of community birth affect women's attendance in prenatal care?
- 12) In what ways do you think women's relationships with family members, partners, friends, influence their use of prenatal care?
- 13) Is there anything that friends/family/partner could do to encourage/support a woman's use of prenatal care?
- 14) How does the community support/discourage use of prenatal care?
- 15) Can you tell me about the other kinds of services available in this community for pregnant women?
- 16) Why do you think women follow up/do not follow up with these services?
- 17) What are some of the challenges delivering a prenatal care program in this community?
- 18) What kinds of Government of Nunavut policy directives encourage/support prenatal care in your community? How effective have these directives been?
- 19) A study by Heaman, Gupton and Moffitt (2005) reported that women who have stressful lives, low levels of self-esteem and lower social supports are more likely to have lower utilization of prenatal care. How do you think the demographic characteristics of women in your community contribute to their use of prenatal care?
- 20) Do you have any recommendations for improving utilization for women who do not regularly attend?

### Appendix F: Comparison Table of Factors Influencing Utilization of Prenatal Care

	Women		Service Providers	
	Arviat	Rankin Inlet	Arviat	Rankin Inlet
<b>Motivators</b>				
Just to check on things	++	+		
Health of baby	++++++	++++	++	++
Health of mom	+++++	+++		
Worried about pregnancy	+	+	++	
Support from family/partner	++++++	+++++	+	++
Have to/no choice	++	+	+	+
<b>Barriers</b>				
I don't feel like it	++			
Everything is fine	++++		+	+
Work/School	+++	+	+	+++
Transportation	+			++
Life Circumstance-Busy/an imposition	++			+
Life C-Forgot	++	+		++
Life C-Family life/busy	++			
English speaking provider	+++++++		+++	
Scheduling	++			+
<b>Facilitators</b>				
Easy to go	+++++	++	+	
Transportation or close	++	+++		
LC – get out of the house		+		+
Personal tricks to get there	+	+		
Phone reminders		++		+
Choosing hcp	+	++		+
Inuktitut speaking provider	+++++++	+		
Provider community member	++	+		+