POLICY BRIEF
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Geographic Induction—Time for a Protocol

Rural Maternity Care New Emerging Team

Background

- → Since 2000, 20 rural BC hospitals have closed their maternity services[1]
- → Women must leave their home communities weeks before their due date to avoid going into labour without access to care
- → Rural birthing women and their families commonly encounter financial, emotional, and psychological stress
- → Women have a strong desire to determine the time and place of their birth

Whether in a rural or urban environment, women have a strong desire to give birth in their home communities, close to the support of family and friends and familiar health care providers. But for many rural women whose local hospitals do not provide maternity services, this desire cannot be met. Instead, women must leave their home communities to give birth at a referral hospital with specialist (surgical) capabilities. In many cases, due to the distance between the woman's rural home and referral hospital, she will wait in the referral community for weeks before her due date to avoid going into labour without access to care. If a woman's pregnancy goes past her due date or she experiences complications from the delivery, she may spend five to six weeks or more in the referral community. In leaving their homes for an extended period, rural birthing women and their families commonly encounter financial, emotional, and psychological stress.[2-4]

Since the regionalization of health care in British Columbia in 2000, rural maternity service closures have drastically increased the number of rural mothers who must leave home to have their babies. Interviews with rural mothers show that many women pay thousands of dollars out-of-pocket for travel, accommodation, and food expenses for themselves and their families.[5] For mothers with other children or dependent parents at home, leaving them behind can be emotionally stressful and it can be expensive to arrange care for them. To avoid these stresses, women may stay in their communities and wait until labour begins before traveling to the referral community, risking having their baby en route or at their unequipped local hospital. Limited numbers of rural women choose to not to travel at all and have unassisted home births with lay attendants instead.[6] Another technique that mothers and care providers use to avoid long stays away from home is geographic induction.

SUMMARY

Geographic induction is emerging as an intervention for rural mothers who must travel from their home communities to give birth in larger hospitals with obstetrical (surgical) back-up. Care providers and their patients will decide upon geographic induction for an earlier delivery when the patient experiences social, financial, and/or emotional stress as a result of the distance between herself and her home. To date, there are no guidelines or protocol for geographic induction. Such guidelines are urgently needed in order to improve the provision, monitoring, and safety of this intervention for both patients and care providers.

AT A GLANCE

- 30% of Canadians live in rural and remote communities[11]
- Only 16% of family doctors and 3% of obstetricians practice in rural and remote hospitals[12]
- Since 2000, 20 rural BC hospitals have stopped offering maternity services[1]
- During 2004-2005, 7.1% of parturient women left their communities to give birth in referral hospitals[1]
- Approximately 4% of all inductions in rural BC are geographic inductions[8]
- Induction of labour occurs in 3% to 23.5% of Canadian births[13]
- International data suggest that "social inductions" occur in as many as 55.5% of births in some US hospitals[14] and 51% of all births in Finland[15]

What is geographic induction?

→ "Geographic induction" is elective induction of labour due to lack of immediate proximity to local care providers.

→ Chosen in order to minimize the time women spend out of their communities.

→ More common for rural multiparous women or women who have traveled significant distances for labour and delivery services.

"Geographic induction" is elective induction of labour chosen to reduce a pregnant woman's time away from home when she is in a referral community awaiting the onset of labour. In these instances, there is no medical or obstetric reason for the induction. Geographic induction is more common for rural multiparous women or women who have traveled significant distances for labour and delivery services. It is sometimes referred to as "social induction." The American College of Obstetricians and Gynecologists observes that some care providers and their rural patients may discuss an elective social induction of labour when the mother is at risk of a rapid labour, for psychosocial reasons, or because of the distance from their delivery hospital.[7]

Why do we need guidelines for geographic induction?

→ Currently there are no guidelines in Canada

→ It is difficult to determine the prevalence of geographic induction

→ Lack of evidence base for decision making

It is hard to determine the prevalence of geographic induction. Doctors do not generally include "geographic" or "social" reasons on hospital charts because of the stigma attached to providing a procedure that is not medically necessary. However, a recent study through the Centre for Rural Health Research found that geographic induction occurs in approximately 4% of all induced pregnancies in British Columbia.[8] Interviews with rural women also show that many mothers have no choice but to undergo a geographic induction so that they can avoid a prolonged stay away from their families.[9]

Currently in Canada, there are no guidelines or protocol for providing geographic or social induction. Also, the Society of Obstetricians and Gynecologists of Canada discourages doctors from providing elective inductions because some studies have linked induction with potential complications.[10] However, there is still not enough evidence to show that social inductions are safe or unsafe. Women will continue to ask to be induced as long as they are relocated from their home communities. Because of this ongoing demand and conflicting evidence on the safety of inductions, guidelines for geographic induction are urgently needed.

What are the clinical prerequisites for induction?

Guidelines for geographic induction must be based on current evidence for induction of labour, including:

- Healthy mother
- Favourable cervix and Bishop's score
- Good fetal presentation
- Healthy baby
- Appropriate gestational age
- Comprehensive informed consent discussion

What are the social prerequisites for geographic induction?

In addition to these clinical prerequisites for induc-

tion of labour, guidelines for geographic induction should consider these social variables:

- Parity (the number of prior children the mother has had; multiparous women are more likely to have shorter labours)
- Distance and mode of travel between the woman's home and delivery site (women traveling by air and/or water and over extreme distances should be given priority)
- Seasonal weather conditions impacting travel
- Resources available to women in the referral community (i.e. affordable accommodation, healthy meals, and community support)
- Financial resources available to women (i.e. personal savings or government subsidies for rural women traveling to or staying in referral communities)
- Adequate nursing staff and medical personnel for monitoring inductions in the referral hospital
- Social support from family or friends in the referral community.

Who should develop the guidelines?

→ Multidisciplinary committee

→ Input from all key stakeholders

The process of developing guidelines for geographic induction should be inclusive, multidisciplinary, and honour diverse expertise, experiences, and methodologies. Specifically, the development process must include input from all key stakeholders at the community, hospital, and administrative levels, including:

- Rural care providers (physicians, nurses, and midwives) in satellite and referral communities who provide care for rural patients and understand rural maternity care;
- Maternal fetal medicine specialists;
- Representatives from professional bodies responsible for setting guidelines and practice protocols;
- Health planners and researchers; and
- Rural women and community members.

What else do we need to know?

In addition to these consultations, more research is needed to understand the risks and benefits of geographic induction. Some pressing research questions include:

- What is the appropriate gestational age for induction?
- What are the risks and benefits of elective induction for nulliparous women?

Conclusion

Currently, 1 in 3 Canadians lives in a rural area.[11] It is time to acknowledge that Canada's population distribution makes geographic inductions increasingly common. By developing a clear protocol for geographic induction, decision makers would not be condoning or encouraging this intervention. Instead, they would help the quality improvement and quality assessment of geographic induction by:

- encouraging care providers to document instances of geographic induction;
- getting more accurate data on the prevalence, practice patterns, and outcomes of geographic induction;
- enhancing the evidence base for medical practice;
- encouraging comprehensive informed consent discussions between care providers and mothers;
- reducing the stresses involved in decision making about geographic inductions;
- providing a clear list of options available for women; and
- increasing patient safety.

GLOSSARY

Referral Hospital
A hospital offering specialist (surgical) labour and delivery services to outlying communities

Referral Community
A community that has such a hospital in it

Nulliparous
A woman who has never given birth

Multiparous
A woman who has given birth two or more times

Gestational Age
The age of an unborn baby. Most rural mothers are transferred to referral communities at 36-37 weeks gestational age.

The **Rural Maternity Care New Emerging Team** (RM-NET), housed in the Centre for Rural Health Research, is a collaborative group of academic and community-based researchers, policy makers, administrators, and other key stakeholders working together to achieve a comprehensive understanding of rural maternity care services in British Columbia. The RM-NET is co-directed by Jude Kornelsen and Stefan Grzybowski and its core team includes Shelagh Levangie, Sarah Munro, Reyna Ramolete, Melanie McDonald, and Bryce Westlake.

The *Issues in Rural Maternity Care* policy brief series addresses current issues in the provision of maternity care in British Columbia and provides timely recommendations for improving the quality and safety of rural intrapartum services. Targeted at decision makers and maternity care providers, it is produced by the Rural Maternity Care New Emerging Team (RM-NET).

Resources

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