Ontario

A User Guide to the Ontario Perinatal Record

Prepared by the Provincial Council for Maternal and Child Health (PCMCH) and
The Better Outcomes Registry & Network (BORN) Ontario
Perinatal Record Working Group

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Contents

Introduction

Background

A standard form to guide and document pregnancy care in Ontario has been in place since 1979. This 2017 version is the 5th revision (1987, 1993, 2000 and 2005). Until 2005, the Ontario Medical Association (OMA) was primarily responsible for content and format. The 2017 update is a partnership between the Provincial Council for Maternal Child Health (PCMCH), The Better Outcomes Registry & Network (BORN) Ontario, the OMA and the Association of Ontario Midwives (AOM).

For the majority of pregnant people, pregnancy and birth is a normal physiological process. Nevertheless, it is a life-changing event for pregnant people and families, and the physical and psychosocial care provided during this period can have long-lasting effects. The 2017 version acts as a care map (pathway) for pregnancy, birth and the very early newborn period and should help support evidence-informed care and shared decision making. Clearly, care will differ depending on each pregnant person's unique history and circumstances, but the basics of care applicable to most pregnant people are included.

Method

A committee was formed by PCMCH and BORN Ontario inclusive of all practitioners using the current antenatal record to support clinical care in pregnancy (obstetricians, midwives, family physicians, nurses, nurse practitioners) as well as other stakeholders supporting high quality maternity care (Best Start Resource Centre, Public Health, BORN, PCMCH). We conducted a stakeholder survey of all maternity care practitioner groups as well as specialists in genetics, mental health, pediatrics, etc. to solicit their priorities for changes in content and functionality in the new record. We completed an environmental scan of other provincial antenatal records and looked to other countries for examples of similar forms. We reviewed each section of the form, reviewed the literature and clinical practice guidelines and consulted experts in the field to determine if care practices required change. We developed decision-making criteria to guide our work in determining whether a change/addition/deletion was required.

We went outside the committee for broad feedback three times during the process. The initial survey elicited over 350 responses which were all discussed. A "close to final" draft was distributed widely for feedback and over 150 individual and group responses were incorporated. The final draft was tested by committee members and reviewed by the whole committee. Changes based on the feedback were incorporated at each stage.

Major changes since 2005

The first change is the name. The form is now called the ***Ontario Perinatal Record*** (OPR) as we have added a formal postnatal care tool. The second major change is that the form is one page longer. The primary reason for this was care provider request – adding anything else to an already lengthy form with small font was not feasible. With changes to prenatal screening, the addition of mental health screening, and more discussion topics, a 2-page record was not possible.

Terminology, both medical and social, has also changed since 2005. In our choice of language, we have tried to be respectful of gender identity and the multiple ways in which individuals may identify themselves as a parent. While the vast majority of people experiencing pregnancy identify as pregnant people, some do not. Thus, we have used the terms "pregnant person" to ensure that the form and the guide are inclusive. Similarly, genetic risk is documented in terms of the gametes rather that "father" and "mother".

Use of the Form

The Ontario Perinatal Record was created to standardize the *documentation* of perinatal care, not to be the standard of clinical care. Care providers need to follow national and local guidelines and individualize care to each situation. Clinical care recommendations change rapidly (particularly in the domain of genetic screening) and thus, guidelines will change before the OPR can be updated. We hope that the form will standardize documentation and capture all of the elements required for high quality care.

The paper version of the Ontario Perinatal Record is not being issued in triplicate. The copies were often illegible, particularly when faxed to the hospital. Additionally, a large percentage of Ontario maternity care providers are using an electronic version of the record. We suggest that copies of Ontario Perinatal Record 1 and 2 are sent to the birthing unit of the hospital where the pregnant person intends to give birth once the estimated date of birth is confirmed and the initial laboratory and ultrasound investigations are complete. This should occur by about 22 weeks' gestation. This ensures the record of essential information including position of the placenta is immediately available should there be early complications of pregnancy. A copy of the form can also be given to the pregnant person to carry with them.

The fully completed OPR2 as well as the OPR3 is to be forwarded to the Birthing Unit by about thirty-six weeks when the bulk of the antenatal visits and laboratory investigations have been completed (including GBS status). A copy of these records can also be carried by the pregnant person, if desired.

Future plans for the OPR

Given the ever changing nature of medicine and perinatal care, it is important that the OPR reflect current practice. The form will be housed at the Provincial Council for Maternal and Child Health and be

reviewed at least every 3 to 5 years with input from all of the major stakeholder organizations. An electronic version of the form is also being created to assist care providers who work within an EMR environment. The ultimate goal is to be able to transmit data from the OPR to BORN Ontario to populate the maternal child registry data.

Acknowledgements

The committee members and subject matter experts consulted for the 2017 version of the OPR are listed below. To say that this group was dedicated to the cause would be a vast understatement. People worked tirelessly to accomplish the goal. We would also like to acknowledge Perinatal Services British Columbia who generously shared and their prenatal care pathway and process.

Ontario Perinatal Record Work Group Members

Name	Role	Organization
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Dr. Bill Mundle MD, FRCSC	Obstetrician/MFM Windsor Regional Hospital
Ms. Claudia Steffler RN, NP	Nurse Practitioner/Clinical Director, Maternity Care Centre – Hamilton Assistant Clinical Professor, Department of Family Medicine, McMaster University
Ms. Julie Toole RM, MHSc	Midwife/ Quality and Risk Specialist Risk Management Specialist, Association of Ontario Midwives

Ms. Doreen Day MHSc	Senior Program Manager, PCMCH
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We would like to formally recognize the contribution of Dr. Stan Lofsky, a family physician from Toronto, to the ongoing development of the Ontario Perinatal Record. Having been formally involved since the 1992 revision, Stan brought his dedication to maternity care and a historical perspective to the committee which was missed when he had to withdraw from the project.

Subject Matter Experts Consulted

Name	Title / Role / Organization
Dr. Cindy Lee Dennis RN, PhD	***Women's Mental Health*** Professor in Nursing and Medicine, University of Toronto, Department of Psychiatry Canada Research Chair in Perinatal Community Health Women's Health Research Chair, Li Ka Shing Knowledge Institute, St. Michael's Hospital
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Dr. Nan Okun MD, FRCSC, MHSc	***MFM & Prenatal Screening*** Staff, Maternal-Fetal Medicine Division, Mount Sinai Hospital Division Head, Maternal Fetal Medicine, University of Toronto Professor, University of Toronto, Department of Obstetrics & Gynecology
Dr. Anne McLeod MD, FRCPC	***Medicine/Haematology*** Staff Cardiologist, Sunnybrook Hospital, Department of Hematology and Medical Oncology Assistant Professor, University of Toronto
Dr. Mark Yudin MD, MSc, FRCSC	***Obstetrics, Gynecology and Reproductive Infectious Diseases*** Staff, St. Michael's Hospital, Department of Obstetrics and Gynecology Associate Professor, University of Toronto
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Dr. Lisa Graves MD, CCFP, FCFP	***Family Medicine/Substance Abuse*** Associate Professor, University of Toronto, Department of Family and Community Medicine Associate Professor, Northern Ontario School of Medicine
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Use of the Guide

This companion document to the OPR is meant to be a guide for using the form and **NOT** an exhaustive treatise on perinatal care. Where the record has changed significantly, we have tried to include clinical details and resources. However, practitioners are advised to follow the most recent clinical guidelines in a field which changes constantly.

If using this updated OPR for the first time, it is useful to read the guide and learn about the new content and resources. If you have learners in your prenatal care setting, the guide will provide the step-by-step approach to completing the form. Resources for many parts of the guide are included at the back.

While this guide supports the paper version of the form, many of the same instructions/definitions/resources will be available as the EMR version of the form is developed.

Ontario Perinatal Record 1

Demographics

Item	Description
Last Name	Last name as it appears on the health card.
First Name	Given (first) name as it appears on the health card. Other names (preferred name, nickname, etc.) can be in "quotations".
Address – street number, street name	
Apt/Suite/Unit	
Buzzer No	This information facilitates home visits.
City/ Town	
Province	
Postal Code	
Contact – Preferred	Preferred method of contact and information. Indicate if it is a work, home or cell phone number (specify if it is appropriate to text information) or email address.
Leave Message Y/N	This relates to the preferred contact. Explicitly ask if it is appropriate to leave a message when contacting.
Contact – Alternate / E-mail	An alternative work, home or cell phone number (specify if it is appropriate to text information) or email address. Informed consent to communicate by text or email should be obtained and recorded in the chart.
Date of Birth	Pregnant person's date of birth in format of YYYY/MM/DD
Age at EDB	Pregnant person's age at estimated date of birth.
Language	Language most readily understood. Important when English is the second language or is not spoken or understood.
Interpreter Required Y/N	Indicate whether or not assistance from an interpreter is required.
Occupation	Document type of work and discuss any workplace hazards/risks that might affect pregnancy
Education Level	Document level of education completed. Consider this when providing both written (handouts) and oral information. • No certificate, diploma or degree • High school certificate or equivalent • Apprenticeship or trades certificate or diploma • College, CEGEP or other non-university certificate or diploma • University certificate or diploma below the bachelor level • University certificate, diploma or degree at bachelor's level or above
Relationship Status	Current relationship status to provide information on supports or safety issues: • Single, Never legally married • Legally married (and not separated) • Separated, but still legally married

	• Common-law • Divorced • Widowed
Sexual Orientation	Sexual orientation and gender identity are an important part of a medical history and as necessary as the medical and surgical history, travel history, or family history. A careful understanding of gender and sexuality can help tailor care to their individual risk factors. For assistance in asking about sexual orientation and gender identity, refer to the Rainbow Health Ontario website [1]. Seek guidance from patients/clients about the pronoun they expect you to use in referring to them (e.g. he/she/they or another word) and record this somewhere in the demographics or in the comments section.
	Useful questions to ask include: • ***Are you currently in a relationship? Is it heterosexual or homosexual?*** • ***How do you identify your sexual orientation? And your gender identity?***
OHIP No.	OHIP number and version code.
Patient File No.	Office file number/ MRN (medical record number).
Disability Requiring Accommodation	Note the disability and the required accommodation. This includes a physical, sensory or cognitive disability. In the case of cognitive or learning disabilities, information should be provided in a form that is easy to understand and accessible.
Planned Place of Birth	The place where the pregnant person intends to give birth (hospital, home, birth centre, other-specify).
Planned Birth Attendant	Name of the most responsible provider (MRP) or on-call group planning to attend the labour and birth.
Newborn Care Provider in Hospital	Name of infant's health care provider while still in hospital.
Newborn Care Provider in Community	Name of infant's health care provider once discharged.
Family Physician/ Primary Care Provider	Name of family physician or primary care provider outside of pregnancy.
Allergies or Sensitivities (include reaction)	List allergies and sensitivities and the type of reaction to the agent (anaphylaxis, rash, GI distress, etc.)
Medications (Rx/OTC, complimentary/alternative/ vitamins, include dosage)	List any medications currently used, including prescription, over-the-counter drugs, complementary, alternative therapies, herbals and vitamins and dosage.
Partner's First Name	The given (first) name of the current partner.
Partner's Last Name	The surname (last name) of the current partner. This space may be left blank if no partner is reported. The named partner in this section may not be the genetic contributor to this pregnancy.
Partner's Occupation	The current partner's occupation.
Partner's Education Level	Document the partner's level of education. Consider this when providing both written (handouts) and oral information to the pregnant person.
Age	Age of the partner.

Pregnancy Summary

Item	Description
LMP	First day of the last menstrual cycle in YYYY/MM/DD.
Cycle q	Average length of cycle in days.
Certain Y/ N	Indicate if this date is certain or uncertain.
Regular Y/ N	Indicate if the cycle is regular or not.
Planned Pregnancy Y/N	Planned or unplanned pregnancy.
Contraceptive Type Last Used	Type of contraceptive and the month and year stopped.
Conception: Assist Y/N Details:	Indicate if assisted reproductive technologies were utilized in this pregnancy. Specify treatment.
EDB by LMP	Expected date of birth by using the last menstrual period date (if known) in YYYY/MM/DD.
Final EDB	Expected date of birth in YYYY/MM/DD confirmed by an ultrasound (US) at an appropriate gestational age according to the SOGC Guideline [2].
Dating Method	Method used to determine the EDB. If assisted reproductive technology was used, indicate date of procedure (YYYY/MM/DD) and age of embryo at transfer (in the case of IVF) if known.
Gravida	Total number of prior plus present pregnancies regardless of gestational age, type, time or method of termination/outcome. A pregnancy with twins/multiples is counted as one pregnancy.
Term	Total number of previous pregnancies with birth occurring at greater than or equal to 37 completed weeks.
Preterm	Total number of previous pregnancies with birth occurring between 20 + 0 and 36+7 completed weeks.
Abortus	Total number of spontaneous or therapeutic abortions occurring prior to 20+0 weeks. Spontaneous abortions include miscarriage, ectopic pregnancy, missed abortion, and molar pregnancy.
Living Children	Total number of children the pregnant person has given birth to that are presently living. Providers can include each child's name in the free text.
Stillbirth(s)	Total number of previous pregnancies resulting in a stillbirth. A stillbirth is defined as a product of conception weighing 500 grams or more or of 20 or more weeks' gestation, which after being completely delivered shows no sign of life. Intentional terminations of pregnancy that meet either criterion are also classified as stillbirths in Ontario [3].
Neonatal/ Child Death	Total number of deaths of an infant or child any time after live birth.

Obstetrical History

Item	Description
Year /Month	Month and year of the birth or pregnancy loss.
Place of Birth	Place of birth or pregnancy loss (hospital name and/or city).
Gest (wks)	Number of weeks' of gestation at birth or loss.

Labour Length	Number of hours in active labour.
Type of Birth	Type of birth, including vaginal (spontaneous, forceps, vacuum) or caesarean section. Details can be included in "comments" section.
Comments regarding abortus, pregnancy, birth and newborn (e.g. GDM, HTN, IUGR, shoulder dystocia, PPH, neonatal jaundice)	Note any additional comments about the pregnancy or birth including any perinatal complications. Describe issues that are most relevant to current pregnancy. Include notes about neonatal/ child death. Some complications like preterm birth, GDM, growth restriction and hypertension may be modifiable risk factors for a subsequent pregnancy. See special circumstances ASA, progesterone and Laboratory investigations.
Sex M/F	Male or female.
Birth Weight	Birth weight in grams.
Breastfed/ Duration	Number of months the baby was breastfed.
Child's Current Health	Relevant concerns, conditions or abnormalities.

Medical History and Physical Exam

Check Y or N next to each Item, and then use the Comments section at the bottom of the page to elaborate on the specific issue, noting the number of the Item the comment refers to.

Item	Description
Current Pregnancy	
1. Bleeding	Any vaginal bleeding that has occurred during the current pregnancy. Specify gestation and duration.
2. Nausea /vomiting	Any nausea and/or vomiting that have been a concern in the pregnancy. Document any medications used.
3. Rash/fever/illness	Any fever in pregnancy and the gestational age of the fetus at the time of the fever. Consider infections such as Toxoplasmosis, Listeria, CMV, Parvo, TB, etc.
Nutrition	
4. Calcium adequate	The adequacy of dairy products or other calcium sources in the normal diet. Eat Right Ontario [4] and Health Canada [5] recommend 1000 mg/day of calcium during pregnancy with a higher dose of 1300 mg/day of calcium for those under 19. The SOGC Guideline recommends calcium supplementation of at least 1 g/day, orally, for pregnant people with low dietary intake of calcium (< 600 mg/day) who are at high risk of preeclampsia [6].
5. Vitamin D adequate	Inform about of the importance of vitamin D stores while pregnant and breastfeeding. Patients/clients at risk for low vitamin D stores include those who: • Have darker skin tones • Live in northern latitudes, • Routinely cover their skin for cultural reasons • Have diets low in vitamin D. The recommended total daily intake from diet and supplementation is 15 mcg (600 IU) [5].

	• Are Indigenous
6. Folic acid preconception	Maternal use of folic acid prior to and during pregnancy. Document the dosage taken. Recommended dosage by Health Canada is 0.4 mg if at average risk [7] . Refer to the SOGC Guideline on risk factors requiring a higher dose [8].
7. Prenatal vitamin	Indicate any prenatal vitamin use. Health Canada recommends a daily supplement with 16-20 mg iron. Any prenatal vitamin containing 0.4 mg folic acid is acceptable [7].
8. Food access/ quality adequate	Indicate if poverty/other circumstances impact access to healthy food and make referrals as appropriate.
9. Dietary restrictions	Indicate any restrictions that may have an impact on nutritional status, e.g. vegan, lactose intolerance.
Surgical History	
10. Surgery	Any surgical procedures, particularly those that may affect pregnancy management or outcome.
11. Anaesthetic complications	Significant complications from prior local, regional or general anaesthetics. This includes metabolic disorders such as malignant hyperthermia and pseudocholinesterase deficiency, difficult intubations, as well as severe postoperative vomiting.
Medical History	
12. Hypertension	Previous chronic hypertension, hypertension currently managed by medication, hypertension with previous pregnancies. See also “Special Circumstances: Low dose ASA”.
13. Cardiac/Pulmonary	Significant cardiac or pulmonary disease, including congenital heart disease and chronic respiratory disease, including asthma.
14. Endocrine	Endocrine disorders, of which diabetes and thyroid conditions are most commonly encountered.
15. GI/Liver	Significant pre-existing liver and gastrointestinal disease.
16. Breast (incl. surgery)	Breast surgery, including biopsies, augmentation or reduction, or other conditions which may affect pregnancy or breastfeeding.
17. Gynecological (incl. surgery)	Any uterine or cervical procedure, particularly those which may affect uterine or cervical integrity, such as cone biopsy or myomectomy. Include any vulvar alterations, such as female genital mutilation (FGM), which may affect delivery.
18. Urinary tract	Pre-existing urinary disorders and those complicating a prior pregnancy.
19. MSK/Rheum	Rheumatic and autoimmune disorders (e.g. SLE, rheumatoid arthritis, antiphospholipid syndrome). Also indicate musculoskeletal conditions that might affect pregnancy/birth such as scoliosis.
20. Hematological	Significant hematological disorders.
21. Thromboembolic/coag	Indicate existing thromboembolic disorders or coagulopathies.
22. Blood transfusion	Any prior transfusions of blood or blood products.

23. Neurological	Any existing neurological history including those that affect or can be affected by pregnancy (e.g. epilepsy, migraines, multiple sclerosis).
24. Other	
Family History	
25. Medical Conditions (e.g. diabetes, thyroid, hypertension, thromboembolic, anaesthetic complications, mental health)	Family history of heart disease, hypertension, diabetes, thromboembolic or coagulation issues. Include diseases in the immediate family that pose an increased risk for the pregnancy and birth. Screen for family history of depression/psychiatric issues, addiction to alcohol or drug abuse.
Genetic History of Gametes	
26. Ethnic/racial background **Egg _____ Age____Yrs** **Sperm_____**	For assessment of risk for genetic disorders, the genetic origin of each gamete needs to be considered. In cases of gamete donation, the age of the egg donor should be documented for assessment of age-related chromosomal risk. Care providers should be sensitive to the various ways employed to conceive, especially the use of egg and sperm donors and gestational carriers.
27. Carrier Screening: at risk? • **Hemoglobinopathy screening** (Asian, African, Middle Eastern, Mediterranean, Hispanic, Caribbean) • **Tay-Sachs disease screening** (Ashkenazi Jewish, French Canadian, Acadian, Cajun) • **Ashkenazi Jewish screening panel**	Screen for the diseases listed in the identified populations. As these conditions are autosomal recessive, consider testing carrier status of both gamete providers, if one tests positive.
28. Genetic Family History • **Genetic conditions** (e.g. CF, muscular dystrophy, chromosomal disorders) • **Other** (e.g. intellectual, birth defect, congenital heart, developmental delay, recurrent pregnancy loss, stillbirth) • **Consanguinity**	Consider screening if available and refer to genetic counsellor if appropriate. [9] Couples who are biological relatives are common in some cultures, and raise the risk of genetic disorders and pregnancy loss. If consanguinity is confirmed and there is a family history of recurrent pregnancy loss or infant morbidity/mortality, referral to a geneticist/genetic counselor may be appropriate.
Infectious Disease	
29. Varicella disease	History of varicella (chicken pox) disease negates the need for antibody testing.
30. Varicella vaccine	History of vaccination against varicella (two doses) negates the need for antibody testing.
31. HIV	In Ontario, universal HIV testing is recommended at the first antenatal visit regardless of risk factors as effective interventions are available to reduce the risk of mother-to-baby transmission [10]. Recognised risk factors include having a history of intravenous drug use or sexual partners who have

	injected drugs or have HIV, and/or residence in a country where HIV is endemic. Consider repeat HIV testing later in pregnancy for those with ongoing risk.
32. HSV Self Y/N **Partner Y/N**	Consider prophylaxis when there is a history of recurrent genital HSV, as per the SOGC Guideline for management of HSV in pregnancy [11]. Pregnant people who have no history of HSV but have a partner with genital HSV should have type-specific serology to determine their risk of acquiring primary HSV in pregnancy [11].
33. STIs	Past or present history of a sexually transmitted infection(s)/ treatment and test of cure. Consider repeat testing later in pregnancy for those with ongoing risk.
34. At risk population (Hep C, TB, Parvo, Toxo)	*Prior history of active disease, whether treated or not, as well as exposure through high risk environment or behaviour. For more information on Hep C, refer to the resources provided by CDC* [12]*, ACOG* [13] *and the Canadian Liver Foundation* [14]. For more information on TB, please refer to the resources provided by CDC [15]. For more information on Parvo, refer to the SOGC Guideline [16] and the resources provided by CDC [17]. For more information on Toxo, refer to the SOGC Guideline [18] and resources provided by CDC [19].
35. Other	Refers to other infectious diseases not noted above. This includes previous infections with, or potential exposures to other infectious agents including CMV, West Nile virus, malaria, Lyme disease and Zika virus. For more information, refer to the following resources (Appendix B): PHAC, CDC, and MotherRisk.
Mental Health/ Substance Use	
36. Anxiety **Past Y/N** **Present Y/N** **GAD-2 Score**	Routine mental health screening in pregnancy is recommended by several organizations. Maternal anxiety or depression is associated with prenatal and postpartum depression and poor infant and child outcomes. Routine screening and intervention has the potential to improve mental health in pregnancy and decrease postpartum depression. Past history or current anxiety should be documented and include treatment/coping strategies. The GAD -2 score is a validated tool to screen for anxiety [20]. Its use is explained in OPR 4 and the score is recorded in this box. This tool can be used repeatedly throughout pregnancy; re-screen pregnant people at high risk of anxiety. Pregnant people identified as requiring follow-up regarding anxiety or depression should be referred to the most responsible primary care provider for appropriate medical treatment. Pregnant people and

	their families can also be referred to the local public health department's Healthy Babies Health Children program for further community support and intensive parenting supports as necessary.
37. Depression **Past Y/N** **Present Y/N** **PHQ-2 Score**	Past history or current depression should be documented and include treatment/coping strategies. The PHQ 2 score is a validated tool to screen for depression [21]. Its use is explained on the OPR 4 and the score is recorded in this box. This tool can be used repeatedly throughout pregnancy; re-screen pregnant people at high risk of depression. The Edinburgh Perinatal/Postnatal Depression Score (EPDS) has also been validated in pregnancy and can be used as further testing if the PHQ2 score indicates risk. Its use is also explained on the OPR 4. Pregnant people identified as requiring follow-up regarding anxiety or depression should be referred to the most responsible primary care provider for appropriate medical treatment. Pregnant people and their families can also be referred to the local public health department's Healthy Babies Health Children program for further community support and intensive parenting supports as necessary.
38. Eating Disorder	Specify the disorder and how it is being managed.
39. Bipolar	Specify and document ongoing treatment.
40. Schizophrenia	Specify and document ongoing treatment.
41. Other (PTSD, ADD, personality disorders, etc.)	Specify the condition and document ongoing treatment.
42. Smoked cig within past 6 months **Current smoking ____ cig/day**	Document any cigarette use in the last six months, even prior to pregnancy or in early pregnancy. If still smoking, the estimated number of cigarettes smoked daily is entered. Quitting is best, but even reducing smoking during pregnancy has an important impact on improving pregnancy outcomes. For more information, refer to the following resources (Appendix B): MotherRisk, Pregnets, and ACOG. Pregnant people and their families can also be referred to the local public health department's Healthy Babies Health Children program for further community support and intensive parenting supports as necessary.
43. Alcohol: Ever drink alcohol **If yes:** **Last drink: (when) ___** **Current drinking ____ drinks/ wk** **T-ACE Score ____**	Ask everyone a general screening question such as "Do you ever use alcohol?" or "Do you ever enjoy a drink or two?" If the answer is "no" there is no need to continue. If the answer is "yes", ask "When was the last time that you had a drink?" to identify if alcohol has been consumed during the pregnancy. [22] The T-ACE score is a validated tool to assess problem

	drinking in pregnancy (see OPR 4) and the score is recorded in this box. Consider referral as appropriate. Pregnant people and their families can also be referred to the local public health department's Healthy Babies Health Children program for further community support and intensive parenting supports as necessary.
44. Non-prescribed substances / drugs	Include all illicit drugs and pharmaceuticals being taken without a prescription. Specify the drug, quantity and frequency.
45. Marijuana	Marijuana is of particular concern given the prevalence of its use and future legalization in Canada. Provide appropriate information or counsel regarding risk to pregnancy, the fetus and during breastfeeding, and consider referral as appropriate. [22]
Lifestyle/ Social	
46. Occupational risks	Refers to work-related or other environmental situations, which are detrimental to pregnancy, examples include ionizing radiation, toxic chemicals, and infectious agents.
47. Financial/housing issues	Document any financial concerns, including housing stability. For more information, refer to the child poverty clinical tools from the Ontario College of Family Physicians (OCFP) provided in the resources (Appendix B).
	*A useful questions to ask: "**Do you ever have difficulty making ends meet at the end of the month**?"*
48. Poor social support	Poor social support is associated with postpartum depression. Discuss who will provide support during and after pregnancy. Questions about how the partner/family feel about the pregnancy and who will be helping with the baby following birth are helpful in eliciting information. Pregnant people and their families can also be referred to the local public health department's Healthy Babies Health Children program for further community support and intensive parenting supports as necessary.
49. Beliefs/practices affecting care	Refers to any religious or cultural practice that may impact pregnancy, birth, or newborn care. Ensure these cultural/religious are communicated in advance where changes to the usual clinical pathway in hospital are required. For more information, please refer to the SOGC Consensus Guideline for health

	professionals working with First Nations, Inuit, and Métis [23].
50. Relationship problems	Problematic relationships can be associated with increased dysfunction in pregnancy, the postpartum period, postpartum depression, domestic abuse, and child abuse.
	*Useful questions to ask include: "**How would you describe your relationship with your partner?"** and "**What do you think the relationship will be like after the baby arrives?"***
51. Intimate partner/ family violence	Consider routine screening for risk of physical, emotional or sexual abuse. This also refers to a pattern or history of physical, sexual and/or emotional interpersonal violence. If appropriate, make a referral. There are many tools to screen for intimate partner abuse, for example the Woman Abuse Screening Tool (WAST) [24]. For more information, refer to the resources from ACOG [25] [26].
	Useful questions to ask include: • ***Within the past year - or since you have been pregnant - have you been hit, slapped, kicked or otherwise physically hurt by someone?*** • ***Are you in a relationship with a person who threatens or physically hurts you?*** • ***Has anyone forced you to have sexual activities that made you feel uncomfortable?***
52. Parenting concerns (e.g. developmental disability, family trauma etc.)	Parenting concerns may be related to the physical or emotional aspects of child care. If there are concerns about the prospective parents' ability to care for a baby, consider referral to the appropriate resources. Mandatory reporting guidelines should be discussed and followed as per the Child and Family Services Act (CFSA). The full text of the CFSA and its associated regulations can be found online at the Ontario government's e-laws website [27]. Pregnant people and their families can also be referred to the local public health department's Healthy Babies Health Children program for further community support and intensive parenting supports as necessary.

Ontario Perinatal Record 2

Demographics

Some of the information contained on the Ontario Perinatal Record 1 is repeated at the top of the Ontario Perinatal Record 2. These were chosen both for their importance, and for the convenience of easily referring to them.

Physical Exam

Item	Description
Ht_____cm	Height in centimetres.
Pre-pregnancy Wt_____kg	Pre-pregnant weight in kilograms.
BP_____	Blood pressure at the initial exam.
Pre-pregnancy BMI _____kg/m^2	Pre-pregnant body mass index in kg/m^2.
Exam as indicated **Head and neck** **Breast/nipples** **Heart/lungs** **Abdomen** **MSK** **Pelvic** **Other**	Document results and comments for the physical examination findings in the space provided.
Exam Comments	
Last Pap YYYY/MM/DD **Result**	In accordance with the Ontario Cervical Cancer Screening Clinical Practice Guidelines [28], initiate Pap tests at age 21 and, if normal, repeat every three years. Pap tests should only be conducted during the pre- or postnatal period if the pregnant person is due for the routine screening.

Initial Lab Investigations

This section explains routinely ordered lab investigations. Results should be documented and discussed with the pregnant person. Note any tests declined.

Test	Description
Hb	The Hb screens for anemia which requires diagnosis and follow up.
ABO/Rh(D)	Refers to the major blood groups. This may or may not need to be repeated with the second/third trimester blood work. Rh(D) negative status is documented on OPR 3 as a reminder of the need for Rh(D) immune globulin administration.

MCV	Refers to any abnormality in red cell volume. Low MCV (<85) may indicate iron deficiency or thalassemia. High MCV may indicate folate or B12 deficiency, liver disease, hypothyroidism or alcohol use.
Antibody screen	Any circulating antibody measured by indirect Coomb's. A positive screen warrants additional testing in order to identify the specific antibody as some will have implications for the fetus.
Platelets	Thrombocytopenia is relatively common in pregnancy and may represent either benign or pathological conditions which require diagnosis and follow up.
Rubella immune	Record Rubella status as immune (positive titre) or nonimmune (negative or indeterminate). Check box in "Recommended Immunoprophylaxis" on the OPR 3 if rubella immunization is required postpartum. Inform pregnant person of non-immune status.
HBsAg	The presence of Hepatitis B surface antigen indicates prior Hepatitis B infection and carrier status. The information is important for assessment of maternal liver function and identifying newborns that require Hep B immunoprophylaxis after birth. Check box in "Recommended Immunoprophylaxis" on the OPR 3 to ensure that the infant receives appropriate immunization. Hep B antibody screening indicates previous vaccination and immunity or previous exposure and is **NOT** the appropriate test for Hep B screening in pregnancy. [29]
Syphilis	Screen everyone for syphilis. Consider rescreening those at risk of acquiring syphilis during pregnancy in each trimester.
HIV	Screen everyone for HIV. Consider rescreening those at risk of acquiring HIV during pregnancy in each trimester.
GC	Screen everyone for gonorrhea. Consider rescreening those at risk of acquiring gonorrhoea during pregnancy in each trimester.
Chlamydia	Screen everyone for Chlamydia. Consider rescreening those at risk of acquiring chlamydia during pregnancy in each trimester.
Urine C&S	Screen everyone for asymptomatic bacteriuria (ABU) preferably in the first trimester or at first presentation and treat if positive [30]. Consider re-screening if the first screen is positive or there is a history of recurrent urinary tract infections. Treat GBS bacteriuria in pregnancy and treat as GBS positive when in labour (document GBS positivity in OPR 3). [31]

Second and Third Trimester Lab Investigations

Test	Description
Hb	Hb is routinely repeated at approximately 28 weeks' gestation.
Platelets	Same as above.

ABO/Rh(D)	Same as above.
Repeat Antibodies	Done for those who are Rh(D) negative prior to administering Rh(D)Ig.
1 hr GCT	As untreated gestational diabetes mellitus (GDM) can lead to increased perinatal morbidity and mortality and universal screening is recommended between 24 and 28 weeks' gestation, or at any stage in pregnancy with multiple risk factors. There are two approaches to screening outlined in the Canadian Diabetes Association (CDA) Clinical Practice Guideline [32]. The preferred approach is to start with a non-fasting, one-hour 50g glucose challenge test (GCT). A GCT between 7.8 and 11.2 mmol/L requires a two-hour fasting GTT for diagnosis. A GCT over 11.2 is diagnostic of gestational DM. [33]
2 hr GTT	Refers to the two-hour fasting glucose tolerance test (GTT). This can be used as a follow-up of an abnormal GCT or as a first line test in those presenting with risk factors. Diagnostic criteria for each of these algorithms can be found in the CDA Guideline [32].
Additional investigations as indicated: **TSH, Diabetes Screen** **Hb Electrophoresis/ HPLC, Ferritin, B12,** **ID (e.g. Hep C, Parvo B19, Varicella, Toxo, CMV)** **Drug Screen, repeat STI screen**	These tests should be considered when clinically indicated, often at the time of the first trimester lab tests.

Prenatal Genetic Investigations

Item	Description
Screening Offered Yes/No	Everyone, regardless of age, should be offered prenatal screening for the common aneuploidies, major congenital anomalies and other chromosomal abnormalities after a discussion of the risks and benefits. The type of screening test offered will depend on gestational age at 1st prenatal visit, availability of nuchal translucency (NT) measurement, maternal (oocyte) age at delivery and personal risk factors for aneuploidy and other chromosomal abnormalities. The availability of prenatal genetic investigation should be discussed early in the pregnancy, as the information is complex and the tests are time-specific. Document the test(s) selected, if testing was declined or if screening was not feasible due to being outside the appropriate gestational age. For all genetic tests, indicate the test performed (or offered) and the results.
eFTS (between 11-13+6wks)	Enhanced First Trimester Screening (eFTS) combines a nuchal translucency scan and first trimester PAPP-A, AFP and hCG, with some locations also including PlGF.The performance characteristics of enhanced FTS are similar to Integrated Prenatal Screening (IPS).
IPS Part 1 (between 11-13+6wks)	IPS has been replaced by eFTS, see above.

Part 2(between 15-20+6wks)	
MSS (between 15-20+6wks) **AFP (between 15-20+6wks)**	MSS (Quad screening) uses second trimester serum analytes alone and can be used when the gestational window for eFTS has passed or when nuchal translucency (NT) ultrasound is not available. MS-AFP should not be used for screening for neural tube defects when there is access to a high-quality second trimester anatomy ultrasound. Exceptions include: valproate/carbamazepine use, poor visibility on the second trimester anatomy ultrasound, or where the maternal BMI≥35 kg/m^2.
Cell-Free Fetal DNA (NIPT) Offered Y/N	Cell-free fetal DNA testing - often referred to as Non-invasive Prenatal Testing (NIPT) - screens for specific chromosome aneuploidies (trisomy 21, 18, 13) as well as sex chromosome disorders and microdeletion syndromes, by analyzing circulating cell-free fetal DNA present in maternal blood. This test can be initiated as early as 9-10 weeks' gestational age and up to any gestation. Cell-free fetal DNA testing does not screen for open neural tube defects. ***Provincial OHIP coverage for this test is currently limited*** to specific clinical circumstances but several companies offer the test for private pay. Consider discussing this option with all patients/clients, even if the gestational window for standard testing has elapsed.
CVS/Amnio Offered Y/N	Chorionic villus sampling (CVS) (GA 10-12 weeks) and/or amniocentesis (GA >15 weeks) are considered diagnostic tests and may be used if a screening test is abnormal or in other high risk circumstances.
Other genetic testing Offered Y/N	Indicate type of testing and results.
NT Risk Assessment 11-13+6wk (multiples)	Fetal nuchal translucency (NT) measurement combined with maternal age is an acceptable first trimester screening test for aneuploidies in twin pregnancies, however, eFTSwill improve the screening accuracy. Cell-free fetal DNA testing can also be used in twin pregnancies. A thickened NT in the absence of genetic abnormalities may indicate cardiac defects or other fetal anomalies requiring further investigations and referral to a local Genetics Clinic.
Abnormal Placental Biomarkers	Abnormal serum markers may reflect abnormalities of placentation and require further follow up.
No Screening Tests	
Counseled and declined Date: YYYY/MM/DD	Date testing was offered and declined.
Presentation >20+6wks NIPT offered Y/N Date YYYY/MM/DD	Document that the pregnant person presented outside the gestational window for standard prenatal screening. NIPT is not limited to the same gestational window, and could be offered as an alternative, with OHIP funding subject to eligibility criteria. Note whether NIPT was offered, and the date.

Ultrasound

Item	Description
Date	Date of the ultrasound(s) in YYYY/MM/DD.
GA	The gestational age in weeks and days for this ultrasound as calculated using the dating methods indicated on OPR 1.
Result	Document discrepancy between GA calculated based on dates with the GA calculated based on measurements in this ultrasound. Include other important findings (e.g. placenta location, completion of anatomy survey, estimated fetal weight, any anomalies).
NT Ultrasound (between 11-13+6 weeks)	In addition to assessment of nuchal thickness, the NT ultrasound may be used for dating if an earlier dating ultrasound was not done.
Anatomy scan (between 18-22wks)	The anatomy scan is also a genetic screening test which can detect major and minor malformations of the fetus. Note any cervical or placental abnormalities detected.
Placental Location	Document the location of the placenta as noted on the ultrasound
Soft Markers	Soft markers are obstetric ultrasound findings that are considered variants of normal but are associated with varying degrees of increased risk for underlying fetal aneuploidy. In women with a low risk of aneuploidy following first trimester aneuploidy screening, the presence of specific ultrasound "soft markers" associated with fetal trisomy 21 (echogenic intracardiac focus) or trisomy 18 (choroid plexus cysts) identified during the second trimester ultrasound (18 to 22 weeks) is not clinically relevant due to poor predictive value. With the exception of increased nuchal fold, they should not be used to adjust the a priori risk for fetal aneuploidy and do not warrant further testing [34]. Referral to genetics or MFM may still be indicated, particularly when there are multiple soft markers or in the presence of markers which are associated with other fetal abnormalities. [34] [35] [36] .
Genetic screening result reviewed with pt/client	This is a prompt to remind care providers of the importance of reviewing the genetic screening results with the pregnant person to ensure they understand results and potential next steps.
Approx 22 wks: Copy of OPR 1 & 2 sent to hospital and/or given to pt/client	This is a prompt to remind care providers to forward the information on OPR 1 and 2 to the hospital (even if intending an out of hospital birth). Copies may also be given to the pregnant person to carry.

Ontario Perinatal Record 3

Demographics

Some of the information contained on the Ontario Perinatal Record 1 is repeated at the top of the Ontario Perinatal Record 3. These were chosen both for their importance, and for the convenience of easily referring to them.

Issues

Item	Description
Issues (abnormal results, medical/social problems)	Use this section to list any problems (medical or social) identified in the completion of the OPR 1 or 2, review of lab results or subsequent visits. Keep this list current and review regularly.
Plan of management/ Medication change/ Consultations	For each issue identified, indicate follow up plans affecting antenatal, intrapartum, postpartum and newborn care. This may include consultations, investigations, results and medication changes. Keep this list current and review regularly.

Special Circumstances

Item	Description
Low Dose ASA Indicated	Low dose ASA (81 mg) taken nightly has been shown to decrease preeclampsia and IUGR if started between 12 and 20 weeks' (preferably by 16 weeks') gestation in pregnant people at higher risk for these conditions. Major risk factors include, but are not limited to, prior preeclampsia, chronic hypertension, pre-gestational (type 1 or type 2) diabetes, pre-pregnancy BMI > 30 kg/m2 or assisted reproductive therapy. Other risk factors which may be important, especially in combination, include prior placental abruption, multifetal pregnancy, chronic kidney disease, prior stillbirth or IUGR, age > 40 years, nulliparity, or SLE [37] [38]. When ASA is used, it is generally discontinued at 36 weeks. There is continuing research into the optimal dosage and some specialists use higher doses – consult with your local referral centre for advice.
Progesterone Indicated (PTB prevention)	Consider vaginal (not intramuscular) progesterone for pregnant people at risk of preterm birth. Risk factors include, but are not limited to, a history of preterm birth or a shortened transvaginal cervical length < 2.5 cm prior to 22-24 weeks' gestation.
HSV suppression indicated	Offer those with known recurrent HSV acyclovir or valacyclovir suppression from 36 weeks' gestation to delivery. This decreases the risk of clinical lesions and viral shedding at the time of delivery and therefore decreases the need for a caesarean section. For more

	information, refer to the SOGC Guideline for the management of HSV in pregnancy [11].
Social (e.g. child protection, adoption, surrogacy)	Social issues or specific circumstances that require involvement of other agencies or referrals, social work or specific planning around delivery and postpartum care.

GBS

Rectovaginal swab **Pos/ neg** **Other indications for prophylaxis Y/N**	Rectovaginal GBS swab screening is routinely offered between 35 and 37 weeks. Include the date the swab was done, results and sensitivities if indicated. Document any history of GBS bacteriuria in this pregnancy or a previous GBS affected infant. These are indications for intrapartum antibiotic prophylaxis and negate the need for a rectovaginal swab. For more information, refer to the SOGC Guideline *[39] [31]*.

Recommended Immunoprophylaxis

For more information on the recommended immunoprophylaxis, please refer to the SOGC Guideline for immunization in pregnancy [40].

Item	Description
Rh(D) neg [ ] **Rh(D) IG Given [ ]** **YYYY / MM / DD**	Non-sensitized Rh(D) negative pregnant people should receive Rh(D) immunoglobulin at 28-29 weeks' gestation. Timing of immunoprophylaxis may be affected by prior administration of additional Rh(D) immunoglobulin doses and these should be documented in the section below. As Rh(D) immunoglobulin is a blood product, usual practice for discussion and consent should be followed.
Additional dose given: YYYY/MM/DD	Rh(D) Immune globulin should also be given: • after spontaneous or induced abortion, ectopic pregnancy or obstetrical complications (e.g. any bleeding, abdominal trauma) or procedures such as amniocentesis. • within 72 hours after delivery of a Rh(D)positive infant Note the date(s) of additional doses of RhIG given. [41]
Influenza **• Discussed** **• Received** **• Declined**	During influenza season, discuss the benefits of influenza vaccine to the pregnant person, fetus and newborn. The vaccine can be safely administered at any gestation. For more information, refer to the resources from the Public Health Agency of Canada (PHAC) [42], including the recommendations from the National Advisory Committee on Immunizations (NACI) [43].
Pertussis: **• Discussed** **Up-to-date Y/N Year____** **• Received** **• Declined**	The National Advisory Committee on Immunization (NACI) recommends that immunization with diphtheria and tetanus toxoids and acellular pertussis vaccine (Tdap) vaccine should be offered, ideally between 27 and 32 weeks of gestation, in every pregnancy irrespective of previous Tdap immunization history [44]. SOGC recommendation extends the window of immunization to between 21 and 32 weeks with evidence supporting providing Tdap over an even wider range of

	gestational ages (from 13 weeks up to the time of delivery) in view of individual circumstances [45] [44].
Post-partum vaccine discussed • **Rubella** • **Other**	Offer postpartum vaccination with MMR if not immune or rubella indeterminate. Document other vaccines which might be indicated such as varicella.
Newborn needs • **Hep B prophylaxis** • **HIV prophylaxis**	Refers to the needs of the newborn in a household where Hepatitis B exposure is possible. An infant born to a mother who is HbsAg positive and potentially chronically infected is at risk for acquiring Hepatitis B. Passive immunization with Hepatitis B immunoglobulin (HBIG) should be administered postpartum along with the first dose of active immunization with Hepatitis B vaccine. This is administered as a three-dose series and is available free of charge from the local Public Health Department. In households where close family members other than the mother are HBsAg positive, the newborn needs active immunization only. For more information, refer to the following resource from PHAC: "Primary Care Management of Hepatitis B – Quick Reference (HBV-QR)" [46].
Pre Preg Wt ____ kg **BMI ____**	These numbers are carried over from OPR 1 to remind care providers of the pregnancy, birth and postpartum risks associated with BMI over 30 and to facilitate calculation of weight gain. Those with high BMI may need referral or consultation for specialized services. For more information, refer to the SOGC Guideline [47] and the AOM Guideline [48].

Subsequent Visits

Item	Description
Date	YYYY/MM/DD
GA (wks/days)	Gestational age in weeks + days based on the EDB. In some cases the EDB based on dates may be modified. As soon as the final EDB is determined, the gestational age should be listed accordingly. As an option, the previously recorded dates could be circled or otherwise marked to indicate these referred to a preliminary EDB and are not synchronous with the final EDB.
Weight (kg)	Weight in kilograms. Assess trend in weight gain during pregnancy. For recommended weight gain in pregnancy by BMI see OPR 4. For more information, refer to the Institute of Medicine weight gain recommendations for pregnancy, as per the ACOG Committee Opinion no. 548 [49].
BP	Measure blood pressure in a sitting position with an appropriately-sized cuff on the arm resting comfortably at the level of the heart.
Urine Prot.	Measurement of urinary protein by dipstick (ranges from neg (-), trace (tr), 1+, 2+, 3+, 4+). There are conflicting guidelines about the utility of routine screening for urinary protein. However, it has been left on this form until up-to-date Canadian clinical practice guidelines are issued.
SFH	Symphysis to fundal height measured in centimetres from the pubis to the top of the fundus. This measurement is operator-dependent and if

	possible should be performed by the same provider with consistency in the positioning the patient. Fundal height in cm correlates approximately to gestational age in weeks but is affected by fetal position and habitus of the pregnant person.
Pres.	Presentation refers to the fetal anatomical part closest to the pelvic inlet (usually the head or the buttocks). Document as cephalic or breech. Document the lie if not longitudinal (e.g. transverse, oblique) or unstable. This box may be left blank in early pregnancy visits until fetal parts are more easily palpated.
FHR	The fetal heart may be recorded as present or not, or the rate specified. Document rate when at risk for heart rate anomalies or when auscultation reveals a rate outside the normal range of 110-160 bpm.
FM	Fetal movements can be reported by the mother, palpated and/or observed by the clinician. Document as present, absent or decreased. Decreased or absent movements require further assessment.
Comments	Refers to any additional information relative to the condition of the patient/client and fetus. Any aspects of the antenatal care, specifics of discussions, etc. may be recorded.
Next Visit	Indicate the interval until the next visit and any upcoming tests or procedures.
Initial(s)	Enter the initials of the health care provider conducting the visit. If a learner is involved, provide initials of both the learner and the supervisor/preceptor. The full name corresponding to the initials of the health care provider should be entered at the bottom of the page.

Discussion Topics

Finding reputable online information sources can be challenging. Best Start and OMama provide Ontario-specific resources which address all of these discussion topics and more.
Indicate with a check if the discussion topics were addressed. For more information, including how to access these websites, refer to the resources provided in Appendix B.

Item	Description
	1st Trimester
Nausea/ Vomiting	Suggestions to assist with this common issue and when to contact a health care provider. For more information, refer to the SOGC Guideline "The management of nausea and vomiting of pregnancy" [50].
Routine prenatal care/Emergency contact/ On call providers	Individualized discussion regarding your practice, on call arrangements, appointment frequency, who to call with urgent or non-urgent questions.
Safety: food, medication, environment, infections, pets	Review: • Food safety to reduce risk of food-acquired infection (e.g. listeriosis) [51]. • The use of prescription, non-prescription, homeopathic or herbal and common over-the-counter medications in pregnancy and where to find current information.

	• Fever and other signs of infection that require contact with a health care provider. • SOGC Guidelines on toxoplasmosis [18] and parvovirus [16], and when to contact a health care provider.
Healthy weight gain	Discussing weight management requires a positive and respectful approach. Provide support and information about healthy eating and physical activity and make a referral when necessary.
Physical activity	Exercise during pregnancy is associated with a range of benefits and is not associated with adverse outcomes. Discuss physiological changes in pregnancy and their effects on the safety of certain activities [52]. Consider using PARmed-X for Pregnancy to assess physical activity readiness and recommend an exercise program.
Seatbelt use	Recommend and review the routine and correct use of seatbelts.
Sexual activity	Reassure that sexual activity in pregnancy is safe but may require adaptations for comfort. Some complications of pregnancy are contraindications for vaginal intercourse (e.g. threatened preterm labour, P-PROM, placenta previa).
Breastfeeding	Discuss plans for infant feeding. Discuss the importance of breastfeeding and the risks associated with formula feeding, as well as postpartum supports for breastfeeding. Populations with lower breastfeeding rates that benefit from additional prenatal breastfeeding support include: • Body mass index >30 • Breast reduction/surgery • First baby • Gestational diabetes or existing diabetes • Lack of social/emotional support • Low socio-economic circumstances • Low thyroid hormone • Polycystic Ovarian Syndrome • Pregnant with multiples • Previous breastfeeding difficulty • Previous preterm birth • Scheduled or high risk for Caesarean birth • Under 25 years of age • Previous history of anxiety/depression or sexual abuse • Use of assisted reproductive technologies
Travel	Discuss travel and the risk of deep vein thrombosis, vaccinations for international travel, insurance, high risk travel areas (including risk of infections), availability of health services and airline requirements.
Quality information sources	Recommend reliable sources of information about pregnancy, childbirth and infant feeding. Best Start Resource Centre and OMama provide Ontario-specific resources which address all of these discussion topics and more. For more information, including how to access these websites, refer to the resources provided in Appendix B.
VBAC Counseling	For those with a previous caesarean section and no contraindications to vaginal birth, discuss the benefits and risks associated with a planned trial of

	labour. For more information, refer to the following resources: Health Quality Ontario's VBAC Quality Standard and Patient Reference Guide [53], Association of Ontario Midwives [54], BC Women's Hospital & Health Centre [55] and the SOGC VBAC Guideline [56].
2nd Trimester	
Prenatal classes	Provide information about finding prenatal classes, including breastfeeding classes, or on-line alternatives appropriate for their needs (e.g. language, level of literacy, financial situation, philosophy and values). Encourage registration in early second trimester.
Preterm labour	Review risk factors for preterm labour. Educate **EVERYONE** on symptoms of preterm labour and when to seek care.
PROM	Discuss symptoms of pre-labour rupture of membranes (PROM) at any gestation and when to seek care.
Bleeding	Discuss vaginal bleeding, possible causes and when to seek care.
Fetal Movement	Discuss normal patterns of fetal movement and when to seek care for concerns. For more information, refer to the SOGC Guideline and the *Movements Matter* Campaign [57] [58].
Mental health	Anxiety, depression or other conditions are common and may develop or worsen during pregnancy. Review signs and symptoms, resources and when to seek care with **EVERYONE**. Mental health assessment should be an **ongoing process** and the screening tools in the OPR 4 can be used at any time throughout pregnancy.
VBAC consent	Vaginal birth after caesarean is appropriate for many pregnant people. Obtain informed consent for the patient/client's choice of trial of labour or repeat caesarean section. Intention for a trial of labour after Caesarean section should be clearly stated and documentation of the previous uterine scar should be clearly marked on the prenatal record. [56]
3rd Trimester	
Fetal movement	Discuss the importance of awareness of fetal movement, normal patterns and when to seek care for concerns [57].
Work plan/Maternity leave	Discuss work and any plans for pregnancy or parental leave. For more information, refer to the pregnancy and parental leave resources provided by the Ontario Ministry of Labour [59].
Birth plan: pain management, labour support	Review birth preferences and discuss: • Stages of labour • Pain management options • Labour support, including who will be present • Specific wishes such as delayed cord clamping, skin-to-skin care, etc.
Type of birth, potential interventions, VBAC plan	Provide information about the risk and benefits of common interventions. Confirm intention for trial of labour or repeat CS in those with previous CS.
Admission timing	Discuss: • Signs and symptoms of early labour and comfort measures • Benefits of staying home until labour is established, if appropriate • Important telephone numbers, such as after hours, labour triage, etc. • Term PROM without labour

	This information should be adapted to the family's specific circumstances and geography
Mental health	Review signs and symptoms, resources and when to seek care with **EVERYONE**. Mental health assessment should be an **ongoing process** and the screening tools in the OPR 4 page can be used at any time throughout pregnancy.
Breastfeeding and support	Reiterate the importance of breastfeeding from the first trimester discussion topics. Consider risks for lower breastfeeding initiation and success (e.g., first baby, first time breastfeeding, any breast surgery, gestational diabetes, previous breastfeeding difficulty, etc.) and refer to supports from prenatal breastfeeding classes or a skilled lactation professional. Review local postpartum breastfeeding supports. Encourage support person to attend classes/appointments as well.
Contraception	Discuss plans for contraception in the postpartum period including options specific to patient's circumstances (e.g. feeding method, medical risk factors, whether reversibility desired).
Newborn care/ Screening tests/ Circumcision/ Follow-up appt.	Discuss: • Preparation for parenthood and answer questions regarding newborn care. • Strategies for ensuring a health care provider is available for the newborn at the time of birth and after discharge. • Newborn screening tests and follow-up appointments. • Recommendations regarding routine circumcision of male infants. For more information, refer to the Canadian Paediatric Society Position Statement on newborn male circumcision [60].
Discharge planning/Car seat safety	Discuss car seat legislation, use and installation and inform about any hospital regulations regarding discharge and car seats.
Postpartum care	Provide information on the physiological and psychological recovery from birth. Refer to issues such as perineal hygiene, rest, nutrition, emotional changes, and comfort measures. Include expectations for routine follow-up and indications for emergent care.
Comments	
Approx 36 wks: Copy of OPR 2 (updated) & 3 to hospital and/or to pt/client	This is a prompt to remind care providers to forward the information on updated OPR 2 and OPR 3 to the hospital. Copies may also be given to the patient/client to carry.
Name/Initials	Enter the name and initials of the health care provider or learner conducting the visit(s).

Ontario Perinatal Record 4 – Resources

These validated screening tools can be used to assess the need for further counselling/ treatment/ referrals.

Item	Description
Generalized Anxiety Disorder scale (GAD-2)	The GAD-2 is a validated screening tool for generalized anxiety disorder as well as panic disorder, social anxiety and post-traumatic stress disorder. A score of 3 or more merits consideration of further assessment by the more comprehensive GAD-7 or a referral [20].
The Patient Health Questionnaire-2 (PHQ-2)	The PHQ-2 is a commonly used validated screening tool for depression. A score of 3 or more merits consideration of further assessment by tools such as the PHQ-9 or the EPDS or a referral [21].
T-ACE Screening Tool	The T-ACE is a validated screening tool developed specifically to assess problem drinking in pregnancy which may affect the fetus. A score of 2 indicates need for further assessment and follow-up. For more information, refer to the SOGC Guideline on alcohol use and pregnancy [61].
Edinburgh Perinatal/Postnatal Depression Scale (EPDS)	The EPDS is a widely-used screening tool for perinatal depression. Initially developed for diagnosis of postpartum depression, it has been validated for use in pregnancy as well. It is available in multiple languages. A score of 13 or more merits more comprehensive assessment. Any positive response to question 10 (self-harm) requires immediate mental health assessment.
Institute of Medicine Weight Gain Recommendations for Pregnancy	The IOM Weight Gain recommendations have been widely adopted. Calculation of pre-pregnancy BMI is required to determine appropriate gestational weight gain. Both low and high BMI as well as inappropriate gestational weight gain are risk factors for poor pregnancy outcomes.

Ontario Perinatal Record 5 – Postnatal Visit

Demographics

Some of the information contained on the Ontario Perinatal Record 1 is repeated at the top of the Ontario Perinatal Record 2. These were chosen both for their importance, and for the convenience of easily referring to them.

History

Item	Description
Review of birth	
Vaginal: **• Spontaneous** **• Vacuum** **• Forceps** **• VBAC** **• Episiotomy/ Lacerations** **• OASIS**	Debrief the birth experience and answer any questions about the event or outcomes. Any *OASIS (Obstetrical Anal Sphincter Injuries) should be discussed with respect to risks of recurrence in subsequent pregnancies, and anal incontinence should be referred for pelvic floor physiotherapy. [62]
Caesarean: **• Planned** **• Unplanned**	
Details	
Birth Attendant	
Pregnancy/ birth issues requiring follow-up (e.g. diabetes, hypertension, thyroid)	Identify any opportunities for follow-up screening, treatment, referrals or longer term health counselling. Common issues include adjusting thyroid medications, ensuring appropriate glucose screening for those who had gestational diabetes, and adjusting antihypertensive medications.
Baby's Name	
Baby's Care Provider	Name of care provider who will complete the well-baby visits.
Birth Weight (g)	
Baby's Health/Concerns	
Infant feeding: • **Breast milk only;** • **Combination of breast milk and breast milk substitute** • **Breast milk substitute only**	Document how the baby is being fed.

Feeding concerns	Discuss infant feeding method and any need for referral/ support.
Current medications	Review medication and supplement use and any need for dosage adjustment.
Bladder function	Discuss bladder function and incontinence and treat/refer as needed.
Emotional wellbeing	Review adjustment to parenthood and emotional wellbeing.
Bowel function	Discuss bowel function, constipation and incontinence and treat/refer as needed.
Relationship	Review how the new baby has affected the parents' relationship.
Sexual function	Discuss sexual activity, changes and expectations.
Postpartum Depression Screen (EPDS or other)	Screen **ALL** clients/patients for postpartum depression. See screening tools on the Resource page 4 of the OPR.
Lochia/Menses	Discuss postpartum bleeding and return of menstrual cycle.
Family support/ Community resources	Review supports in place and refer as necessary.
Perineum/Incision	Discuss perineal or incisional healing and any ongoing discomfort if present.
Smoking N/Y **_____ cig/day**	The postpartum period is a high-risk time for relapse among those who managed to reduce or quit during pregnancy. Discuss strategies for maintenance of smoking cessation. Discuss risks of smoking around infants and children.
Alcohol N/Y **If yes: Drinks/wk_____** **and If yes: T-ACE Score_____**	Ask about alcohol use and refer to Ontario Perinatal Record- Resources for T-ACE screening tool.
Non-prescribed substances/drugs (e.g. opioids, cocaine, marijuana, party drugs, other) N/Y	Discuss the health risks of using non-prescribed substances/ drugs as well as newborn implications. Refer as appropriate.
Rubella immune **Y/ N** **• Discussed** **• Declined** **• Received**	Inform about the benefits of postpartum immunization. For more information, refer to the resources from PHAC [42], including the recommendations from the NACI [43].

Influenza • **Discussed** • **Declined** • **Received**	Inform about the benefits of postpartum immunization. For more information, refer to the resources from PHAC *[42]*, including the recommendations from the NACI *[43]*.
Pertussis (TdAP) **Up-to-Date Y/N** • **Discussed** • **Declined** • **Received**	Inform about the benefits of postpartum immunization. For more information, refer to the resources from the PHAC [42], including the recommendations from the NACI [43].
Other Immunizations	
Last Pap YYYY/MM/DD Results	Perform PAP test only if indicated as per provincial screening

Physical Exam As Indicated

Item	Description
Weight Today (kg)	Examine as indicated.
Pre-Delivery Weight (kg)	
Pre-Pregnancy Weight (kg)	
BP (mm Hg)	
Affect, Thyroid, Breasts, Abdomen, Perineum, Pelvic	

Discussion Topics

Item	Description
Transition to parenthood/partner's adjustment	Opportunity to discuss emotional health, coping strategies and changes in relationships.
Family violence and safety	Ask about any physical, emotional or verbal abuse and feelings about personal or newborn safety. Discuss safety plans and referrals as appropriate.
Nutrition/physical activity/healthy weight	Discuss postpartum physical activity, nutrition and the benefits of a healthy weight following and between pregnancies. Outline the longer term health risks associated with cumulative weight gain, including diabetes.

Plan for management of alcohol tobacco/ substance use	Based on screening tools and answers to questions above, provide resources and/or referrals as appropriate. For more information, refer to the SOGC Guidelines on alcohol use *[61]* and substance use in pregnancy *[22]*, as well as the following resources (Appendix B): Pregnets and MotherRisk.
Contraception	Discuss plans for future pregnancies/contraception. Discuss risks and benefits of different methods, including the effects on breastfeeding. Prescribe and arrange chosen method.
Pelvic floor exercises	Review pelvic floor exercises to help strengthen pelvic floor muscles. Provide resources and referrals as appropriate.
Community resources (e.g. Healthy Babies Healthy Children)	Outline prenatal, postpartum and child resources available in the community and online.
Advice regarding future pregnancies and risks	Based on pregnancy history and outcomes, outline potential risk factors and important considerations for future pregnancies (e.g. preterm birth, severe jaundice, placental issues, and gestational diabetes). Considerations may include education, preconception planning and communication with other members of the health care team. [63] Risk factors for the future development of early cardiovascular disease such as hypertension, gestational diabetes, growth restriction etc. should be discussed and strategies to modify risk identified.
Preconception planning: folic acid, medications, etc.	Outline health promotion strategies for future pregnancies. For more information, refer to the SOGC Guideline [8].
If CS, future mode of birth and pregnancy spacing	Discuss the recent caesarean section. Discuss options for future births, outlining factors associated with successful vaginal birth after caesarean in a subsequent pregnancy, as well as any contraindications. Provide written information about the reasons for their Caesarean birth and their options for future births. Written information could be in the form of an operative report, but should be in a format that is easy to read and includes the following: gestational age; reason for Caesarean section; fetal position and presentation; length of labour and dilation before Caesarean section; whether labour was induced or augmented; type of uterine incision, extension of the incision, and closure; and any contraindication to future vaginal birth. [53]
Other comments / concerns	A pregnant person with chronic medical conditions, such as hypertensive disorders, obesity, diabetes, thyroid disorders, renal disease, mood disorders, and substance use disorders should be counseled regarding the importance of timely follow-up with their obstetrician-gynecologist or primary care providers for ongoing coordination of care [63]. For a pregnant person who has experienced a stillbirth, or neonatal death, it is essential to ensure follow-up with an obstetrician-gynecologist or other obstetric care provider [63].
Signature of healthcare provider	

Appendix A: Acronyms and Abbreviations

Acronym	Full Term
A (in GTPALS)	Abortions
Abn	Abnormal
ADD	Attention Deficit Disorder
AFP	Alpha-feto Protein
ASA	Acetylsalicylic Acid
BP	Blood Pressure
BMI	Body Mass Index
Cig	Cigarettes
CF	Cystic Fibrosis
CMV	Cytomegalovirus
CS	Caesarean Section
C&S	Culture & Sensitivity
CVS	Chorionic Villus Sampling
EDB	Estimated Date of Birth
eFTS	Enhanced First Trimester Screening
EPDS	Edinburg Perinatal/Postpartum Depression Scale
FGM	Female Genital Mutilation
FHR	Fetal Heart Rate
FM	Fetal Movement
FTS	First Trimester Combined Screening
G (in GTPALS)	Gravida
GA	Gestational Age
GBS	Group B Streptococcus
GC	Gonorrhea
GCT	Glucose Challenge Test
GDM	Gestational Diabetes Mellitus
GI	Gastrointestinal
GTT	Glucose Tolerance Test
Hb or Hgb	Hemoglobin
HBsAG	Hepatitis B Surface Antigen
Hep B	Hepatitis B
Hep C	Hepatitis C
HIV	Human Immunodeficiency Virus
HPLC	High performance liquid chromatography
HQO	Health Quality Ontario
HSV	Herpes Simplex Virus
Ht	Height
HTN	Hypertension
IPS	Integrated Prenatal Screening
IUGR	Intrauterine Growth Restriction

IUI	Intrauterine Insemination
KG	Kilograms
L (in GTPALS)	Living Children
LEEP	Loop Electrosurgical Excision Procedure
LMP	Last Menstrual Period
M	Metres
MCV	Mean Corpuscular Volume
MRN	Medical Record Number
MRP	Most Responsible Provider
MSK	Musculoskeletal
MSS	Maternal Serum Screening
Neg	Negative
NIPT	Non-Invasive Prenatal Testing (cell free DNA)
NT	Nuchal Translucency
OHIP	Ontario Health Insurance Plan
OTC	Over the counter (i.e. medications)
Pap	Papanicolaou Test
P (In GTPALS)	Preterm
Parvo	Parvovirus
PPH	Postpartum Hemorrhage
Pres.	Presentation
PROM	Pre-Labour Rupture of Membranes
P-PROM	Preterm Pre-Labour Rupture of Membranes
Rh(D)	Rhesus
Rx	Prescription
PTB	Preterm Birth
PTSD	Post-Traumatic Stress Disorder
S (in GTPALS)	Stillbirth
SFH	Symphysis Fundal Height
SOGC	The Society of Obstetricians and Gynaecologists of Canada
STI	Sexually Transmitted Infection
T (in GTPALS)	Term
T1 or T2	Trimester 1 or Trimester 2
TB	Tuberculosis
TdAP	Tetanus, Diphtheria, Pertussis
Toxo	Toxoplasmosis
TSH	Thyroid-Stimulating Hormone
US	Ultrasound
VBAC	Vaginal Birth After Caesarean
Wt	Weight

Appendix B: Additional Resources

Resource	Resource Location
OPR – Page 1	
Sexual Orientation – Rainbow Health • Offers training to health and social service providers across the province on a variety of LGBTQ related topics	www.rainbowhealthontario.ca
Infectious Diseases • Public Health Agency of Canada - Canadian Guidelines on Sexually Transmitted Infections in Pregnancy • Centers for Disease Control and Prevention	http://www.phac-aspc.gc.ca/std-mts/sti-its/cgsti-ldcits/section-6-4-eng.php https://www.cdc.gov/zika/ https://www.cdc.gov/lyme/index.html https://www.cdc.gov/westnile/index.html
Mental Health • The Healthy Babies Healthy Children (HBHC) program provides Screening, assessment and home visiting intervention provided by a Public Health Nurse and Home Visitor. • HBHC supports families with a variety of identified bio-psychosocial risk factors that could compromise child development with in-home intervention services to strengthen protective factors.	http://www.children.gov.on.ca/htdocs/English/earlychildhood/health/index.aspx
Smoking • Pregnets (Prevention of Gestational and Neonatal Exposure to Tobacco Smoke). They provide information, resources and support to pregnant and postpartum women and their health care providers. • ACOG – A Clinician's Guide to Helping Pregnant Women Quit Smoking • RNAO – Supporting Pre- and Postnatal Women and their Families Who Use Tobacco	www.pregnets.org www.acog.org/~/media/Departments/Tobacco%20Alcohol%20and%20Substance%20Abuse/SCDP.pdf http://rnao.ca/bpg/courses/supporting-pre-and-postnatal-women-and-their-families-who-use-tobacco
Poverty • Ontario College of Family Physicians Clinical Tools and Resources	http://ocfp.on.ca/tools/clinical-tools-and-resources#wh

Resource	Resource Location
Intimate Partner Violence	http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Health-Care-for-Underserved-Women/Intimate-Partner-Violence http://rnao.ca/sites/rnao-ca/files/Woman_Abuse_Screening_Identification_and_Initial_Response.pdf https://sogc.org/wp-content/uploads/2013/01/157E-CPG-April2005.pdf
Nutrition in Pregnancy	http://www.hc-sc.gc.ca/fn-an/nutrition/prenatal/index-eng.php
OPR – Page 2	
Pap Tests – Cancer Care Ontario	https://www.cancercare.on.ca/common/pages/UserFile.aspx?fileId=13104
Lab tests in Pregnancy • ACOG describes routine testing in pregnancy	http://www.acog.org/~/media/For%20Patients/faq133.pdf
Diabetes Screening • Executive summary and algorithms	http://guidelines.diabetes.ca/
Prenatal Screening • An overview of ON prenatal screening	http://prenatalscreeningontario.ca/
Ultrasound in Pregnancy • Determination of gestational age (SOGC) • Ultrasound in twin pregnancy • ACOG Guideline	 https://sogc.org/wp-content/uploads/2014/02/gui303CPG1402E.pdf https://sogc.org/wp-content/uploads/2013/01/gui260CPG1106E.pdf http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Guidelines-for-Diagnostic-Imaging-During-Pregnancy-and-Lactation
OPR – Page 3	
Immunization in Pregnancy • SOGC information • CDC overview	 https://sogc.org/wp-content/uploads/2013/01/gui220CPG0812.pdf http://www.cdc.gov/vaccines/pregnancy/pregnant-women/ http://www.cdc.gov/vaccines/pregnancy/downloads/immunizations-preg-chart.pdf
Fetal Movements • Movements Matter	https://www.tommys.org/pregnancy-information/symptom-checker/baby-moving-less/movements-matter-raising-awareness-fetal-movements

Resource	Resource Location
Breastfeeding • Best Start Resource Centre - Ontario specific fact Sheets for pregnancy and infant feeding • CMNRP- Breastfeeding Toolkit	http://en.beststart.org http://www.cmnrp.ca/en/cmnrp/BreastfeedingHealth_Care_Providers_p4872.html
OMama • Ontario specific website and mobile app	www.omama.com
Vaginal Birth after Caesarian Section (VBAC) • Quality Standards • Patient Reference Guide	http://www.hqontario.ca/Evidence-to-Improve-Care/Quality-Standards/View-all-Quality-Standards/Vaginal-Birth-After-Caesarean-VBAC
Travel and Pregnancy • Gov't of Canada • ACOG information	https://travel.gc.ca/travelling/health-safety/travelling-pregnant http://www.acog.org/Patients/FAQs/Travel-During-Pregnancy
General Resources	
Society of Obstetricians & Gynaecologists of Canada	www.sogc.org
The Association of Ontario Midwives (AOM)	www.aom.on.ca
Public Health Agency of Canada	www.phac-aspc.gc.ca
National Institute of Health and Care Excellence	www.nice.org.uk
Decision Aids for Pregnancy • Ottawa Hospital Research Institute Resources • Society of Obstetricians & Gynaecologists of Canada	https://decisionaid.ohri.ca/AZsearch.php?criteria=pregnancy https://www.pregnancyinfo.ca/
Healthy Babies Healthy Children	http://www.children.gov.on.ca/htdocs/English/earlychildhood/health/index.aspx

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