

# Evidence *in* Context

Issue:  
Released:

Patient Decision Aids in Obstetrics  
September 2022

**Health research – synthesized and contextualized for use in Newfoundland & Labrador**

## Patient Decision Aids in Obstetrics in Newfoundland & Labrador

Jude Kornelsen, Heather Brown, Colin Walsh, Christie Warren, Rick Audas

Increasingly, healthcare decision makers, clinicians, and patients have come to expect that obstetrical care will involve shared decision making, a process in which healthcare decisions are shared between patients and their care providers. Having a shared decision making mechanism in place can help to ensure that patients understand their available options; are aware of the risks and benefits of these options; and are able to incorporate their personal values, preferences, and concerns when making informed decisions about their care.

Patient Decision Aids (PDAs) are tools that promote shared decision making by taking into account patient values and priorities alongside any clinical considerations and are especially useful in supporting complex decisions in cases where the scientific evidence about available options might be limited.

To examine this issue, provincial decision makers asked the Contextualized Health Research Synthesis Program (CHRSP) to find out what the health evidence says about the effectiveness of PDAs on outcome measures such as: improving patient knowledge, helping alleviate decisional conflict, reducing anxiety, patient satisfaction, and helping to support informed decision making.

To answer these questions, CHRSP assembled a project team that included subject expert Jude Kornelsen, Associate Professor, Department of Family Practice, University of British Columbia; health system leader Heather Brown, CEO of Labrador Grenfell Health; and local experts in midwifery, nursing, family medicine, and obstetrics and gynecology in Newfoundland and Labrador.

Patient and caregiver advisers and community stakeholders assisted with contextualization, considering the synthesis findings in terms of local factors that might affect their effectiveness, feasibility and acceptability in this province.

This report briefly summarizes the key findings from the research evidence on this topic and the results of our contextualization process. On the final page are some considerations for decision makers who may be planning to implement Patient Decision Aids in Newfoundland & Labrador.

Readers are encouraged to review the full report on the NLCAHR website for the list of references and an outline of the methodology for this study:

[www.nlcahr.mun.ca/CHRSP](http://www.nlcahr.mun.ca/CHRSP)



Newfoundland & Labrador Centre for  
**APPLIED  
HEALTH  
RESEARCH**  
[www.nlcahr.mun.ca](http://www.nlcahr.mun.ca)

### The Research Question:

**“How do Patient Decision Aids affect patient knowledge and decisional conflict when patients and their caregivers engage in shared decision making within the childbearing year?”**

**Disclaimer:** This document is an executive summary of a larger report that contains fully-referenced material. We have omitted references from this summary for the sake of brevity, but readers who wish to review the fully-referenced report are encouraged to do so at <http://www.nlcahr.mun.ca/CHRSP/> together with an online companion document describing the methodology, data extraction and detailed synthesis results.

**Read the full report here: <http://www.nlcahr.mun.ca/CHRSP/>**

## *What did the Evidence Say?* A Summary of Key Findings

The following key messages summarize the most relevant findings from this report and reflect the state of the available research evidence on this topic:

- ✓ The research evidence suggests that Patient Decision Aids tend to improve patients' knowledge of obstetrics topics.
- ✓ The research evidence suggests that Patient Decision Aids tend to reduce patients' uncertainty (decisional conflict) about the preferred course of action in pregnancy.
- ✓ Findings about patients' anxiety and satisfaction after using Patient Decision Aids are mixed, with some research suggesting improvements (i.e., reduced anxiety and greater satisfaction), and other research indicating no effect on these outcomes.
- ✓ Little evidence was found for the outcome of informed decision making; however, the limited research that is available suggests that Patient Decision Aids lead to better-informed patient decisions.
- ✓ While most of the formats of Patient Decision Aids reviewed in this report are effective, our synthesis indicates that computer-based Patient Decision Aids are the most effective.
- ✓ Patient Decision Aids are consistently effective in most pregnancy scenarios reviewed in this report, except when used for decisions about prenatal screening.

## What evidence did we look for?

To be eligible for inclusion in this study, research evidence had to be a systematic review or a meta-analysis covering at least two studies and published within the past 10 years or be a very recent, high-quality primary study; include people who were making decisions about their pregnancy within the childbearing year; include a comparator group receiving usual care, educational materials, or another intervention; study an intervention that followed our definition of a patient decision aid; measure outcomes related to knowledge, decisional conflict, satisfaction, anxiety, or perception of making an informed decision; and be published in English.

## What did we find?

This report synthesizes the results of 12 eligible systematic reviews (six of which had at least one Canadian study) and from five separate primary studies (none of which were Canadian) that were published too recently to have been captured within the systematic review literature. All included systematic reviews restricted their scope to include only randomised control trials (RCTs). Four of the five included primary studies were also RCTs and the fifth primary study was described as a non-randomized (non-equivalent) controlled trial with purposive sampling. Our critical appraisal found 5 included systematic reviews to be of high quality and 7 of moderate quality and all five included primary studies were rated as being of good quality.



### Key findings from the research evidence

## Limitations of the evidence

The systematic reviews and primary studies included in this report did not exclusively look at any single pregnancy-related scenario in which a decision would be required, but rather identified a number of potential pregnancy scenarios. This heterogeneity also extended to the fact that the reviews did not tend to focus on one PDA tool, instead researchers looked at a variety of tools and formats intended to support making decisions. Since Patient Decision Aids are designed to promote shared decision-making and to facilitate communication, they would be expected, overall, to help improve health literacy and/or facilitate communications. However, review authors noted a lack of research that focuses on health literacy in either the development of Patient Decision Aids or in their evaluation.

# The Newfoundland & Labrador Context *for* Patient Decision Aids



CHRSP researchers consulted with provincial healthcare stakeholders, patients, and families to identify local contextual factors to consider when designing PDAs in this province. The results of these consultations are included in the full report. Key contextual factors are summarized below.

## Travel for Care/ Services and Service Choice

The geography of this province often necessitates travel for healthcare in pregnancy. While CHRSP researchers found no systematic review literature on PDAs that focus specifically on decisions related to travel and/or the location of delivery, PDAs that include information about the mode and timing of travel were thought to be an especially beneficial approach to address this common decision-making scenario in Newfoundland & Labrador.

PDAs are meant to be implemented by a trusted care provider. The lack of choice and access to perinatal services in NL could hinder their effectiveness. Our consultants remarked that many clients receive obstetrical care from whichever healthcare provider is available, which may not always be the same person. Some consultants hoped that Patient Decision Aids could help this issue by ensuring all necessary information is provided to the pregnant patient in a consistent format, regardless of who is providing their care.

## Demographic Factors

Chronic health conditions among the NL population can contribute to more high-risk pregnancies and our consultants noted that a very high number of pregnancies in NL can be considered high-risk. Since risk requires more challenges in decision making, PDAs could be a way to help patients to be more aware and informed about the risks and benefits of all options available to them.

There is also potential for pregnant people to make a decision that does not align with either the usual clinical risk management or the care provider's capability and/or willingness to provide care. When creating PDAs, resolving patient and health provider conflicts is an important factor to be considered.

## The Culture of Healthcare

Several consultants noted that they had either experienced or observed a paternalistic model of obstetrical care in NL. Paternalism makes it difficult to implement PDAs effectively since PDAs are intrinsically meant to take a patient-

centered approach. According to both our contextualization consultants and to the online documents published by our healthcare partners, patient-centered care is endorsed by the NL healthcare system. Our consultants indicated that patient-centred care will help to eliminate paternalism.

## Indigenous Healthcare

Indigenous peoples in NL are at risk of the negative impacts of both paternalism and colonialism. When Indigenous people have to travel for healthcare, they often feel pressure to accept obstetric decisions that do not always align with their own cultures or traditions. Their decision-making is also complicated by isolation and cultural alienation. Birth is often connected to the kinship and traditional lands that help shape their identity, and enforced evacuation for delivery is reported as creating added stress of being separated from family, culture, and community. It will therefore be critically important for health system leaders to work together with Indigenous Peoples to develop culturally relevant PDAs that are based on shared decision-making.

## Health Human Resources

Obstetrical care providers are faced with a low volume of deliveries and a widely distributed population with single providers responsible for large catchment areas, which can lead to stress and overwork. Training, staffing, and organizational considerations will be needed to support providers who administer PDAs. Mitigating the impact of extra duties on over-burdened healthcare providers and ensuring that providers have sufficient time to administer PDAs will also be factors to consider.

## The Role of Midwives

Midwives were considered as important facilitators to implementing PDAs. Our consultants suggested that midwives facilitate shared decision-making, since they already practice patient-centered care. Midwives also provide clients with increased choice in terms of obstetrics services, including location of delivery. Midwifery could therefore target some of the barriers to PDAs in terms of shared decision-making and care options available to patients.

## Contextualized Synthesis: Patient Decision Aids in Obstetrics

### Considerations for Decision Makers

While the research synthesized in this report outlined the potential benefits of using Patient Decision Aids in pregnancy-related decision-making, both the evidence and our discussions with CHRSP contextualization consultants highlighted important factors that decision makers may wish to consider when implementing Patient Decision Aids in Newfoundland & Labrador:

- Research evidence supports the use of Patient Decision Aids for obstetrical decision making when the intervention combines reliable evidence-based information with a consideration of patient values and beliefs. Patient Decision Aids were found to improve patient knowledge and to decrease decision making uncertainty when delivered through an open dialogue with a trusted care provider in an effort to outline obstetrical care options for pregnant patients.
- Many pregnant patients in NL face difficult decisions regarding travel for obstetrical services and for childbirth. Although the available evidence on Patient Decision Aids in this report did not focus specifically on travel-related decisions given that the evidence supports PDAs as a means to increase patient knowledge and to decrease patient uncertainty, decision makers in NL are encouraged to consider developing local Patient Decision Aids that focus on shared decision making related to travel during pregnancy, including the mode and timing of such travel.
- Patients in NL are seeking access to obstetrical care as close to home as possible. Patient Decision Aids have no discernible effect on either patient anxiety or on patient satisfaction measures. As such, it is unlikely that implementing Patient Decision Aids would resolve the overall problems associated with access to obstetrical care in NL.
- Chronic health conditions create higher risks in pregnancy. Patient Decision Aids support discussions between healthcare providers and their patients to ensure that patients at risk are positioned to make safer, better-informed decisions.
- In pregnancy, it is crucial to establish a trusting relationship with one's healthcare provider in order to effectively navigate shared decision-making. Decision makers in this province are encouraged to look at ways to maintain continuity of care provider(s) as much as possible throughout pregnancy.
- The health system may wish to consider ways to eliminate the culture of paternalism in obstetrical care.
- When developing obstetrical Patient Decision Aids for use in NL, decision makers are encouraged to seek input and perspectives from front-line healthcare workers who care for pregnant persons (e.g., obstetricians, midwives, nurses, etc.), as well as speaking with patients and caregivers from both rural and urban areas of the province. Importantly, decision makers should seek to work with Indigenous peoples and their leaders on any proposed interventions designed for use in Indigenous care contexts.
- The effectiveness of Patient Decision Aids depends on care providers having ample time to discuss patient options, risks, and benefits in the care setting. Health system decision makers will need to consider issues of time management, burnout, and overwork among healthcare providers when designing and implementing Patient Decision Aids.
- Awareness of midwives in NL as a valuable healthcare resource needs to be improved. Efforts to raise this awareness and to promote midwifery practice may be beneficial to patients seeking alternative care options as well as being helpful for other healthcare providers who currently require service support.
- To optimize the chances for successful development and implementation of Patient Decision Aids, stakeholders will be required to advocate for, and to champion the process.
- In the current fiscal environment, health system decision makers face challenges in implementing new healthcare interventions. Although this report does not include an economic analysis for Patient Decision Aids, a more thorough assessment of associated costs should be considered as part of any proposed implementation plan.

For the complete CHRSP report, including details on the evidence reviewed by the project team, and for more information about the CHRSP process, please visit the NLCAHR website: <http://www.nlcahr.mun.ca/CHRSP/>