Champlain Maternal Newborn Regional Program
Programme régional des soins à la mère et au nouveau-né de Champlain

Introduction Package
Induction of Labour Toolkit

Prepared by:

Catherine Gascon & Lauren Rivard, Perinatal Consultants, CMNRP

on behalf of the

CMNRP Induction of Labour Workgroup

August 2021

Disclaimer

Please note that the terms “mothers” and “women” used in this report are meant to refer to all expectant and birth parents regardless of gender or gender identity. It is important that we practice relationally and respectfully with all people, from all backgrounds, genders, and identities so they are not discriminated against, and/or inadvertently harmed by language used by healthcare providers.

The content of this document was based on extensive literature reviews and stakeholder/expert opinion. It does not define a standard of care, nor is it intended to dictate exclusive courses of practice. Rather, it presents general, recognized evidence-based recommendations that are intended to provide a foundation and direction for practice. Variations and innovations that demonstrably improve the quality of patient care are encouraged rather than restricted. Information in this document is subject to change without notice.

Although significant effort has been made to ensure the accuracy of the information presented in this report, neither the authors, CMNRP, nor any other parties make any representation or warranties as to the accuracy, reliability or completeness of the information contained herein.

How to use the Induction of Labour (IOL) Toolkit

The IOL toolkit contains several documents intended for health care providers (HCP) and patients (listed below). These documents can be found on the CMNRP website (www.cmnrp.ca) or by using the links provided in this report. The intention of a regional IOL Toolkit is to standardize the care provided to pregnant patient across the region as it pertains to cervical ripening and induction of labour. We recognize that processes and care may be slightly different in centres across the region, but would urge your organization to consider the rigorous processes used to develop these tools. The workgroup members all agreed that the intention of this toolkit was to help standardize evidence based care, as such many common but non-evidence based indication for IOL have been intentionally excluded.

These tools are designed to complement the work of the Provincial Council for Maternal and Child Health's (PCMCH) Safe Administration of Oxytocin initiative. The PCMCH toolkit can be found at https://www.pcmch.on.ca/health-care-providers/maternity-care/pcmch-strategies-and-initiatives/safe-administration-of-oxytocin/ and should be reviewed (and implemented) as your organization moves forward in implementing changes in the care being recommended through this toolkit. Additional support for implementation of the PCMCH Safe Administration of Oxytocin will be a priority for CMNRP, if you have any questions or concerns please contact cmnrpinfo@cmnrp.ca.

Some contents of the toolkit require organizations to explicitly name their unit and list a contact number that their patients can call for questions or ongoing telephone assessments. These tools will be sent electronically to each CMNRP partner organization. Organization requiring word file format documents to support formatting based on internal forms committees can send their request to cmnrpinfo@cmnrp.ca.

Toolkit Contents

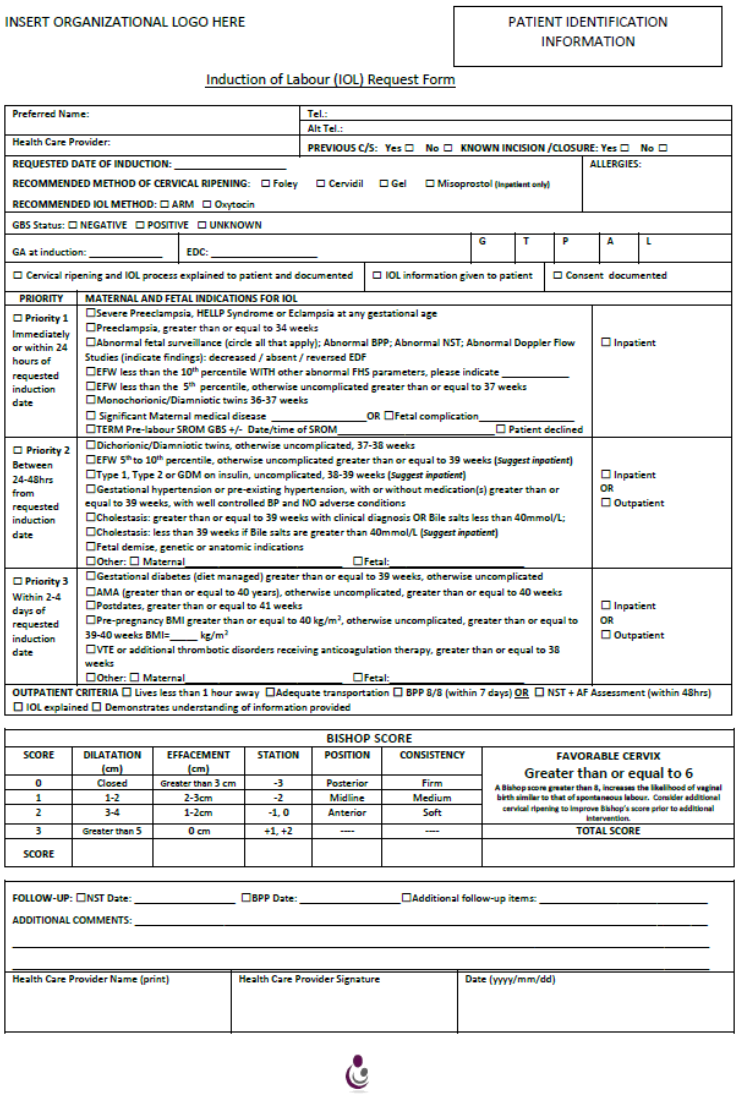
1. Induction of Labour Request Form

- **What is it?**
  This form was revised from the previous regional IOL Request Form. It has been enhanced to prompt the HCP to consider the clinical indication for IOL as well as the priority status given the indication.

- **Who can use this?**
  Obstetricians, family physicians, registered midwives, nurse practitioners and residents.

- **How to use?**
  This form is meant to be filled out in clinic at the time a decision and discussion including consent for IOL occurs. Depending on how your centre utilizes your IOL request form, this tool may be used in a paper format or added in your electronic medical record (EMR) system.

Click on image to download



INSERT ORGANIZATIONAL LOGO HERE

PATIENT IDENTIFICATION INFORMATION

Induction of Labour (IOL) Request Form

Preferred Name:	Tel.: Alt Tel.:
Health Care Provider:	PREVIOUS C/S: Yes ☐ No ☐ KNOWN INCISION /CLOSURE: Yes ☐ No ☐
REQUESTED DATE OF INDUCTION: _____ RECOMMENDED METHOD OF CERVICAL RIPENING: ☐ Foley ☐ Cervidil ☐ Gel ☐ Misoprostol (Inpatient only) RECOMMENDED IOL METHOD: ☐ ARM ☐ Oxytocin	ALLERGIES:
GBS Status: ☐ NEGATIVE ☐ POSITIVE ☐ UNKNOWN	
GA at induction: _____ EDC: _____ G T P A L	
☐ Cervical ripening and IOL process explained to patient and documented	☐ IOL information given to patient ☐ Consent documented

PRIORITY	MATERNAL AND FETAL INDICATIONS FOR IOL	
☐ Priority 1 Immediately or within 24 hours of requested induction date	☐Severe Preeclampsia, HELLP Syndrome or Eclampsia at any gestational age ☐Preeclampsia, greater than or equal to 34 weeks ☐Abnormal fetal surveillance (circle all that apply); Abnormal BPP; Abnormal NST; Abnormal Doppler Flow Studies (indicate findings): decreased / absent / reversed EDF ☐EFW less than the 10th percentile WITH other abnormal FHS parameters, please indicate _____ ☐EFW less than the 5th percentile, otherwise uncomplicated greater than or equal to 37 weeks ☐Monochorionic/Diamniotic twins 36-37 weeks ☐ Significant Maternal medical disease _____OR ☐Fetal complication_____ ☐TERM Pre-labour SROM GBS +/- Date/time of SROM_____ ☐ Patient declined	☐ Inpatient
☐ Priority 2 Between 24-48hrs from requested induction date	☐Dichorionic/Diamniotic twins, otherwise uncomplicated, 37-38 weeks ☐EFW 5th to 10th percentile, otherwise uncomplicated greater than or equal to 39 weeks (*Suggest inpatient*) ☐Type 1, Type 2 or GDM on insulin, uncomplicated, 38-39 weeks (*Suggest inpatient*) ☐Gestational hypertension or pre-existing hypertension, with or without medication(s) greater than or equal to 39 weeks, with well controlled BP and NO adverse conditions ☐Cholestasis: greater than or equal to 39 weeks with clinical diagnosis OR Bile salts less than 40mmol/L; ☐Cholestasis: less than 39 weeks if Bile salts are greater than 40mmol/L (*Suggest inpatient*) ☐Fetal demise, genetic or anatomic indications ☐Other: ☐ Maternal_____ ☐Fetal:_____	☐ Inpatient OR ☐ Outpatient
☐ Priority 3 Within 2-4 days of requested induction date	☐Gestational diabetes (diet managed) greater than or equal to 39 weeks, otherwise uncomplicated ☐AMA (greater than or equal to 40 years), otherwise uncomplicated, greater than or equal to 40 weeks ☐Postdates, greater than or equal to 41 weeks ☐Pre-pregnancy BMI greater than or equal to 40 kg/m², otherwise uncomplicated, greater than or equal to 39-40 weeks BMI=____ kg/m² ☐VTE or additional thrombotic disorders receiving anticoagulation therapy, greater than or equal to 38 weeks ☐Other: ☐ Maternal_____ ☐Fetal:_____	☐ Inpatient OR ☐ Outpatient
OUTPATIENT CRITERIA ☐ Lives less than 1 hour away ☐Adequate transportation ☐ BPP 8/8 (within 7 days) OR ☐ NST + AF Assessment (within 48hrs) ☐ IOL explained ☐ Demonstrates understanding of information provided		

BISHOP SCORE

SCORE	DILATATION (cm)	EFFACEMENT (cm)	STATION	POSITION	CONSISTENCY	FAVORABLE CERVIX
0	Closed	Greater than 3 cm	-3	Posterior	Firm	Greater than or equal to 6
1	1-2	2-3cm	-2	Midline	Medium	A Bishop score greater than 8, increases the likelihood of vaginal birth similar to that of spontaneous labour. Consider additional cervical ripening to improve Bishop's score prior to additional intervention.
2	3-4	1-2cm	-1, 0	Anterior	Soft	
3	Greater than 5	0 cm	+1, +2	----	----	TOTAL SCORE
SCORE						

FOLLOW-UP: ☐NST Date: _____ ☐BPP Date: _____ ☐Additional follow-up items: _____

ADDITIONAL COMMENTS: _____

Health Care Provider Name (print)	Health Care Provider Signature	Date (yyyy/mm/dd)

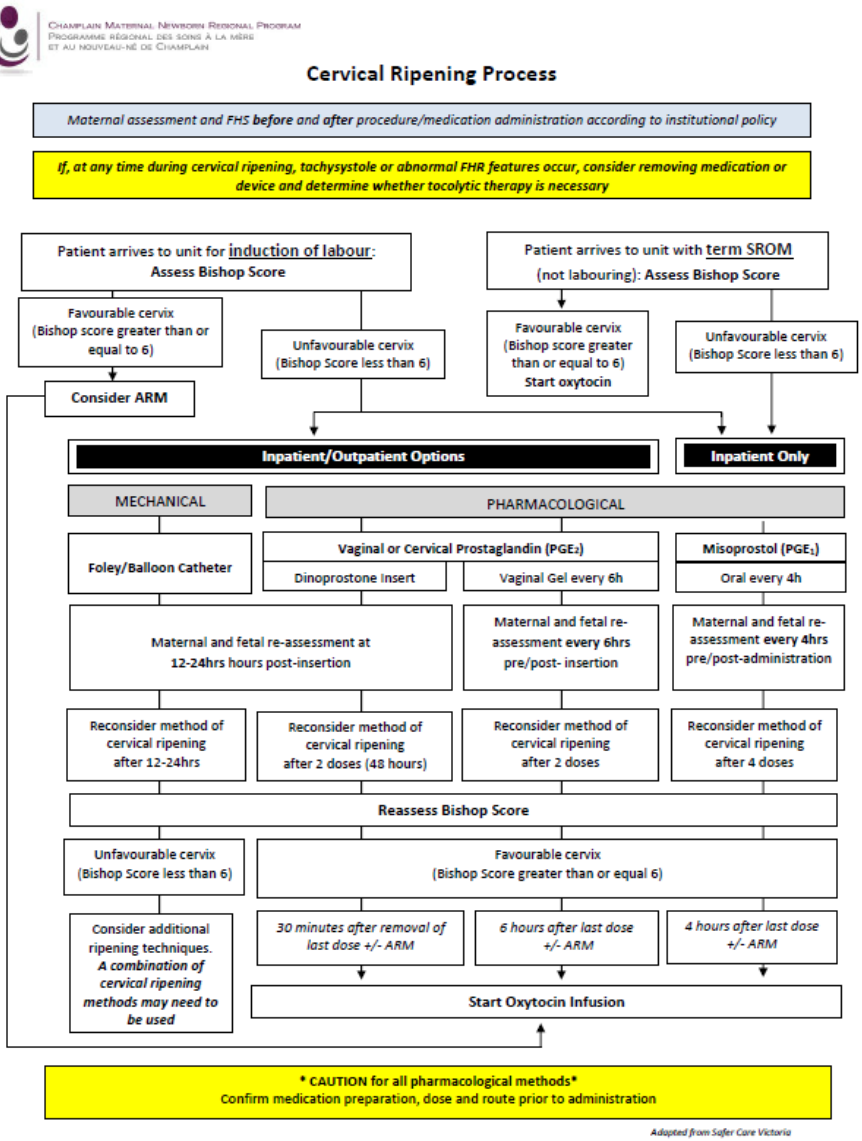
2. Cervical Ripening Options Flowchart

- **What is it?**
  This tool was designed to assist the primary obstetrical HCP decide which method of cervical ripening is optimal for the patient. It outlines the current methods of cervical ripening used across the region, highlights the options for cervical ripening with rupture of membranes, and highlights when inpatient IOL should be done rather than outpatient.

- **Who can use this?**
  Obstetricians, family physicians, registered midwifes, registered nurses, nurse practitioners, residents, medical students and nursing students.

- **How to use it?**
  This tool is formatted to be enlarged, printed and laminated and posted in a clinical decision making area.

Click on image to download



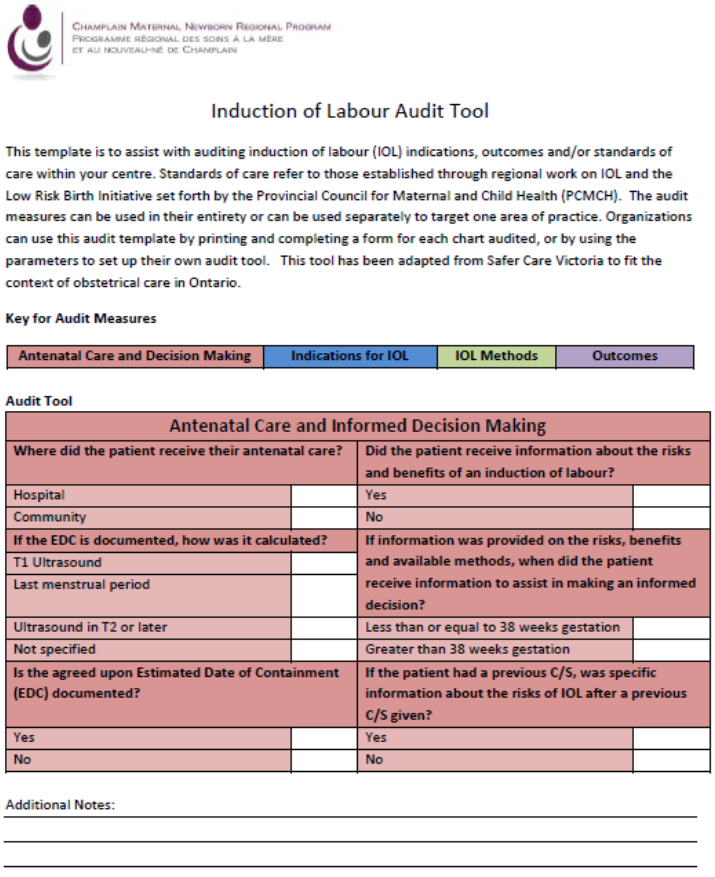
3. Induction of Labour Audit Tool

- **What is it?**
  The IOL audit tool was created to assist with auditing IOL practices including documented indications for IOL and outcomes and/or standards of care within each centre. This tool has been adapted from Safer Care Victoria to fit the context of obstetrical care in Ontario. The key audit measures include: Antenatal Care and Decision Making, Indications for IOL, IOL Methods and Outcomes.

- **Who can use this?**
  Nurse educators, managers or any HCP wanting to audit IOL practices.

- **How to use it?**
  Organizations can print and complete a form for each patient, or use the parameters to set up their own audit tool. Standards of care refer to those set out in the Low Risk Birth Initiative set forth by the PCMCH and can be used separately or in combination. Each section of the audit tool is color coded to facilitate specific audit measurements.

Click on image to download



Champlain Maternal Newborn Regional Program
Programme régional des soins à la mère et au nouveau-né de Champlain

Induction of Labour Audit Tool

This template is to assist with auditing induction of labour (IOL) indications, outcomes and/or standards of care within your centre. Standards of care refer to those established through regional work on IOL and the Low Risk Birth Initiative set forth by the Provincial Council for Maternal and Child Health (PCMCH). The audit measures can be used in their entirety or can be used separately to target one area of practice. Organizations can use this audit template by printing and completing a form for each chart audited, or by using the parameters to set up their own audit tool. This tool has been adapted from Safer Care Victoria to fit the context of obstetrical care in Ontario.

Key for Audit Measures

Antenatal Care and Decision Making	Indications for IOL	IOL Methods	Outcomes

Audit Tool

Antenatal Care and Informed Decision Making			
Where did the patient receive their antenatal care?		**Did the patient receive information about the risks and benefits of an induction of labour?**	
Hospital		Yes	
Community		No	
If the EDC is documented, how was it calculated?		**If information was provided on the risks, benefits and available methods, when did the patient receive information to assist in making an informed decision?**	
T1 Ultrasound			
Last menstrual period			
Ultrasound in T2 or later		Less than or equal to 38 weeks gestation	
Not specified		Greater than 38 weeks gestation	
Is the agreed upon Estimated Date of Containment (EDC) documented?		**If the patient had a previous C/S, was specific information about the risks of IOL after a previous C/S given?**	
Yes		Yes	
No		No	

Additional Notes: _____

4. Patient Education Tool - Induction of Labour (multimodality tool)

- **What is it?**
  This patient education tool was created to help patients understand the concept of cervical ripening and IOL. This tool highlights indications for IOL, methods of IOL, and answers many of the frequently asked questions patients have about IOL. It also includes information on the process of IOL, the length of time cervical ripening may take, and information about the acuity of labour and birth units, to help patients to better prepare for the busyness of some of the units across the region.
  This tool is available in both French and English and can be used in different formats:
  - Electronic patient education tool (which includes a poster with a QR code to post in waiting rooms or clinic areas),
  - Printable patient education tool,
  - PowerPoint presentation.

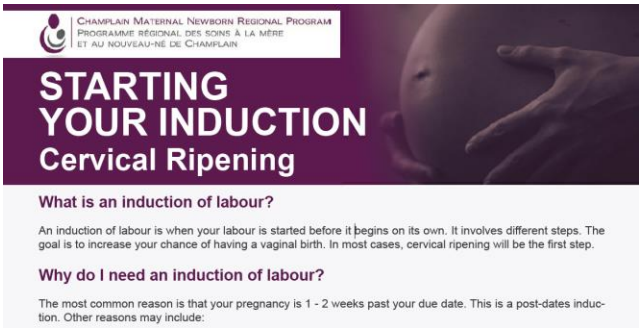
- **Who can use this?**
  Obstetricians, family physicians, registered midwifes, registered nurses, registered practical nurses, nurse practitioners, residents, medical students and nursing students.

- **How to use?**
  This is tool is meant to be given to patients in the antenatal period. Clinics and organizations may laminate the abbreviated poster with the QR code and display it in their assessment and waiting rooms. Patients can scan the QR code with their mobile and be directed to the electronic version of the 2 page patient education tool. For patients who do not have access to mobile devices, the HCP can print a copy of the handout available at www.cmnrp.ca.

  This patient education tool is available only on the CMNRP website, as this allows for CMNRP to maintain the tools contents and accuracy. The patient education tool is date stamped and will be updated as needed.

  The PowerPoint presentation can be looped on an electronic screen/television in your clinic/organizations waiting area. The presentation includes high level, basic information on IOL, similar to the content in the electronic patient education tool; it also includes the QR code for more information.

Click image to download English and French versions



5. Patient Information Sheet – Outpatient Cervical Ripening

- **What is it?**
  This tool was design to give out to patients once the decision to have an outpatient cervical ripening (prior to commencing induction with oxytocin) has been made with their HCP. It gives information on what to expect and explains in detail the process of outpatient cervical ripening. This tool is available in French and English.

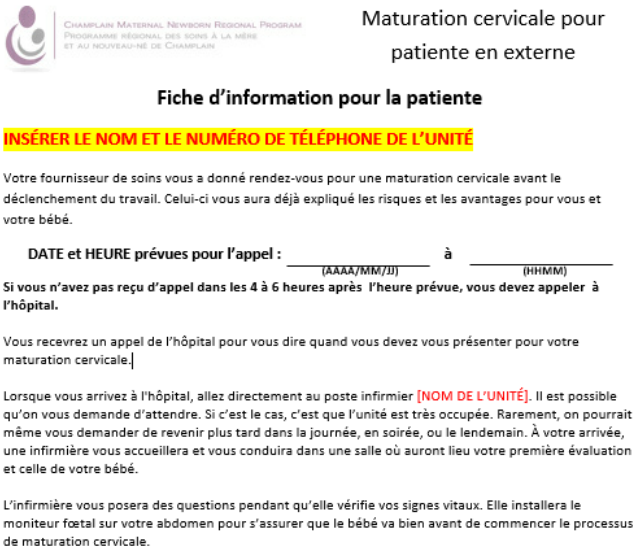
  Specific information contained on the sheet includes:

  - Various methods of cervical ripening;
  - The possibility of needing a repeat dose or a combination of different methods to ripen the cervix;
  - Specific times the patient is expected to call the unit throughout the cervical ripening process;
  - Indications for the patient to return to the unit; and
  - Cautions for instructions at home.

- **Who can use this?**
  Obstetricians, family physicians, registered midwifes, registered nurses, nurse practitioners, residents, medical students and nursing students.

- **How to use it?**
  The HCP should give this tool to patients if an outpatient cervical ripening has been scheduled. The HCP and patient should discuss the contents of this sheet and the patient should then be instructed to review this information further, and write out any additional questions they have which the labour and birth staff can answer. This tool is designed for each organization to include their unit name and telephone number. Copies of this tools should be found in the HCP offices, clinics, and the triage of labour & delivery hospitals units. In some cases, this tool may be given in triage if the IOL was not planned in advance.

Click on image to download English and French versions



Champlain Maternal Newborn Regional Program
Programme régional des soins à la mère et au nouveau-né de Champlain

Maturation cervicale pour patiente en externe

Fiche d'information pour la patiente

INSÉRER LE NOM ET LE NUMÉRO DE TÉLÉPHONE DE L'UNITÉ

Votre fournisseur de soins vous a donné rendez-vous pour une maturation cervicale avant le déclenchement du travail. Celui-ci vous aura déjà expliqué les risques et les avantages pour vous et votre bébé.

DATE et HEURE prévues pour l'appel : _____ (AAAA/MM/JJ) **à** _____ (HHMM)

Si vous n'avez pas reçu d'appel dans les 4 à 6 heures après l'heure prévue, vous devez appeler à l'hôpital.

Vous recevrez un appel de l'hôpital pour vous dire quand vous devez vous présenter pour votre maturation cervicale.

Lorsque vous arrivez à l'hôpital, allez directement au poste infirmier [NOM DE L'UNITÉ]. Il est possible qu'on vous demande d'attendre. Si c'est le cas, c'est que l'unité est très occupée. Rarement, on pourrait même vous demander de revenir plus tard dans la journée, en soirée, ou le lendemain. À votre arrivée, une infirmière vous accueillera et vous conduira dans une salle où auront lieu votre première évaluation et celle de votre bébé.

L'infirmière vous posera des questions pendant qu'elle vérifie vos signes vitaux. Elle installera le moniteur fœtal sur votre abdomen pour s'assurer que le bébé va bien avant de commencer le processus de maturation cervicale.

6. Telephone Assessment for Outpatient Cervical Ripening for Health Care Providers

- **What is it?**
  This tool is used to conduct a telephone assessment of uterine activity, fetal movement and general maternal well-being for patients at home undergoing cervical ripening. To optimize the patient experience, this tool coincides with the Outpatient Cervical Ripening Patient Information Sheet; it allows for the opportunity for the patient to call at the scheduled time or in advance if going to sleep.

- **Who can use this?**
  Obstetricians, family physicians, registered midwifes, registered nurses, nurse practitioners and residents.

- **How to use this?**
  Designed to be used approximately every 6 hours following the initial method of cervical ripening, this tool will guide the clinician in identifying potential tachysystole or a decrease in fetal movement among other things, prompting them to instruct the patient to return to the facility for additional surveillance and/or admission for subsequent cervical ripening or IOL. This is meant as a documentation tool, and can be a paper version or integrated into your facilities EMR system.

Click on image to download

Outpatient Cervical Ripening: Telephone Call-back Form

PATIENT IDENTIFICATION INFORMATION

Foley

ASSESSMENT	(Y/N)	Comment
Have you had regular contractions for more than 1 hour?		
Have you had more than 5 contractions within 10 minutes?		
Have you had any contractions that have lasted 90 sec. or longer?		
If you are contracting, how painful are your contractions on a scale of 0-10 (VAS: 0-10)?		
Can you talk through your contractions? Do you need to breathe through them?		
Have you had any vaginal bleeding?		
Is your baby moving as much as usual?		
Is the Foley still in place?		
Do you have any other concerns or questions about what to do?		
ACTION TAKEN	(Y/N)	
Told to return to hospital		
Clarification, reassurance provided and reviewed comfort measures		
Informed of time to call back for next telephone/triage assessment		
Follow-up plan of care / Comments:		

PRINTED NAME	DESIGNATION	SIGNATURE	DATE (YYYY/MM/DD)	TIME (HHMM)

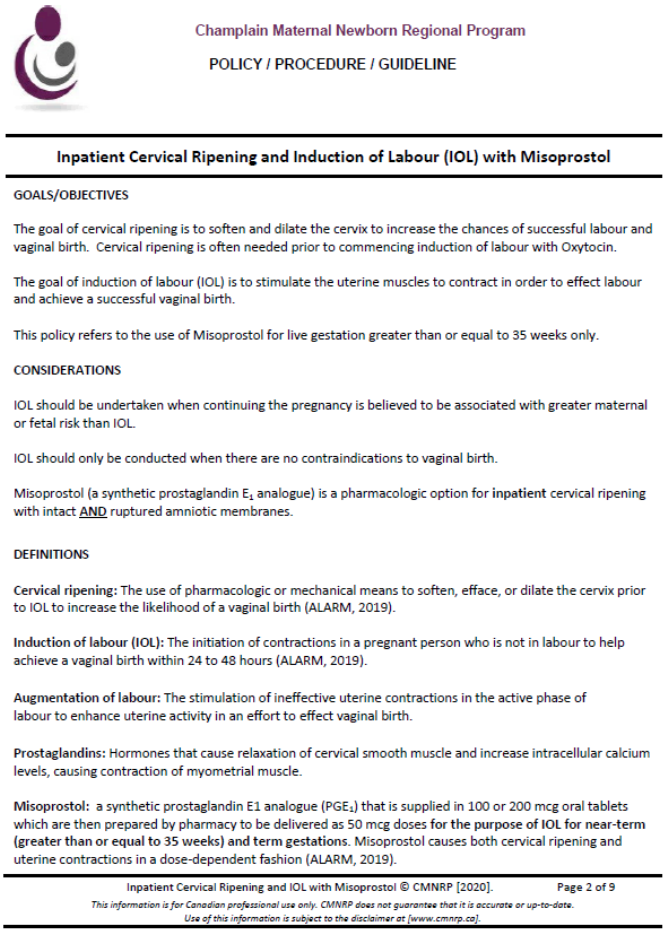
7. Misoprostol for Cervical Ripening and Induction of Labour – Policy & Procedure

- **What is it?**
  This policy and procedure is for the use of *INPATIENT* cervical ripening and IOL with Misoprostol in live gestations greater than or equal to 35 weeks. The policy includes definitions, indications, exclusion criteria, side effects, equipment needed, procedure for administration, management and documentation. Misoprostol for IOL has been implemented in several regional hospitals for those patients who present with rupture of membranes, no or minimal uterine activity and an unfavorable cervix.

- **Who can use this?**
  Obstetricians, family physicians, registered midwives, registered nurses, nurse practitioners, residents, medical students and nursing students.

- **How to use this?**
  Organizations can use this policy and procedure to guide care for INPATIENT cervical ripening and IOL with misoprostol.

Click on image to download



Champlain Maternal Newborn Regional Program

POLICY / PROCEDURE / GUIDELINE

Inpatient Cervical Ripening and Induction of Labour (IOL) with Misoprostol

GOALS/OBJECTIVES

The goal of cervical ripening is to soften and dilate the cervix to increase the chances of successful labour and vaginal birth. Cervical ripening is often needed prior to commencing induction of labour with Oxytocin.

The goal of induction of labour (IOL) is to stimulate the uterine muscles to contract in order to effect labour and achieve a successful vaginal birth.

This policy refers to the use of Misoprostol for live gestation greater than or equal to 35 weeks only.

CONSIDERATIONS

IOL should be undertaken when continuing the pregnancy is believed to be associated with greater maternal or fetal risk than IOL.

IOL should only be conducted when there are no contraindications to vaginal birth.

Misoprostol (a synthetic prostaglandin E_1 analogue) is a pharmacologic option for **inpatient** cervical ripening with intact **AND** ruptured amniotic membranes.

DEFINITIONS

Cervical ripening: The use of pharmacologic or mechanical means to soften, efface, or dilate the cervix prior to IOL to increase the likelihood of a vaginal birth (ALARM, 2019).

Induction of labour (IOL): The initiation of contractions in a pregnant person who is not in labour to help achieve a vaginal birth within 24 to 48 hours (ALARM, 2019).

Augmentation of labour: The stimulation of ineffective uterine contractions in the active phase of labour to enhance uterine activity in an effort to effect vaginal birth.

Prostaglandins: Hormones that cause relaxation of cervical smooth muscle and increase intracellular calcium levels, causing contraction of myometrial muscle.

Misoprostol: a synthetic prostaglandin E1 analogue (PGE_1) that is supplied in 100 or 200 mcg oral tablets which are then prepared by pharmacy to be delivered as 50 mcg doses **for the purpose of IOL for near-term (greater than or equal to 35 weeks) and term gestations**. Misoprostol causes both cervical ripening and uterine contractions in a dose-dependent fashion (ALARM, 2019).

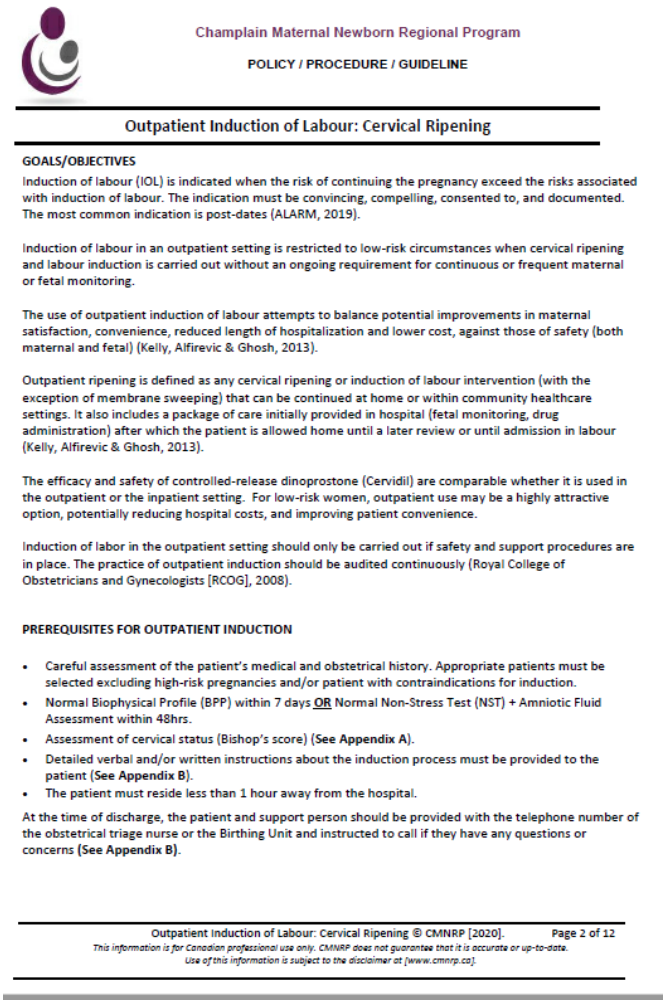
8. Outpatient Cervical Ripening – Policy & Procedure

- **What is it?**
  The outpatient cervical ripening policy is largely an update/revision to policies from across the region. The policy supports the implementation or continuation of the practice of outpatient IOL for those patients who can safely undergo cervical ripening in their own home/preferred environment. It includes goals, prerequisites, different options for cervical ripening, considerations, equipment needed, procedure for administration and management and documentation.

- **Who can use this?**
  Obstetricians, family physicians, registered midwifes, registered nurses, nurse practitioners, residents, medical students and nursing students.

- **How to use this?**
  Organizations can use this policy and procedure to guide care for outpatient cervical ripening.

Click on image to download



Champlain Maternal Newborn Regional Program

POLICY / PROCEDURE / GUIDELINE

Outpatient Induction of Labour: Cervical Ripening

GOALS/OBJECTIVES

Induction of labour (IOL) is indicated when the risk of continuing the pregnancy exceed the risks associated with induction of labour. The indication must be convincing, compelling, consented to, and documented. The most common indication is post-dates (ALARM, 2019).

Induction of labour in an outpatient setting is restricted to low-risk circumstances when cervical ripening and labour induction is carried out without an ongoing requirement for continuous or frequent maternal or fetal monitoring.

The use of outpatient induction of labour attempts to balance potential improvements in maternal satisfaction, convenience, reduced length of hospitalization and lower cost, against those of safety (both maternal and fetal) (Kelly, Alfirevic & Ghosh, 2013).

Outpatient ripening is defined as any cervical ripening or induction of labour intervention (with the exception of membrane sweeping) that can be continued at home or within community healthcare settings. It also includes a package of care initially provided in hospital (fetal monitoring, drug administration) after which the patient is allowed home until a later review or until admission in labour (Kelly, Alfirevic & Ghosh, 2013).

The efficacy and safety of controlled-release dinoprostone (Cervidil) are comparable whether it is used in the outpatient or the inpatient setting. For low-risk women, outpatient use may be a highly attractive option, potentially reducing hospital costs, and improving patient convenience.

Induction of labor in the outpatient setting should only be carried out if safety and support procedures are in place. The practice of outpatient induction should be audited continuously (Royal College of Obstetricians and Gynecologists [RCOG], 2008).

PREREQUISITES FOR OUTPATIENT INDUCTION

- Careful assessment of the patient's medical and obstetrical history. Appropriate patients must be selected excluding high-risk pregnancies and/or patient with contraindications for induction.
- Normal Biophysical Profile (BPP) within 7 days **OR** Normal Non-Stress Test (NST) + Amniotic Fluid Assessment within 48hrs.
- Assessment of cervical status (Bishop's score) **(See Appendix A)**.
- Detailed verbal and/or written instructions about the induction process must be provided to the patient **(See Appendix B)**.
- The patient must reside less than 1 hour away from the hospital.

At the time of discharge, the patient and support person should be provided with the telephone number of the obstetrical triage nurse or the Birthing Unit and instructed to call if they have any questions or concerns **(See Appendix B)**.

Outpatient Induction of Labour: Cervical Ripening © CMNRP [2020]. Page 2 of 12

This information is for Canadian professional use only. CMNRP does not guarantee that it is accurate or up-to-date. Use of this information is subject to the disclaimer at [www.cmnrp.ca].

For further information please contact cmnrpinfo@cmnrp.ca.