

# Informed Decision-Making for Labour & Birth

Throughout this paper, gender-specific language such as “woman”, “women” and “mother” is used in order to accurately cite the research referred to. We intend these terms to refer to all childbearing individuals, regardless of their gender identity or sexual orientation.

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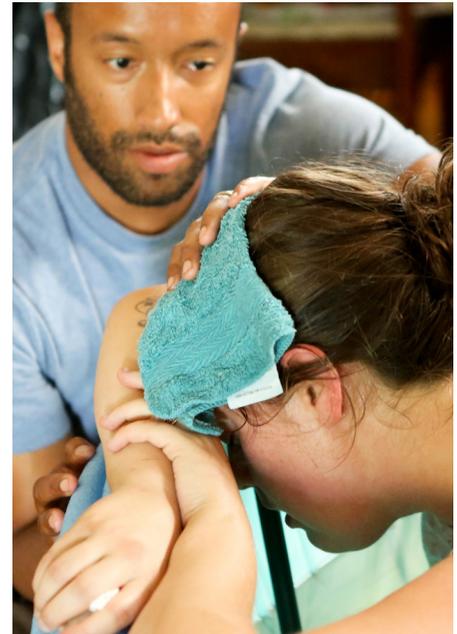
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## Executive Summary

In order to set the context for public health's role in the discussion about informed decision-making for labour and birth, the importance of physiological labour and birth to lifelong health and wellness must be addressed. From a public health perspective, this is a key upstream health promotion strategy for the prevention of poor health outcomes for mothers and babies.

Physiological labour and birth is a biological process that relies on the innate capacity of both mother and baby (1). A physiological labour and birth is more likely to be safe and healthy, in both the short and long-term, because health promoting biological processes are not disrupted (1). Medical interventions were developed to protect maternal and fetal well-being when complications arise. However, high rates of common maternity care practices and interventions are occurring in the absence of complications and/or without support from high-quality evidence (2). These maternity care practices and interventions disrupt the hormonal physiology of the mother and baby, with consequences lasting through the perinatal period and beyond (2).



There is a societal misconception that health care providers (HCPs) are responsible for deciding whether or not a medical intervention is used during labour and birth. However, within the scope of informed decision-making, HCPs are responsible for communicating the best scientific evidence of the benefits, risks and alternatives of an intervention to their patient (3). It is the responsibility of the patient to make the decision that is right for them. It is also the role of the HCP to inform women about how to achieve best outcomes by preserving the normal physiologic processes of labour and birth as much as possible even in the presence of interventions (2) (3). This helps to achieve a patient-centred care approach in which a woman makes informed decisions in the context of her own values and life circumstances. Patient-centred care is crucial; leading to a higher level of patient engagement and better self-perceived patient outcomes (3).

One of the challenges that Ontario currently faces in the aim to support, promote and protect physiological labour and birth and informed decision-making is limited access to low-risk providers of maternity care. Four out of ten Ontarians who request a midwife are unable to access one (4). Seventy-eight percent of low risk births in Ontario are attended by obstetricians (5), when they could be attended by a low-risk provider. Improved access to low-risk providers, who support and promote birth as a normal process, “reduces interventions, improves health outcomes, and is more fiscally accountable” (4).

Two key strategies that support physiological labour and birth and informed decision-making include:

1

### THE INTERNATIONAL MOTHERBABY CHILDBIRTH INITIATIVE (IMBCI)

The [10 Steps of the IMBCI](#) (see Appendix A) equip all HCPs with evidence-based practice recommendations that minimize harm and support physiological labour and birth. The IMBCI acknowledges that maternal health is a human rights issue (see Appendix B). It asserts that women have the right to quality information, respect, and self-determination for themselves and their babies (6) (7). IMBCI's vision is for all birthing facilities to practise the 10 steps, resulting in consistent evidence-based care, reduced mortality and morbidity, and enhanced birth outcomes for mothers and babies (7).

2

### DECISION AIDS

Decision aids are tools to help people participate in their own informed health care decisions (8). They identify the risks and benefits of care options that people may value differently (8). Decision aids help to match what matters most to a person with the option that has these features (8). Use of decision aids for making informed decisions will ultimately ensure that interventions used for labour and birth reflect evidence-based practice and the patient's values. It is recommended that additional decision aids be developed and used for a range of care options that may arise for labour and birth to facilitate informed decisions that feel best for the individual.

There are barriers and challenges to the implementation of informed decision-making for labour and birth. These include:

1. Incomplete, inaccurate, biased, or unavailable patient education resources
2. Societal acceptance of labour and birth as an inherently dangerous event requiring medical interventions
3. Erosion of women's legal and ethical rights to informed consent
4. Lack of opportunity for pregnant patients to have meaningful conversations with their HCPs about their individual care
5. Continued use of non-evidence based practices in maternity care settings
6. HCPs' non-adherence to their patients' informed decisions
7. Challenges relating to implementing decision aids into practice

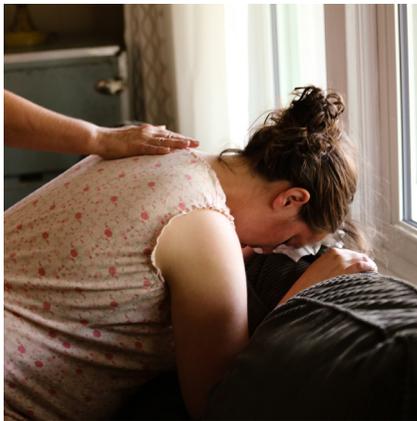
Additionally, it is assumed that these barriers will create an even greater health equity gap for those often marginalized. All individuals need to be given the opportunity to make truly informed health decisions and be supported in the decisions they make. Implementing the education, policy, practice, and research recommendations (see Appendix C) outlined in [Hormonal Physiology of Childbearing](#) will reduce these barriers and support systemic change (2).

Public health has a significant role to play as Ontario moves towards this systemic change. In the 2008 Ontario Public Health Standards (OPHS), public health is directed to work with community partners and educate the public to promote healthy birth outcomes (9). However, the 2008 OPHS does not identify labour and birth as a factor affecting healthy birth outcomes and requiring public health action. As recently as 2015, the Ministry of Health and Long-term Care (MOHLTC) recognized healthy birth practices as a means to healthy birth outcomes for low-risk pregnancies (10). Research study findings released in 2016 also suggest that attending childbirth education classes is associated with an increased likelihood of having a vaginal birth (11). Public health currently provides prenatal education, health promotion and support to expectant individuals and families across Ontario. As a result, public health is well positioned to also provide health education and promotion about informed decision-making and the importance of physiological labour and birth.

Through public health advocacy efforts for access to consistent, evidence-based information necessary for informed discussions about labour and birth, the dialogue is shifted from an illness model to one that supports wellness (1). This aligns with the OPHA RHWG's focus on promotion of wellness. Furthermore, such investments may increase the sustainability of the health care system by reducing costs of maternity care and by improving long-term health outcomes.



Labour and birth is a physiological process that does not inherently require intervention (2).



Informed decision-making has emerged as an important component for supporting physiological labour and birth.

## Rationale for the Position Statement

Labour and birth is a physiological process that does not inherently require intervention (2). It begins and progresses via natural biological processes and promotes “fetal readiness for birth and safety during labour, enhancing labour effectiveness, providing physiologic help with labour stress and pain, promoting maternal and newborn transitions and maternal adaptations, and optimizing breastfeeding and maternal-infant attachment, among many processes” (2). However, rates of medical intervention used for labour and birth vary significantly between hospitals for low-risk women giving birth in similar settings (12). This variation suggests that pregnant individuals and babies are being subjected to risks associated with unnecessary interventions. These unnecessary risks impact downstream health outcomes for mothers and babies.

Informed decision-making has emerged as an important component for supporting physiological labour and birth which in turn reduces unnecessary interventions, improves birth outcomes, and increases positive birth experiences (13). The important health promoting benefits of physiological labour and birth as explained in the report [Hormonal Physiology of Childbearing](#) must be included in all comprehensive informed decision-making discussions.



## Relevance to Public Health

The Ontario Public Health Association (OPHA) Reproductive Health Workgroup (RHWG), comprised of over 40 members from public and community health organizations across Ontario, has advocated to support, promote, and protect physiological labour and birth since the RHWG's inception in 2010. One of the RHWG's initial goals is to advocate for physiological labour and birth best practices and informed decision-making for labour and birth across Ontario. This work was initiated given the growing evidence of better birth outcomes and lifelong wellness associated with physiological labour and birth, as well as the key role that many RHWG members play in prenatal education and knowledge translation across the province.

In the 2008 OPHS, public health is directed to work with community partners and educate the public to promote healthy birth outcomes (9). However, the 2008 OPHS does not identify labour and birth as a factor affecting healthy birth outcomes and requiring public health action. In 2015, the MOHLTC recognized healthy birth practices as a means to healthy birth outcomes for low-risk pregnancies (10). Research study findings released in 2016 also suggest that attending childbirth education classes is associated with an increased likelihood of having a vaginal birth (11). Public health currently provides prenatal education, health promotion and support to expectant individuals and families across Ontario. As a result, public health is well positioned to also provide health education and promotion about informed decision-making and the importance of physiological labour and birth as a strategy to promote healthy birth outcomes.

Public health is also in the unique position of having invested in the Baby Friendly Initiative (BFI); for which informed decision-making is a foundational principle. Supporting, promoting and protecting physiological labour and birth and informed decision-making for labour and birth is the logical next step, especially given the strong physiological link between labour and birth, skin-to-skin contact, breastfeeding, attachment, and health (2). Public health will be able to apply lessons learned from BFI Ontario, as well as leverage the existing relationships with HCPs, organizations and hospitals, in the work to be done regarding labour and birth.

By advocating for access to consistent, evidence-based information necessary for informed discussions about labour and birth, the dialogue is shifted from an illness model to one that supports wellness (1). This aligns with the OPHA RHWG's focus on health promotion. Furthermore, such investments may increase the sustainability of the health care system by reducing costs of maternity care and by improving long-term health outcomes.

## Alignment with MOHLTC Patients First

The MOHLTC proposed health care system reform to reduce gaps and strengthen patient-centred care (14). Public health initiatives to support, promote, and protect physiological labour, and birth and informed decision-making for labour and birth, align with components of the Patients First proposal. Public health initiatives that align well with the Patient First goals are outlined below:

Patients First Goals	Public Health Initiatives
<p>1. “More effective integration of services and greater equity” (14 p. 5).</p>	<ul style="list-style-type: none"> <li>Public health provided input through the OPHA to an expert panel that was established by the Provincial Council for Maternal and Child Health (PCMCH) to review low-risk birth practice across Ontario.</li> </ul>
<p>2. “Inform: Support people and patients – providing the education, information and transparency they need to make the right decisions about their health” (15 p. 5).</p>	<ul style="list-style-type: none"> <li>Premier Wynne directed the Minister of Health to develop a one-stop website of health information to help individuals make informed decisions and navigate the health care system (16). Public health is well positioned to advocate for the inclusion of comprehensive information about labour and birth and making informed decisions in this one-stop website.</li> <li>Public health addresses the prenatal educational needs of pregnant individuals and their families through prenatal education programs, social media and social marketing strategies and is well positioned to inform the public about the importance of physiological labour and birth and making informed decisions.</li> <li>Public health prenatal education programs address both targeted and universal populations to help reduce health equity gaps.</li> </ul>
<p>3. “Protect: Protect our universal public health care system – making decisions based on value and quality, to sustain the system for generations to come” (15 p. 5).</p>	<ul style="list-style-type: none"> <li>Public health plays a prevention role through prenatal education; assisting the public to make informed decisions that will reduce maternity care costs and improve long-term health outcomes. This contributes to a more sustainable health care system for future generations.</li> </ul>

## The Importance of Physiological Labour & Birth to Lifelong Wellness

In order to set the context for informed decision-making for labour and birth, the importance of physiological labour and birth to lifelong health and wellness must be included in any informed decision-making discussion about the use of medical interventions. From a public health perspective, this is a key upstream health promotion strategy for the prevention of poor health outcomes for mothers and babies.

There is a growing body of evidence regarding the importance of physiological labour and birth. Short and long-term health benefits exist for both mother and infant, including (2 p. 169):

- Hormonal optimization;
- Supporting breastfeeding success;
- Gut colonization for infants;
- Maternal mental health;
- Chronic disease prevention, and
- Avoidance of potential harm from unnecessary interventions.

Major hormonal systems are turned on during labour and birth that promote (1):

- Effective labour patterns;
- Endorphin levels [to facilitate pain relief];
- Facilitation of cardio-respiratory transition and thermoregulation of the newborn;
- Successful lactation, and
- Enhanced bonding behavior between the mother and infant.



Allowing spontaneous labour to unfold reduces the risk of unnecessary intervention and fetal compromise (1), and increases the likelihood of immediate and uninterrupted skin-to-skin. Uninterrupted skin-to-skin further supports hormonal processes that facilitate the newborn's transition to extra-uterine life (2). "Skin-to-Skin is an accurate predictive factor of subsequent exclusive breastfeeding and a well-structured mother-infant bonding that supports breastfeeding and attachment" (17 p. 456).



The health benefits of breastfeeding are substantial; protecting babies and mothers against a spectrum of adverse health outcomes. Breastfed babies have a lower incidence of otitis media (18), Sudden Infant Death Syndrome (19), childhood obesity (20) and overall infection-related mortality (21). Breastfeeding mothers have a lower risk of breast and ovarian carcinoma (22), and lower risk of type 2 diabetes (23). Longer durations of breastfeeding have been associated with a reduced risk of postpartum depression (23).

In addition, there are some emerging areas of research related to epigenetic programming and gut colonization that occur during the labour and birth process.

- Epigenetic programming refers to the biochemical process that turns genes on or off. Interruption of the normal hormonal processes that occur during labour and birth can impact this biochemical process resulting in non-communicable diseases and biobehavioural problems (2). The potential long-term effects on health and development that result, for both the individual and generations to come, must be considered.
- Gut colonization looks at the impact of bacterial colonization during vaginal birth, the immediate postpartum period and breastfeeding on immunology, childhood obesity, and endocrine production. This colonization may prevent non-communicable diseases such as cancer and diabetes, later in life (24).

The health promoting benefits of physiological labour and birth are "beneficial to the family and society through enhanced family functioning and cost effective care. Importantly, a focus on these aspects of normal physiologic birth will help to change the current discourse on childbirth as an illness state where authority resides [with the healthcare provider or institution] to one of wellness in which women and clinicians share decisions and accountability" (1). In all health care settings, the innate hormonally driven processes for both mother and baby are foundational and should be supported, promoted and protected, as far as safely possible, to increase the likelihood of healthy outcomes for both mother and baby (25).

# The Risks and Costs of Using Unnecessary Intervention for Labour & Birth

Medical interventions were developed to protect maternal and fetal well-being. However, high rates of common maternity care practices and interventions unsupported by high-quality evidence are disrupting the hormonal physiology of mother and baby, with consequences lasting through the perinatal period and beyond (2).

Since 1985, a caesarean section rate of between 10% and 15% has been considered ideal by international experts in the health care community (26). However, the challenge of identifying a maximum threshold for medically necessary caesarean sections at a population level was noted in a 2015 WHO statement (26). Caesarean section rates can vary widely between healthcare facilities due to differences in patient populations, clinical protocols, and resources (26). The Society of Obstetricians and Gynecologists of Canada (SOGC) propose that caesarean section rates can be compared across institutions, regions and countries when the [Modified Robson Classification System](#) is consistently used in caesarean section data collection processes (27).

Ontario's Better Outcomes Registry & Network (BORN) utilizes the Robson Criteria when collecting and interpreting caesarean section data provided by Ontario hospitals. A 2016 BORN infographic identified discrepancies in caesarean section rates for women having low-risk pregnancies in Ontario hospitals that have more than 500 births per year (12). Top performing Ontario hospitals have caesarean section rates of 10.5% to 14.9% compared to the lowest performing hospital caesarean section rates of 24.0% to 33.0% (12). Such a large caesarean section rate discrepancy between the top and bottom performing hospitals suggests a proportion of caesarean sections are being done unnecessarily. Caesarean sections cost twice as much as vaginal births (28), thereby causing undue financial strain on our health care system when they occur without medical need. Overall, a first time caesarean birth costs approximately \$2,265 more than a vaginal birth with no interventions (29). This additional cost applies to the 80.8% of women greater than or equal to 37 weeks pregnant with one baby in a head down position who have a repeat caesarean section during subsequent pregnancies (Robson Classification 5) (30).

Risks to maternal morbidity and mortality associated with caesarean section have decreased over time; with maternal death now rarely occurring in the developed world (31). However, potential risks related to caesarean section do still exist, including:

## Immediate Risks:

- Not establishing breastfeeding (32);
- Postoperative pain (31) (32);
- Infections (31) (32);
- Post-operative recovery (31) (32);
- Surgical injury (31) (32);

- Miscellaneous complications from surgery (31);
- Admission to Intensive Treatment Unit (31);
- Anaesthetic risks (31);

**Delayed Risks:**

- Thromboembolic Disease (31);
- Hospital readmission (31);
- Postoperative adhesion/pain (31);
- Incisional hernias (31);

**Risks in future pregnancies:**

- Lower rates of future childbearing (31);
- Delay in subsequent pregnancy (31) (32);
- Increase risk of spontaneous miscarriage (31) (32);
- Increase risk of ectopic pregnancy (31) (32);
- Increase risk of abnormal placental implantation and migration (31) (32);
- Fetal growth restriction and preterm birth (31);
- Stillbirth at or after 34 weeks (31) (32);
- Uterine scar dehiscence or rupture (31) (32);
- Peripartum hysterectomy (31) (32), and
- Repeat caesarean section (31).

Labour induction is another common medical intervention where discrepancies in practice across Ontario were highlighted by BORN. For low-risk pregnancies, induction should be used only when the pregnancy exceeds 41 weeks (12). This would suggest that women experiencing low-risk pregnancies and giving birth in similar environments would be expected to have similar induction rates. However, for women who are expecting their first child, having similar health and low-risk pregnancies, top performing hospital induction rates are 9.5% compared with bottom performing hospitals at 42.2% (12).

Medical interventions can have unintended effects on labour and birth that may lead to new problems requiring further intervention (33). Each intervention can lead to the need for additional interventions which is commonly known as the 'cascade of intervention' (33). This cascade moves the path of labour further from the physiological process; thereby increasing risk of poor short and long-term health outcomes for both mother and baby. Practices that may lead to this cascade include (33):

- Use of various medications to induce labour;
- Artificial rupture of membranes before or during labour;

- Use of synthetic oxytocin to augment labour;
- Medications for pain relief, and
- Being confined to bed.

An additional factor that influences the use of interventions for labour and birth is the model of care practised by the HCP (34). The majority of births in Ontario are considered low risk (35). Mothers report that maternal-newborn care is too often ‘over-medicalized’ and should instead be viewed as a normal process (35). The midwifery-led model of care is an existing model that supports physiological labour and birth for low-risk women. One of the challenges that Ontario women currently face is limited access to low-risk providers of maternity care. Four out of ten Ontarians who request a midwife are unable to access one (4). Seventy-eight percent of low risk births in Ontario are attended by obstetricians (5) (See Figure 1), when they could be attended by a low-risk provider. Improved access to low-risk providers, who support and promote birth as a normal process, “reduces interventions, improves health outcomes, and is more fiscally accountable” (4).

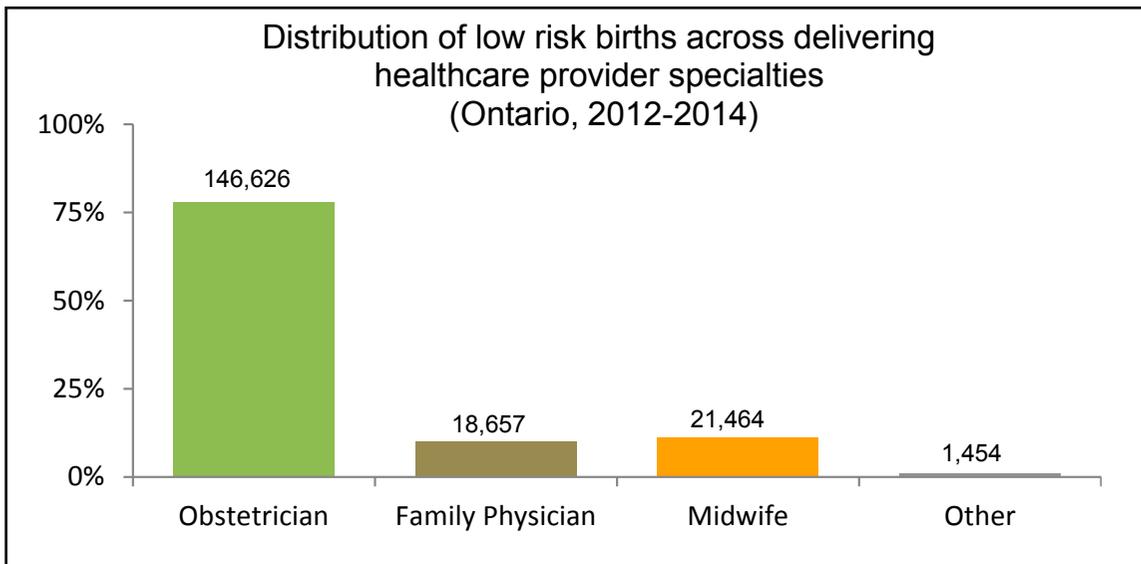


Figure 1. Source: Provincial Council for Maternal and Child Health (5)

## What is Informed Decision-Making?

Health care situations may present with more than one care option, with each option having both benefits and risks. The process of informed decision-making supports patients to make knowledgeable choices in the context of their own values and preferences.

There are three components necessary to make an informed decision (8 p. 1):

- An expert on the evidence (i.e., a HCP) and;
- An expert on which features are the most important (i.e., the patient) and;
- A way to share their views with each other.

Deciding on a care path becomes an easier decision for both HCP and patient when the patient's values are understood (36). In the scope of labour and birth, conversations during pregnancy are necessary to explore a person's values in the event that a medical intervention decision needs to be made during labour (36).



As part of the process of informed decision-making, informed consent is the act of consenting or refusing. If a patient doesn't have the right to refuse a care path, then the act of giving consent has no meaning (37). Informed consent and refusal is a fundamental human right (6) (37) (38) (39).

The IMBCI acknowledges maternal health as a human rights issue, and developed a charter of twenty MotherBaby Rights (see Appendix B) (6). The charter asserts that women have the right to quality information, respect, and self-determination for themselves and their babies (6) (7). HCPs are responsible for upholding these rights by:

- Explaining all care options using the best available evidence, including benefits, risks and alternatives of each option, and in language and terms understood by the patient (6) (40).
- Respecting and responding to each patient's preferences, needs, values and decisions (6) (41).

Over the past decade, informed decision-making has become a key factor to improving health care quality and is emerging as a policy priority in many countries around the world (13) (42). In Ontario, the health care action plan proposed by the MOHLTC suggests that education, information, and the transparency patients need for self-determination will result in an improved health care experience and better health outcomes (15).

## Facilitating & Supporting Informed Decisions for Labour & Birth

Physiological labour and birth is a biological process that relies on the innate capacity of both mother and baby (1). A physiological labour and birth is more likely to be safe and healthy, in both the short and long-term, because biological processes are not disrupted (1). Some women and/or babies will develop complications that require medical interventions to facilitate a safe birth (1). It is then the responsibility of the HCP, not to eliminate risk, but to outline the best scientific evidence of the benefits, risks and alternatives of an intervention to their patient (3). It is also the role of the HCP to inform women about how to achieve best outcomes by preserving the normal physiologic processes of labour and birth as much as possible even in the presence of interventions (2) (3). This helps to achieve a patient-centred care approach in which a woman makes informed decisions in the context of her own values and life circumstances (3). Patient-centred care is crucial; leading to a higher level of patient engagement and better self-perceived patient outcomes (3).

Feeling uninvolved in decision-making during labour and birth can lead to a traumatic birth experience (43). Women report feeling vulnerable, powerless, and distressed when recalling their labour and birth experience as the decisions surrounding their care were made for them without their involvement (43). This ‘feeling out of control’ led patients to adhere to medical interventions even more just to get through the trauma faster (43). HCPs are able to increase their patients’ sense of self control by providing information about all aspects of labour and birth and supporting patients to make informed decisions (13) (43).

“A woman’s confidence and ability to give birth to, care for, and breastfeed her baby and the baby’s ability to feed effectively can be enhanced or diminished by every person who gives them care and by the birth environment” (6). Therefore, all HCPs who support the birthing family, including primary care providers, public health professionals, and prenatal educators, are responsible for protecting the hormonal physiology of labour and birth.

Provincial and international efforts are being made to improve practice relating to evidence-based maternity care built on informed decision-making and physiologic labour and birth principles. Ontario’s PCMCH has been developing a low risk maternal and newborn strategy with the following expected outcomes (5):

- “Optimize system/provider practices that promote ‘normal birth’
- Promote equitable access to normal pregnancy and birth services that is woman/person and family-centred
- Support a system of care that provides women and their families with equitable choice in birth environment and provider“

This strategy is reflected in the province’s proposal to increase low-risk birth options and availability as a means of improving quality of care within the Patients First framework (16).

## International MotherBaby Childbirth Initiative

Internationally, the [10 Steps of the IMBCI](#) (see Appendix A) equip all HCPs with evidence-based practice recommendations that minimize harm and support physiological labour and birth. Maintaining the integrity of the 10 steps provides the “best possible health outcomes and benefits with the most appropriate and conservative use of resources and technology” (6). To move this initiative forward, IMBCI began the process to establish designation status with the World Health Organization (WHO), similar to the Baby-Friendly Hospital Initiative. IMBCI’s vision is for all birthing facilities to practise the 10 steps, resulting in consistent evidence-based care, reduced mortality and morbidity, and enhanced birth outcomes for mothers and babies (7).

To build further evidence in support of the initiative, IMBCI selected nine pilot sites around the world to implement the principles, philosophy, and the 10 steps. Canadian hospital, Pavillon des Naissances, Hôpital Brome Missisquoi Perkins, Cowansville, Centre de Santé et Services Sociaux La Pommeraie, the first Canadian hospital to be designated Baby-Friendly, was one of the selected pilot organizations (7). This hospital believed that implementation of IMBCI would result in improved birth outcomes and staff satisfaction, as well as additional benefits reaching well beyond childbirth itself (7).

Two groups independent of IMBCI also developed comprehensive, evidence-based best practice guidelines supporting informed decision-making and physiological labour and birth. These guidelines complement implementation of the IMBCI. The first, a [Toolkit to Support Vaginal Birth and Reduce Primary Caesareans](#), is designed to educate and motivate maternity clinicians to apply best practices for supporting vaginal birth and reducing primary caesarean (44). The second, Hormonal Physiology of Childbearing, an Essential Framework for Maternal-Newborn Nursing, is a nursing framework developed to support, promote, and protect physiological labour and birth. Ten practice-related recommendations for nurses in maternity settings are suggested by the authors (25).

Additionally, education, policy, practice, and research recommendations have been developed by Dr. Buckley to support the necessary systemic change arising from her Hormonal Physiology of Childbearing report (2) (see Appendix C).

## Decision Aids

Decision aids are tools to help people participate in their own informed health care decisions (8). They identify the risks and benefits of a choice that people may value differently (8). Decision aids differ from the more common health education materials in that decision aids help to match what matters most to a person with the option that has these features (45).

[The International Patient Decision Aid Standards Collaboration \(IPDAS\) Criteria Checklist](#) was designed to ensure that a decision aid is a credible tool for decision-making (46). This quality criteria checklist helps patients, HCPs, and policy makers feel confident to use these tools (46).

“Decision aids are designed to assist patients and their [HCP] in making informed decisions using information that is unbiased and based on high quality research evidence. Decision aids are non-directive in the sense that they do not aim to steer the user towards any one option, but rather to support decision-making which is informed and consistent with personal values” (47 p. 1). Patients who use decision aids experience increased participation in their care, increased knowledge, and are more likely to have realistic expectations and choose an option with features that they value most (8).

The 2014 Cochrane Review found that “there is high-quality evidence that decision aids compared to usual care improve people’s knowledge regarding options, and reduce their decisional conflict related to feeling uninformed and unclear about their personal values” (48 p. 6). It also found moderate-quality evidence that decision aids challenge people to take a more active role in decision-making and improve patient-health care provider communication (48).

An informed decision about medical interventions takes time. Fortunately a full term pregnancy is nine months; allowing people the time to access high quality information, process the information, identify their preferences based on values, and then engage in a shared decision-making process with their HCP (49). “Therefore, access to high-quality information and decision support should be provided at appropriate points in pregnancy and those related to labor and birth should be provided well before labor. In addition, novel tools and processes are needed to support shared decision-making around the time of birth” (49 p. 3).



There are few decision aids that have been developed and tested for labour and birth, which is inconsistent with patients' identification of pregnancy and birth as a time when they need to be part of their care decisions (45). Raynes-Greenow et. al (2010) showed that women who received information about the risks and benefits of pain relief options for labour and birth while still in the prenatal period were more likely to feel they had the necessary information to make a decision that was right for them; contributing to a feeling of satisfaction with their birth experience.

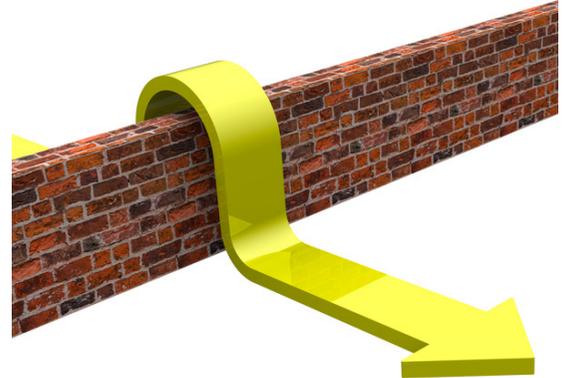
Another example where access to a pregnancy decision aid is valuable is in the case of induction for prolonged pregnancy. In the study by Stevens & Miller (2012), women who were given directive (and therefore partial) information in favor of medical intervention were more likely to prefer the directive (and therefore partial) information in favor of medical intervention were more likely to prefer the procedure than women presented with the benefits, risks, and alternatives to the procedure. Not having all the information contributes to a decision outcome that may be inconsistent with patient values (50).

Situations do arise in obstetrics when a HCP and patient have conflicting values. Identifying these issues during the prenatal period allows time for the HCP to process the difference and determine how best to provide care that is consistent with the patient's values (36). Extreme conflict between the patient's and HCP's values may require a transfer of care to another HCP to ensure the patient's values are reflected in the care being given (36). This can only happen when conversations about medical interventions are started early in the pregnancy (36).

Not only does informed decision-making during pregnancy and birth benefit women, it challenges the overuse of non-evidence based practices amongst HCPs that may have negative impacts on maternal and fetal wellbeing (1) (2) (13) (49). Use of decision aids for making informed decisions will ultimately ensure that interventions used during labour and birth are congruent with evidence-based practice, as well as patient's values. It is recommended that additional decision aids be developed for a range of decisions that may arise during labour and birth to facilitate informed decisions that feel best for individuals.

# Barriers and Challenges to Informed Decision-Making

The importance of informed decision-making for labour and birth is clear; however, in many cases practice has not caught up with the evidence. Women face limited care options (51) and a scarcity of balanced information regarding the available choices for labour and birth (13) (51). Identifying barriers and challenges to the process of informed decision making is an important step towards making critical system changes. Barriers and challenges include:



## 1. Incomplete, inaccurate, biased, or unavailable patient education resources:

- Availability of evidence based, in-person prenatal education varies by geography.
- Online prenatal information and education has been a helpful tool for patients to access prenatal information; however, the access to unbiased and credible online information varies greatly (49).
- In cases where in-person programs are unavailable, and where there is limited or no access to web based programs this information may be entirely unavailable.
- Online prenatal information and education provides the opportunity for knowledge acquisition but are limited in their ability to support the pregnant person to develop the coping skills necessary to manage labour pain.
- Health literacy issues related to language and low literacy create a greater health equity gap.

## 2. Societal acceptance of labour and birth as an inherently dangerous event requiring medical interventions.

- Today's maternity care culture focuses on fear and risks associated with childbirth. In addition, the routine use of medical technology and interventions during labour and birth limit women's awareness and knowledge of physiological childbirth (51).
- Misrepresentation of pregnancy and childbirth by the media perpetuates the perception that technologically based maternity care and passive decision-making are necessary (13) (52).
- Cultural bias and interruption of cultural values may lead to a greater health equity gap if there is conflict between the provider's and the patient's values and preferences.

**3. Erosion of women’s legal and ethical rights to informed consent:**

- A woman’s right to informed consent “is rarely talked about but is critical information that every pregnant woman should know” (37).
- Women often unknowingly defer decision-making for their care decisions to their HCPs which may result in a decision more congruent with the HCP’s values or motivations (49). The deferral of decision-making to HCPs has eroded this right and has resulted in consent processes not always being provided (49).
- A power differential may lead to acceptance of HCP’s preferences without question. It can be assumed that for those often marginalized, a greater health equity gap will be created.

**4. Lack of opportunity for pregnant patients to have meaningful conversations with their HCPs about their individual care.**

- On average, obstetrical prenatal care visits are 5-10 minutes with the majority of time spent completing the medical checklist of physical assessment measurements (49).
- Cultural and language barriers can hinder effective communication creating additional health equity gaps.

**5. Continued use of non-evidence based practices in maternity care settings.**

- Non-evidence based practices may not benefit the patient and may lead to additional interventions, increasing risks for both mother and baby. Options that pose less risk and improve outcomes are often not used (51) (53).

**6. HCPs’ non-adherence to their patients’ informed decisions:**

- Institutional and caregiver policies and practices often take priority over patients’ informed choice, even when patients’ choices align with best practice (13).
- A randomized controlled trial of a decision aid by Shorten et al. (2005) found that decision aids were effective in improving knowledge and decreasing decisional conflict, but there was little evidence that these informed decisions led to the patient’s informed choice actually happening. Strategies are needed to assist HCPs to empower women to translate their informed preferences into practice. Work is needed “to enhance women’s power in decision-making within the doctor-patient relationship” (54 p. 252).

**7. Challenges relating to implementing decision aids into practice.**

- The literature strongly supports the use of patient decision aids as tools to assist with improving patients’ knowledge, reducing decisional conflict, and promoting involvement in decision-making (42). Barriers to implementation of decision aids in practice have been identified and relate to HCPs’ readiness, willingness and ability to implement these tools (42).
- There is a limited number of available and credible labour and birth specific decision aids.

## Conclusions

Physiological labour and birth has significant benefits that optimize the lifelong health and wellbeing of mothers and infants. From a public health perspective, this is a key upstream health promotion strategy for the prevention of poor health outcomes. With the province's work towards a low-risk birth strategy, investing in initiatives that support and promote physiological labour and birth is opportune. OPHA believes that all HCPs, including public health practitioners, play a vital role in assisting mothers to make informed decisions regarding interventions for labour and birth and understanding the importance of preserving the physiologic processes of labour and birth as much as possible. To properly assist patients in making informed health decisions, it is imperative that the information presented to patients is current and based on evidence and best practice.

When circumstances require that medical intervention options be considered, the HCP can promote informed decision-making through the use of decision aids and by practicing in accordance with the guidelines provided in Step 1 of the IMBCI (6):

“Treat every woman with respect and dignity, fully informing and involving her in decision-making about care for herself and her baby in language that she understands, and providing her the right to informed consent and refusal” (6).

All individuals need to be given the opportunity to make truly informed health decisions and be supported in the decisions they make; reducing health equity gaps within the system. HCPs need to be knowledgeable about and comfortable discussing the long-term health benefits of physiological labour and birth, as well as the benefits, risks, and alternatives of any intervention for labour and birth in order to help families make truly informed decisions that align with their values and preferences.

Public health provides prenatal education, health promotion, and support to expectant individuals and families across Ontario. As a result, public health is well positioned to provide health education, promotion, and support about informed decision-making and the importance of physiological labour and birth.

Through public health advocacy efforts for access to consistent, evidence-based information necessary for informed discussions about labour and birth, the dialogue is shifted from an illness model to one that supports wellness (1). This aligns with the OPHA RHWG's focus on promotion of wellness, as well as, the MOHLTC Patients First Action Plan, and the PCMCH Maternal Newborn Strategy. Furthermore, such investments may increase the sustainability of the health care system by reducing costs of maternity care and by improving long-term health outcomes.

## Recommendations

The following recommendations address the identified barriers and challenges and are proposed to support, promote, and protect physiological labour and birth and informed decision-making in Ontario:

1. IMBCI designation for all birthing facilities.
2. Develop and increase access to credible labour and birth decision aids for HCPs and birthing families.
3. Develop profession specific best practice guidelines that support, promote, and protect physiological labour and birth and informed decision-making for all professions that support birthing families (i.e. Society of Obstetricians and Gynecologists of Canada (SOGC), Association of Ontario Midwives (AOM), Registered Nurses Association of Ontario (RNAO)).
4. Include public health representation at provincial level policy planning and implementation related to low-risk birth in Ontario (i.e. PCMCH Low Risk Maternal-Newborn Strategy).
5. Include labour and birth in the OPHS and its guidelines to support:
  - a) The integration of information related to physiological labour and birth and making informed decisions in prenatal education programs, social media, and social marketing strategies.
  - b) Advocacy and policy work related to physiological labour and birth and making informed decisions.
6. Include content about the importance of physiological labour and birth and making informed decisions in all HCP educational curriculums.
7. Increase collaboration between public health and hospital HCP partners to:
  - a) Enhance practitioners' skills to support labouring individuals with less intervention and better facilitate informed decisions (i.e. [Champlain Maternal Newborn Regional Program Labour Support Workshop](#)).
  - b) Increase consistency of messaging related to the importance of physiological labour and birth and supporting informed decision-making.
8. Increase access to care providers across Ontario who support, promote, and protect physiological labour and birth.
9. Increase availability of credible online information for the public regarding the importance of physiological labour and birth and making informed decisions.

# OPHA Resolution on Informed Decision-Making for Labour & Birth

WHEREAS informed consent is a fundamental right of birthing families;

WHEREAS in order to make a truly informed decision, birthing families require knowledge of both the benefits and risks of the available options and alternatives;

WHEREAS HCPs are unique in their obligation to be an objective source of current, evidence-based information for the public that is reflective of best practice;

WHEREAS there is a growing body of evidence regarding the importance of physiological labour and birth; with evidence indicating both short and long-term health benefits for mother and infant including the optimization of infant attachment and breastfeeding;

WHEREAS there are a limited number of medically determined evidence-based reasons to interrupt the process of physiological labour and birth;

WHEREAS HCPs need knowledge, skill, and support for facilitating and supporting informed decision-making regarding labour and birth interventions;

WHEREAS the financial cost of unnecessary medical intervention for labour and birth adds an increased burden to our health care system.

## Be it resolved

THAT OPHA endorse the IMBCI and uphold the principles of informed decision-making and physiological labour and birth as written within when advising the MOHLTC on future protocols about labour and birth;

That OPHA advocate for the development of high quality, user friendly decision aid tools for all labour and birth interventions;

THAT OPHA collaborate with other professional groups and constituent societies to advocate for the inclusion of informed decision-making and decision aid tools in labour and birth practice guidelines, positions, and policies;

THAT OPHA collaborate with other professional groups and constituent societies to advocate for all maternity models of care to support, promote, and protect physiological labour and birth in practice guidelines, positions, and policies;

THAT OPHA advocate for inclusion of informed decision-making and supporting, promoting, and protecting physiological labour and birth into the OPHS and its guidelines;

THAT OPHA encourage and support public health units to address informed decision-making and physiological labour and birth by providing this position paper and recommending resources to consider in program planning;

THAT OPHA advocate for the development of knowledge, skill, and competency of health professionals within educational curricula and continuing education; addressing the importance of physiological labour and birth and the risks of unnecessary medical interventions in keeping with best practices for labour management and support;

THAT OPHA advocate for the development of knowledge, skill, and competency of health professionals within educational curricula and continuing education related to informed decision-making;

THAT OPHA advocate for the development of effective consumer engagement resources to inform individuals about the importance of physiological labour and birth and informed decision-making;

THAT OPHA advocate for increased capacity for and accessibility of midwifery care in Ontario.

## Implementation Strategy

The resolution will be implemented by the OPHA RHWG with the cooperation of the OPHA Board of Directors and Executive where appropriate and as required.

Copies of the position paper and accompanying resolution will be sent to the Chief Medical Officer of Health for Ontario, the Ontario Ministers of Health and Long-term Care and Education and Children and Youth Services, the Public Health Agency of Canada, the PCMCH, and Health Canada.

Copies of the position paper and accompanying resolution will also be sent to Society of Obstetricians and Gynecologists of Canada (SOGC), Association of Ontario Midwives (AOM), Registered Nurses Association of Ontario (RNAO), Breastfeeding Committee for Canada, BFI Ontario and all Ontario public health units.

Opportunities for enhancing the knowledge of the public related to informed decision-making and the importance of physiological labour and birth will be sought.

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## Appendix A

### 10 Steps of the International MotherBaby Childbirth Initiative (IMBCI) (6)

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The 10 Steps of the MotherBaby Childbirth Initiative are based on the results of best available evidence about the safety and effectiveness of specific tests, treatments, and other interventions for mothers and babies. “Safe” means that care is provided through evidence-based practices that minimize the risk of error and harm and support the normal physiology of labour and birth.

“Effective” means that the care provided achieves expected benefits and is appropriate to the needs of the pregnant woman and her baby based on sound evidence. Safe and effective care of the MotherBaby provides the best possible health outcomes and benefits with the most appropriate and conservative use of resources and technology.

**Step 1** - Treat every woman with respect and dignity, fully informing and involving her in decision-making about care for herself and her baby in language that she understands, and providing her the right to informed consent and refusal.

**Step 2** - Possess and routinely apply midwifery knowledge and skills that enhance and optimize the normal physiology of pregnancy, labour, birth, breastfeeding, and the postpartum period.

**Step 3** - Inform the mother of the benefits of continuous support during labour and birth, and affirm her right to receive such support from companions of her choice, such as fathers, partners, family members, doulas, or others. Continuous support has been shown to reduce the need for intrapartum analgesia, decrease the rate of operative births and increase mothers’ satisfaction with their birthing experience.

**Step 4** - Provide drug-free comfort and pain-relief methods during labour, explaining their benefits for facilitating normal birth and avoiding unnecessary harm, and showing women (and their companions) how to use these methods, including touch, holding, massage, labouring in water, and coping/relaxation techniques. Respect women’s preferences and choices.

**Step 5** - Provide specific evidence-based practices proven to be beneficial in supporting the normal physiology of labour, birth, and the postpartum period, including:

- Allowing labour to unfold at its own pace, while refraining from interventions based on fixed time limits and utilizing the partogram to keep track of labour progress.
- Offering the mother unrestricted access to food and drink as she wishes during labour.

- Supporting her to walk and move about freely and assisting her to assume the positions of her choice, including squatting, sitting, and hands-and-knees, and providing tools supportive of upright positions.
- Techniques for turning the baby in utero and for vaginal breech delivery.
- Facilitating immediate and sustained skin-to-skin MotherBaby contact for warmth, attachment, breastfeeding initiation, and developmental stimulation, and ensuring that MotherBaby stay together.
- Allowing adequate time for the cord blood to transfer to the baby for the blood volume, oxygen, and nutrients it provides.
- Ensuring the mother's full access to her ill or premature infant, including kangaroo care, and supporting the mother to provide her own milk (or other human milk) to her baby when breastfeeding is not possible.

**Step 6** - Avoid potentially harmful procedures and practices that have no scientific support for routine or frequent use in normal labour and birth. When considered for a specific situation, their use should be supported by best available evidence that the benefits are likely to outweigh the potential harms and should be fully discussed with the mother to ensure her informed consent.

- shaving
- enema
- sweeping of the membranes
- artificial rupture of membranes
- medical induction and/or augmentation of labour
- repetitive vaginal exams
- withholding food and water
- keeping the mother in bed
- intravenous fluids (IV)
- continuous electronic fetal monitoring (cardiotocography)
- insertion of a bladder catheter
- supine or lithotomy (legs-in-stirrups) position
- caregiver-directed pushing
- fundal pressure (Kristeller)
- episiotomy
- forceps and vacuum extraction
- manual exploration of the uterus
- primary and repeat caesarean section
- suctioning of the newborn

- immediate cord clamping
- separation of mother and baby

**Step 7** - Implement measures that enhance wellness and prevent emergencies, illness, and death of MotherBaby:

- Provide education about and foster access to good nutrition, clean water, and a clean and safe environment.
- Provide education in and access to methods of disease prevention, including malaria and HIV/AIDS prevention and treatment, and tetanus toxoid immunization.
- Provide education in responsible sexuality, family planning, and women's reproductive rights, and provide access to family planning options.
- Provide supportive prenatal, intrapartum, postpartum, and newborn care that addresses the physical and emotional health of the MotherBaby within the context of family relationships and community environment.

**Step 8** - Provide access to evidence-based skilled emergency treatment for life-threatening complications. Ensure that all maternal and newborn HCPs have adequate and ongoing training in emergency skills for appropriate and timely treatment of mothers and their newborns.

**Step 9** - Provide a continuum of collaborative maternal and newborn care with all relevant HCPs, institutions and organizations. Including traditional birth attendants and others who attend births out of hospital in this continuum of care. Specifically, individuals within institutions, agencies and organizations offering maternity-related services should:

- Collaborate across disciplinary, cultural, and institutional boundaries to provide the MotherBaby with the best possible care, recognizing each other's particular competencies and respecting each other's points of view.
- Foster continuity of care during labour and birth for the MotherBaby from a small number of caregivers.
- Provide consultations and transfers of care in a timely manner to appropriate institutions and specialists.
- Ensure that the mother is aware of and can access available community services specific to her needs and those of her newborn.

**Step 10** - Strive to achieve the 10 Steps to Successful Breastfeeding as described in the WHO/UNICEF Baby-friendly Hospital Initiative:

1. Have a written breastfeeding policy that is routinely communicated to all health care staff.
2. Train all health care staff in skills necessary to implement the policy.
3. Inform all pregnant women about the benefits and management of breastfeeding.

4. Help mothers initiate breastfeeding within a half-hour of birth. Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour and encourage mothers to recognize when their babies are ready to breastfeed, offering if needed.
5. Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.
6. Give newborn infants no food or drink other than breastmilk, unless medically indicated.
7. Practice “rooming in”-- allow mothers and infants to remain together 24 hours a day.
8. Encourage breastfeeding on demand.
9. Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.
10. Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic

## Appendix B

### International MotherBaby Childbirth Organization: MotherBaby Rights (6)

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1. You and your baby have the right to be treated with respect and dignity.
2. You have the right to be involved in and fully informed about care for yourself and your baby.
3. You have the right to be communicated with in a language and in terminology that you understand.
4. You have the right to informed consent and to informed refusal for any treatment, procedure or other aspect of care for yourself and your baby.
5. You and your baby have the right to receive care that enhances and optimizes the normal processes of pregnancy, birth and postpartum under a model known as the midwifery (or motherbaby) model of care.
6. You and your baby have the right to receive continuous support during labour and birth from those you choose.
7. You have the right to be offered drug-free comfort and pain-relief measures during labour and to have the benefits of these measures and the means of their use explained to you and to your companions.
8. You and your baby have the right to receive care consisting of evidence-based practices proven to be beneficial in supporting the normal physiology of labour, birth and postpartum.
9. You and your baby have the right to receive care that seeks to avoid potentially harmful procedures and practices.
10. You have the right to receive education concerning a healthy environment and disease prevention.
11. You have the right to receive education regarding responsible sexuality, family planning and women's reproductive rights, as well as access to family planning options.
12. You have the right to receive supportive prenatal, intrapartum, postpartum and newborn care that addresses your physical and emotional health within the context of family relationships and your community environment.
13. You and your baby have the right to evidenced-based emergency treatment for life-threatening complications.
14. You and your baby have the right to be cared for by a small number of caregivers who collaborate across disciplinary, cultural and institutional boundaries and who provide consultations and facilitate transfers of care when necessary to appropriate institutions and specialists.

- 15.** You have the right to be made aware of and to be shown how to access available community services for yourself and your baby.
- 16.** You and your baby have the right to be cared for by practitioners with knowledge of and the skills to support breastfeeding.
- 17.** You have the right to be educated concerning the benefits and the management of breastfeeding and to be shown how to breastfeed and how to maintain lactation, even if you and your baby must be separated for medical reasons.
- 18.** You and your baby have the right to initiate breastfeeding within the first 30 minutes after birth, to remain together skin-to-skin for at least the first hour, to stay together 24 hours a day and to breastfeed on demand.
- 19.** Your baby has the right to be given no artificial teats or pacifiers and to receive no food or drink other than breast milk, unless medically indicated.
- 20.** You have the right to be referred to a breastfeeding support group, if available, upon discharge from the birthing facility.

## Appendix C

### Hormonal Physiology of Childbearing Recommendations (2)

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The following recommendations for education, policy, practice, and research arise from the synthesis presented here. Care practice recommendations below are intended to apply whenever safely possible.

To optimize hormonal physiology in childbearing:

1. Educate all maternity care providers in the hormonal physiology of childbearing.
2. Use effective policies and quality improvement strategies to foster consistent access to physiologic childbearing.
3. Strengthen and increase access to care models that foster physiologic childbearing and safely limit use of maternity care interventions.
4. Use effective consumer engagement strategies to inform women about physiologic childbearing and involve them in related aspects of their care.
5. Provide prenatal care that reduces stress and anxiety in pregnant women.
6. Foster the physiologic onset of labour at term.
7. With hospital birth, encourage admission in active labour.
8. Foster privacy and reduce anxiety and stress in labour.
9. Make nonpharmacologic comfort measures for pain relief routinely available, and use analgesic medications sparingly.
10. Make nonpharmacologic methods of fostering labour progress routinely available, and use pharmacologic methods sparingly.
11. Promote continuous support during labour.
12. Foster spontaneous vaginal birth and avoid unneeded cesareans.
13. Support early and unrestricted skin-to-skin contact after birth between mother and newborn.
14. Support early, frequent, and ongoing breastfeeding after birth.
15. Identify and carry out priority research into hormonal physiology of childbearing, and routinely incorporate this perspective in maternity care research.