

An Analysis of Mental Health Indicators on Canadian Prenatal/ Antenatal Records

April 2024

Part of a series on the state of perinatal
mental health data capture in Canada

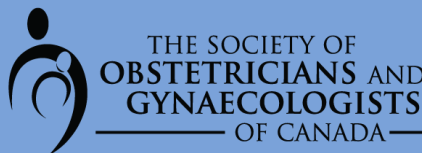


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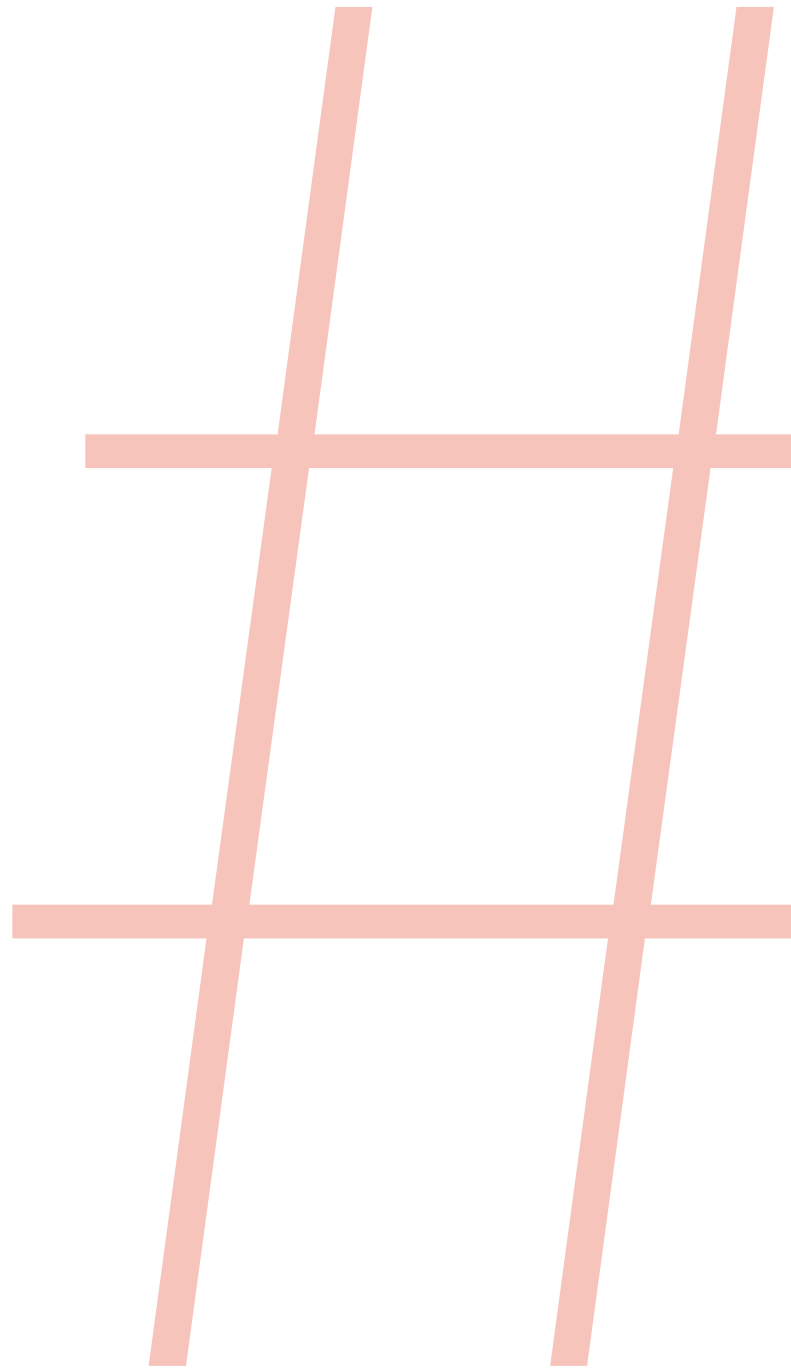
Appendix 1: Gaant Chart: Analysis of Provincial/Territorial Perinatal Forms

Background

In Canada, every province and territory has a data form that comprises the prenatal/antenatal record; however, no two forms are the same. Each captures different information, creating discrepancies in the collection of demographic and health-related data. Further, for records that do include questions on the same topic, they often differ in their definitions for the data elements and in the mandatory elements that are conveyed to provincial and territorial databases. The information that is captured in databases from the antenatal record is often not reported on and is not shared between provincial and territorial systems due to an absence of data sharing agreements. When data is reported in an aggregated manner, the differences in data collection across jurisdictions can lead to inaccurate reporting about the health of Canadian women.

One of the most significant gaps in data capture within the antenatal record is related to perinatal mental illness (PMI). PMI is one of the most common complications of pregnancy and the postpartum period, and the COVID-19 pandemic has only served to increase its incidence among Canadian women. In light of this, there is an urgent need to determine what fields related to PMI are currently captured on provincial and territorial data forms and how these fields compare in order to identify gaps and determine the best routes for standardization between forms.

The focus of this report is to categorize and describe the data fields related to perinatal mental health on the prenatal or antenatal record of each province and territory, which we obtained from public websites or directly from key stakeholders in each region. Information captured on the forms will be qualitatively compared across regions to help identify strengths and gaps within provinces and territories. Ultimately, we aim to use our findings to inform the best methods for standardization and alignment between forms in partnership with key stakeholders across Canada, including provinces and territories.



Patient demographics

We first analyzed the general structure of prenatal and antenatal data forms from all provinces and territories. Note that Yukon currently uses British Columbia's data form. Across provinces and territories, most prenatal and antenatal data forms follow the same general structure. For the purposes of this report, only the sections that can be utilized to help identify patients at risk of PMI will be discussed.

Every data form begins with demographic information about the patient. See Table 1 for a complete categorization of this section.

General information

All provincial and territorial data forms include fields for the patient's name and date of birth. All provinces and territories except British Columbia (BC)/Yukon (YK) request an address. BC/YK and Northwest Territories (NWT) are the only two forms that do not collect contact information, such as a phone number or email address, from patients. All but three data forms (Alberta (AB), Newfoundland (NFL), and Quebec (QC)) include a field about the patient's highest level of education, and all but QC ask about the patient's employment or occupation. Interestingly, while AB does not capture education directly in the patient demographics, this information may be captured in a supplemental *Healthy Mother, Healthy Baby Questionnaire* referenced as part of the care pathway at the initial prenatal visit.

From a data collection standpoint, social and cultural factors captured from demographic information can greatly inform the risk of PMI. Studies suggest that education level, unemployment, and economic status are significantly correlated with perinatal depression.^{1,2} Therefore, standardized collection of such data in all regions can provide a more complete picture of PMI in Canada and help identify women who may be at risk of developing PMI.

Partner information

The majority of data forms ask the patient about their relationship status, with the exception of NWT and QC, although both of these forms do include fields for the partner's name and age, and, in the case of NWT, their occupation and ethnic origin. AB also asks about partner ethnicity, in addition to name and occupation. Data forms from BC/YK, Manitoba (MB), NFL, and Prince Edward Island (PEI) include fields for the father's name, occupation, and age. In addition to these fields, New Brunswick (NB), Ontario (ON), and Saskatchewan (SK) also include education level and Nova Scotia's (NS) prenatal record includes the partner's gender and whether the partner is involved. Nunavut's (NT) prenatal record is unique in that, while it does not ask for the partner's name or age, it does request their education, occupation, and ethnicity, as well as their height and weight and whether they live with the patient.

It is important to note that, while most data fields request information related to the partner, some explicitly state "father." It is important to distinguish the reasoning behind these disparate headings. For instance, is the information collected for biological purposes, in which case the "father" or "donor" information is important, or is it related to social support, in which case "partner" is likely the more appropriate term. BC/YK neatly address this discrepancy but included a field asking for the "biological father/donor" name and an option to select that it is the same as the "partner." Similarly, NS's form asks if the patient has a support person and captures their name.

As a lack of social support, partner unemployment, and marital or partner dissatisfaction are associated with increased risk of antenatal depression and anxiety² and postpartum depression,³ it is important to inquire about relationship status, partner involvement, and social supports at perinatal visits. Whether this occurs when capturing demographic information from the patient or as part of a general discussion may vary across provinces and territories, but it should be captured in some capacity in all regions.

Race, ethnicity, language

Only 6 of the 12 data forms (AB, BC/YK, NB, NS, NT, NWT) include fields regarding the patient's race or ethnicity; only BC/YK, NB, NS, and NT specifically ask about Indigenous identity. NB includes "First Nation" as a choice for ethnic or racial background, and BC/YK includes separate fields for ethnicity and Indigenous identity, including whether the patient is status or non-status. As is reflective of their population demographics, NT's prenatal record focuses primarily on Indigenous identity, including only "Non-Aboriginal" as a qualifier for all other ethnicities. Interestingly, asks patients about their Indigenous identity as part of the demographics, but asks for patient ethnicity when taking a health history.

The patient's preferred language is asked about in 6 data forms from AB, BC/YK, NS, NT, ON, and SK. Of these provinces and territories, only 3 (ON, NS, SK) ask whether an interpreter is required. As with ethnicity, NT's prenatal record reflects the demographics of the population including options for Inuktitut and Inuinnaqtun languages alongside English, French, and Other.

Among all the data forms, 3 provinces (BC/YK, NS) include data fields regarding cultural beliefs and religion that may affect care (e.g., Jehovah's Witness). While not captured in the demographic information, NWT's prenatal record does ask about beliefs and practices, including the acceptance of blood products elsewhere in the data form, and AB's includes beliefs as part of the social/cultural information captured in the patient's history.

Canada has long prided itself on being a multicultural society open to immigrants and refugees of all ethnic backgrounds and identities. As the population continues to grow and increase in diversity, it is imperative that race-based and Indigenous identity data is collected in all healthcare settings to address unfair differences or inequities, and help inform the development of appropriate supports and services, such as interpreters and culturally-safe resources. Regarding PMI, a significant

body of evidence indicates that certain communities and groups of people, including Indigenous women, racial minorities, and immigrant women are at a significantly increased risk of PMI.⁴⁻⁷ Therefore, it is imperative to standardize the collection of information related to race, ethnicity, and language/immigration across all prenatal/antenatal data forms to help healthcare providers identify potential risk factors for PMI and give insight into the prevalence of and contributors to PMI within Canada. It is interesting that NS captures ethnicity as a part of the health history and not demographics. This points to ethnicity as a risk factor alongside lifestyle and genetic risks. This could be a potential method of capture across all data forms to highlight the importance of this data.

Special considerations

Interestingly, both BC/YK and NS include a data field about the patient's gender or preferred pronouns and ON has a field to specify the patient's sexual orientation. While AB does not have a field for sexual orientation, sexuality is listed as a counselling topic for the first prenatal visit. ON and SK ask about patient disability or any accommodations required for special needs.

Women with intellectual and developmental disabilities are known to have increased rates of pregnancy complications, including a high prevalence of new-onset, recurrent, and ongoing PMI.⁸ They also often face discrimination and stigma in healthcare. Similarly, childbearing members of the 2SLGBTQI+ community face unique challenges during pregnancy that can increase their risk of PMI, including isolation, lack of social support, exclusion from traditional pregnancy care, stigma, and discrimination. Further, many healthcare providers do not have adequate training or knowledge to provide trauma-informed care tailored for 2SLGBTQI+ people.⁹ As a first step towards improving care for 2SLGBTQI+ individuals, all patients should be asked for their pronouns on prenatal and antenatal data forms to avoid misgendering them. As indicated above, "partner" should

replace “father” on data forms, unless specifically referring to the biological father, which should be clearly stated. This can help eliminate assumptions related to heteronormativity. As trauma-informed practices are slowly being integrated into clinical care across Canada, it is important for healthcare providers to be aware of any special considerations they must take into account to allow for appropriate, patient-centred care for all pregnant individuals.

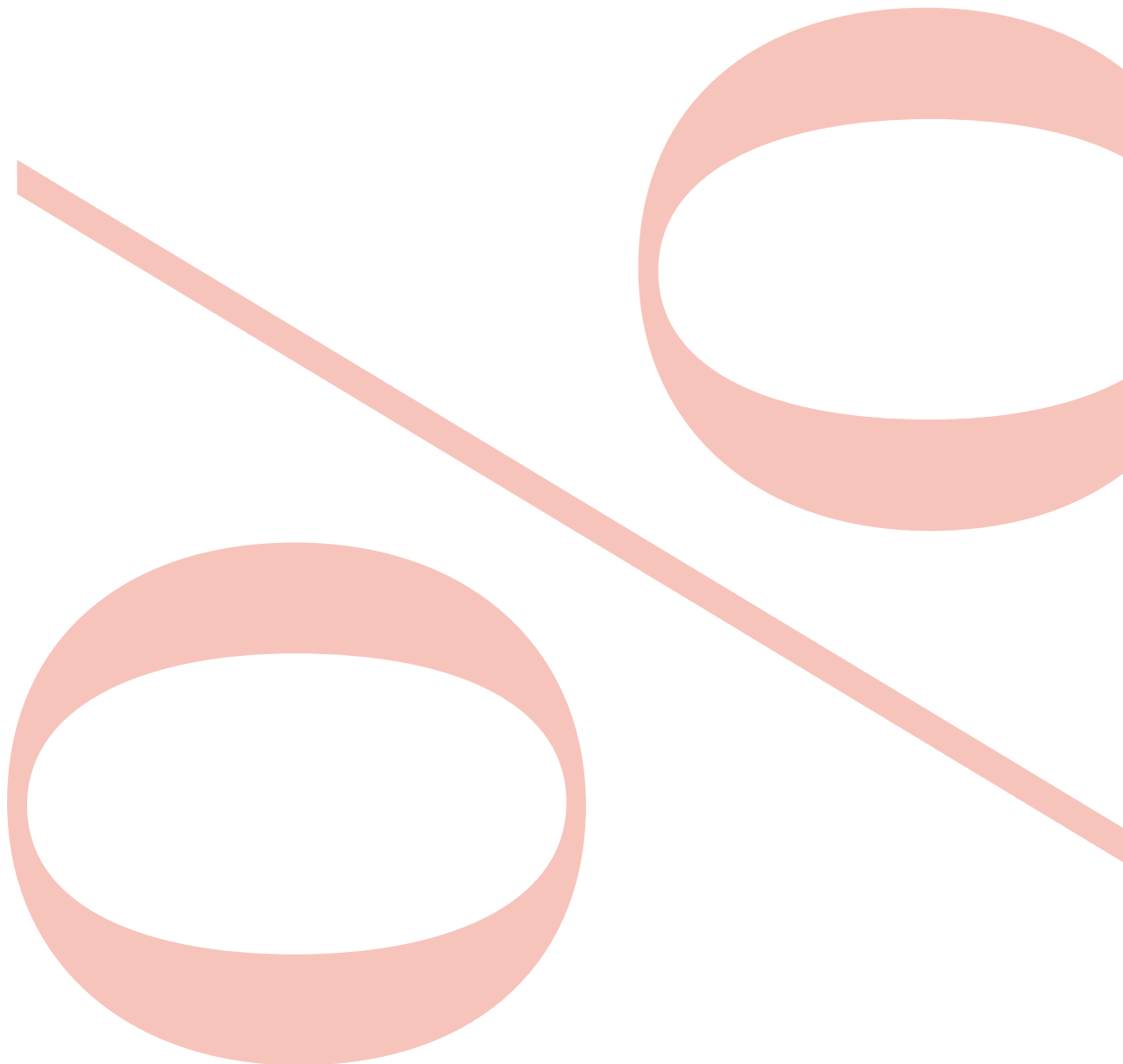


Table 1. Demographic information captured by each data form

Provinces/ territories	Patient name and DOB	Patient address	Patient contact information (phone number or email)	Patient education level	Patient employment status or occupation	Relationship status or partner information	Language	Culture/beliefs	Race or ethnicity	Indigenous identity	Patient gender or preferred pronouns	Sexual orientation	Disability or special considerations	Province/territory total (/13)
Alberta	Yes	Yes	Yes	No ^a	Yes	Yes	Yes	No ^a	Yes	No ^a	No	No ^a	No	7
British Columbia	Yes	No ^b	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	9
Manitoba	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	6
New Brunswick	Yes	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No	8
Newfoundland & Labrador	Yes	Yes	Yes	No	Yes	Yes	No	No	No	No	No	No	No	5
Northwest Territories	Yes	Yes	No	Yes	Yes	Yes ^c	No	No ^d	Yes	No	No	No	No	6
Nova Scotia	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes ^a	Yes	Yes	No	No	11
Nunavut	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	No	No	9
Ontario	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes	9

Prince Edward Island	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	No	No	6
Quebec	Yes	Yes	Yes	No	No	Yes ^c	No	No	No	No	No	No	No	4
Saskatchewan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No	No	No	Yes	8
Yukon	Yes	No ^b	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	9
N across Canada	13	11	10	10	12	13	7	3	7	5	3	1	2	

^aThis information is not captured in the demographics section of the prenatal/antenatal record but is captured elsewhere in the form as part of the health history taken at the initial visit or as part of a supplemental questionnaire (*e.g. Alberta's Healthy Mother, Healthy Baby*)

^bPatients are not asked to provide an address but are asked whether they live on and/or off reserve.

^cNWT and QC do not ask expressly about relationship status, partner information is captured in the demographic section.

^dPatients are not asked directly about cultures and/or beliefs but are asked whether they would accept blood products as part of the "Beliefs and Practices" section of the health history.

Patient history

All data forms capture information on the patient history to form a more complete picture of their overall health.

Obstetrical

The obstetrical history section of all data forms is fairly standardized across provinces and territories. Each form includes the overall number of previous pregnancies (gravida) and how many were term, preterm, abortus (induced or spontaneous), stillbirth, neonatal/child death, and living. For each pregnancy, the date, place of birth, gestational age, duration of labour, mode of birth, sex, birthweight, current health of the child, breastfeeding, and any pregnancy complications are recorded.

While this information is important to identify potential risk factors or physical complications in the current pregnancy, it can also help identify potential risks for PMI. For instance, women who experience a perinatal loss or stillbirth are two times more likely to develop PMI than those with a livebirth,¹⁰ and women with high-risk pregnancies, including those affected by maternal or fetal complications, have higher rates of depression and anxiety.^{11,12} While a history of such complications may not repeat in the current pregnancy, these women could have underlying or undiagnosed PMI that is at risk of worsening or recurrence in the current pregnancy and should be monitored.

Family and medical

Family and medical history in the prenatal and antenatal data forms typically captures information important to the overall health of the women and to identify risk factors for complications. Forms differ in the actual number of items captured, but all offer a comprehensive history to inform current care; elements related specifically to PMI will be discussed in a later section.

Social and lifestyle

Items related to lifestyle or social history are captured in all data forms in some capacity (either as part of the patient history or as

general discussion topics). Such items include, but are not limited to, support systems, violence (intimate partner or family), abuse, and security and safety (financial, housing, or nutrition). The prenatal records for NS, NT, and SK include the Woman Abuse Screening Tool (WAST) to assess intimate partner violence. NWT uses the SAFE tool and MB uses an adapted Antenatal Psychosocial Health Assessment (ALPHA) to ask patients questions about their stress levels, home situation, and social support as part of their history.

As stated above, a lack of support is associated with increased risk of antenatal depression and anxiety^{2,13} and postpartum depression.³ Additional risk factors for PMI include social conflict, financial insecurity, and current or past intimate partner violence.^{1,2,13} Adverse childhood experiences (ACEs), which include abuse, neglect, trauma, and household violence prior to the age of 18 can also increase the risk of perinatal depression and PTSD.^{14,15} Given the association between social risk factors and PMI, it is reassuring that all data forms are capturing this important information; however, in order to account for the impact of past violence, abuse, or trauma on PMI it may be useful to standardize social risk screening as part of the patient's health history, in addition to any discussions occurring in the current pregnancy.

In forms from all provinces and territories, patients are asked about substance use either pre-pregnancy, as part of the medical history, and/or during the present pregnancy. All of the data forms ask general substance use or include a field to indicate other substances being used (e.g., cocaine, opioids, prescribed, non-prescribed), and all ask specifically about alcohol and smoking. Eight provinces and territories (BC/YK, NB, NWT, NS, NT, ON, and SK) ask specifically about cannabis use. Eight provinces and territories include screening tools for alcohol use and indicate where to record the patient's score. MB, NFL, NS, ON, PEI, and SK use the T-ACE while NWT, NT use the TWEAK scoring Guide. There is no statistical difference in the effectiveness of

one alcohol screening tool over the other in pregnancy.¹⁶

In addition to the adverse effect that substance use can have on maternal and child health and pregnancy outcomes, substance use is closely linked with mental illness. Current or past alcohol use and smoking, as well as current substance use during pregnancy, are all risk factors for perinatal anxiety and depression.^{1,2} It is important to continue to capture information related to substance use at the patient's initial visit, and continue screening throughout pregnancy if any risks are identified. In light of the legalization of cannabis products in Canada, and the lack of evidence available on the effects of cannabis during pregnancy, it would be advantageous to standardize screening for cannabis across all data forms.

Data fields specific to PMI

We next analyzed the data fields in the prenatal and antenatal data forms specifically related to mental health. Other analyses and reports^{17,18} have indicated that universal screening for perinatal mental health is only recommended on the prenatal and antenatal data forms of 9 provinces and territories; however, screening in this context refers to a required assessment and score captured in the primary care record by validated instruments, and does not include general education or discussion.¹⁸ Indeed, even in provinces and territories where screening is prompted by the prenatal/antenatal record and/or where the record contains screening tools as appendices, there is significant variation in the recommendations regarding the timing of screening. The prenatal and antenatal records also differ in the number and structure of data fields related to PMI.

Here we aim to confirm these findings and provide a deeper analysis of how and when data related to PMI is captured in the prenatal and antenatal records during the perinatal period. We will also assess which provinces and territories offer more comprehensive approaches to PMI management such as the

inclusion of screening questionnaires and/or referral pathways. A Gantt chart listing all findings can be found in Appendix 1.

Preconception: family and medical history
PMI data captured in the patient health history is summarized in Table 2.

When capturing information on a patient's history, 7 provinces and territories (AB, BC/YK, MB, NS, ON, PEI) directly ask patients about a family history of mental illness or psychiatric disorders. In addition to asking about any mental illness, AB and MB specifically ask about depression and BC/YK ask about substance use disorder as part of the family history. ON includes mental health as an example of family medical conditions alongside diabetes and hypertension.

Regarding the patient's own medical history, all prenatal and antenatal records ask about mental illness. NB, NFL, NT, NWT, and QC ask only about general psychiatric/mental health with a space to indicate a specific diagnosis/disorder. Eight provinces and territories (AB, BC/YK, MB, NFL, NS, ON, and SK) ask about a history of depression, including postpartum (BC/YK and NS). Five provinces (BC/YK, NS, ON, and SK) ask about anxiety and bipolar disorder, and 5 others (BC/YK, NS, ON, and PEI) ask about eating disorders.

Some perinatal records provide a more in-depth medical history related to mental health than others. For instance, in addition to the fields already mentioned, BC/YK's asks about antenatal substance use disorder, NS's asks about schizophrenia, and ON's about both schizophrenia and other disorders (including post-traumatic stress disorder, attention deficit disorder, and personality disorders). ON includes room for the Generalized anxiety disorder (GAD)-2 and Patient Health Questionnaire (PHQ)-2 scores, respectively, while SK includes the EPDS score as part of the patient history.

A personal or family history of mental illness are risk factors for new onset anxiety and depression during pregnancy.^{1,2,13} Further, individuals with pre-existing mental health problems are often at an increased risk of recurrence or worsening during the perinatal period. For instance, more than half of pregnant women with a history of bipolar disorder, experience recurrence during pregnancy¹⁹ and the postpartum period is associated with a diagnostic change from depressive disorder to bipolar disorder.²⁰ While most provinces and territories ask patients about a personal history of mental illness, it is imperative that this data field is adopted by the perinatal records of all regions as an indicator in both the family and personal medical history. While asking patients detailed questions about mental illness may not be feasible given the time allotment for perinatal visits, healthcare providers must be aware of any underlying concerns in order to properly monitor patients' mental health and provide appropriate care.

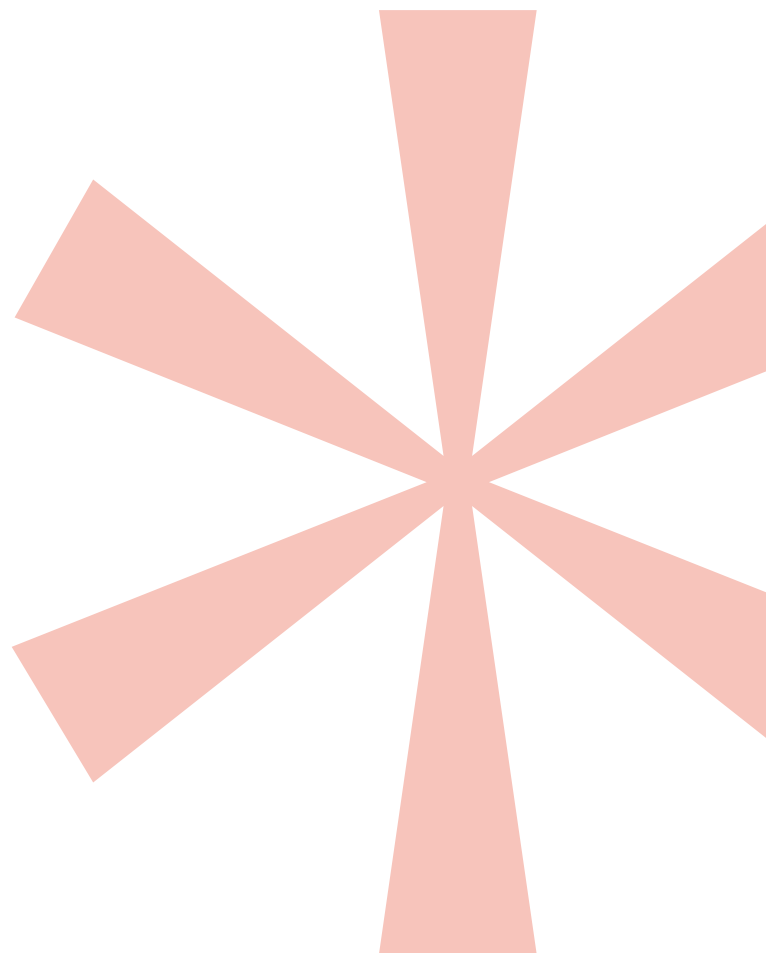
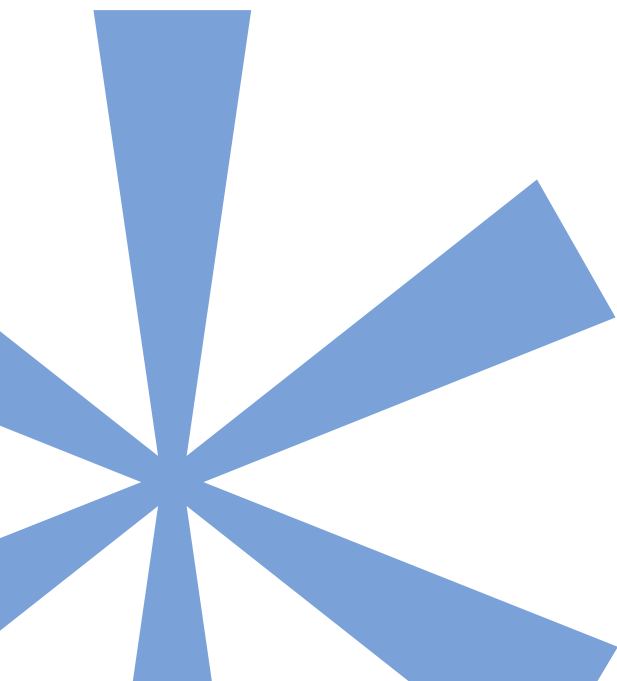
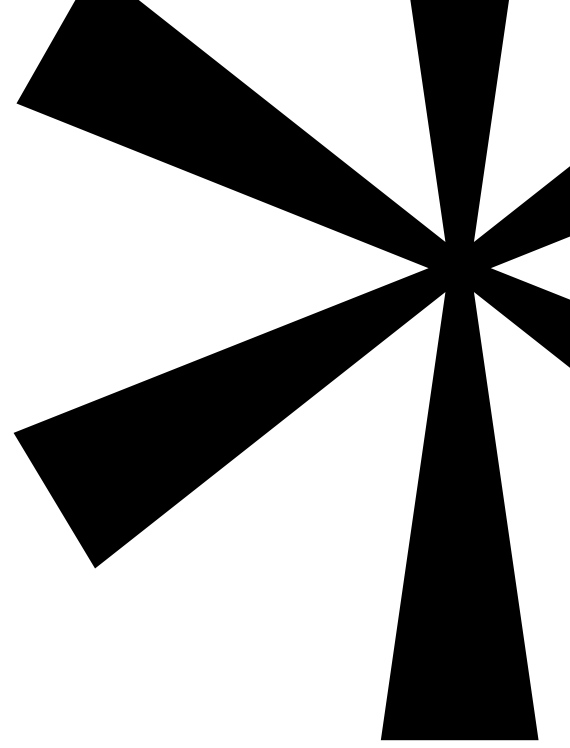


Table 2. PMI data fields included as part of the health history

Provinces/ territories	Family history of mental illness	Any personal history of mental illness	History of depression	History of anxiety	History of bipolar disorder	History of eating disorder	History of schizophrenia	History of PTSD	History of substance use disorder	Province/territory total
Alberta	No	Yes	Yes ^a	No	No	No	No	No	No	2
British Columbia	Yes	Yes	Yes ^b	Yes	Yes	Yes	No	No	Yes	7
Manitoba	Yes	Yes	Yes	No	No	No	No	No	No	3
New Brunswick	No	Yes	No	No	No	No	No	No	No	1
Newfoundland & Labrador	No	Yes	Yes ^a	No	No	No	No	No	No	2
Northwest Territories	No	Yes	No	No	No	No	No	No	No	1
Nova Scotia	Yes	Yes	Yes ^b	Yes	Yes	Yes	Yes	No	No	7
Nunavut	No	Yes	No ^c	No	No	No	No	No	No	1
Ontario	Yes ^a	Yes	Yes ^d	Yes ^d	Yes	Yes	Yes	Yes ^a	No	8
Prince Edward Island	Yes	Yes	No	No	No	Yes ^a	No	No	No	3

Quebec	No	Yes	No	No	No	No	No	No	No	1
Saskatchewan	No	Yes	Yes ^d	Yes	Yes	No	No	No	No	4
Yukon	Yes	Yes	Yes ^b	Yes	Yes	Yes	No	No	Yes	6
N across Canada	6	13	8	5	5	5	2	1	2	

^aThe item is not listed as a separate data field in the family/patient history but is included as an example of a medical condition/mental illness.

^bHistory of postpartum depression included as a separate line item from depression.

^cDepression is listed in the Risk Assessment Guide under Medical History but is not directly asked about when taking a medical history.

^dScreening with a validated tool is indicated.

Current pregnancy

Data fields related to PMI within the current pregnancy are included in the perinatal record as either a topic for general discussion with the patient (without an indication of timing) and/or as specific items to discuss at defined perinatal visits. A summary of PMI indicators in the current pregnancy is found in Table 3.

All provinces and territories, with the exception of AB, MB, NFL, and QC, include PMI as a discussion point for the present pregnancy.

- AB: past prenatal records included discussions of PMI that are no longer indicated at any point during pregnancy on the current prenatal record. In the *Healthy Mother, Healthy Baby Questionnaire* referenced at the first prenatal visit, PMI is not expressly evaluated.
- MB: a checkbox for depression is included among “associated conditions” that may be risk factors for the present pregnancy, but the prenatal record does not include mental health as a discussion topic. Therefore, it is difficult to ascertain if discussions around PMI occur during the current pregnancy or only during the health history.
- NFL: the prenatal record does not include PMI as a discussion topic for the current pregnancy despite listing past postpartum depression and mental illness as indicators in the patient’s risk assessment.
- QC: anxieties/apprehensions and fears (craintes, peurs) are listed among topics for discussion in the present pregnancy. While this may lead to a more structured discussion or assessment of mental health, it does not appear to be specific to PMI.

NB and PEI recommend a general assessment for mental health, but the timing is unclear.

- NB: the depression scale is listed among the discussion topics, but timing for discussion is not indicated.
- PEI: there is an indication for a general prenatal psychosocial assessment as part of the patient’s care plan with the option to select if such an assessment was declined

or completed, although it is unclear what this assessment entails.

Five provinces and territories (BC/YK, NT, ON, and SK) include mental health as a topic for discussion during specific trimesters.

- BC/YK: the antenatal record indicates that mental health should be a discussion topic from the 1st-3rd trimester as indicated.
- NT: patients are asked about antidepressant use in the 2nd and 3rd trimester.
- ON: mental health is listed as a topic for discussion in both the 2nd and 3rd trimesters. Assessment of present mental health, along with spaces to record the GAD-2 and PHQ-2 scores, is included as part of the medical history (as discussed above), suggesting that discussions also occur at the patient’s initial visit. It is unclear if patients are screened again using the GAD-2 and PHQ-2 during the 2nd and 3rd trimesters.
- SK: mental health is listed as a discussion topic in each trimester.

Seven provinces and territories (BC/YK, NB, NS, NT, NWT, and SK) recommend assessment with the EPDS during pregnancy.

- BC/YK: specifically recommends EPDS screening in the 3rd trimester and the record contains a box to record the EPDS score, anxiety and self-harm subscores, the date, gestational age, and follow-up.
- NB: the antenatal record includes a space to record the EPDS score at 28-32 weeks as part of “laboratory and diagnostic imaging,” but does not provide any indication of how to approach screening.
- NS: there is space for three separate EPDS scores and the associated date within the prenatal record to correspond with screening once in each trimester of pregnancy.
- NT: patients are screened using the EPDS in the 2nd trimester (28-32 weeks).
- NWT: the prenatal record includes a space for an EPDS score and the date performed with a suggested timing of 28-32 weeks.

- SK: includes a place to record the EPDS score along with other screening results (T-ACE, WAST-II) from 28-32 weeks.

While the majority of provinces and territories are asking patients about their mental health as part of their discussions, it is clear that there is a serious lack of coordination on when and how these discussions occur. It is critical that a standard process for the screening of PMI is implemented in all provinces and territories to ensure that all women are assessed and managed in a similar fashion. Standardizing questioning and discussions around PMI for all women can help minimize bias and reduce stigma by integrating mental health care discussions into regular checkups. Homogenizing when and how data around PMI is collected can also provide a better measure of the prevalence of PMI in Canada and help inform policy decisions and improve the quality of care.

Table 3. PMI data fields included as part of the current pregnancy

Provinces/ territories	Any data fields related to PMI	PMI as general discussion topic	PMI discussion during 1st trimester	PMI discussion during 2nd trimester	PMI discussion during 3rd trimester	Use of screening tool (timing)^b	Province/territory total
Alberta	No	No	No	No	No	No	0
British Columbia	Yes	No	Yes	Yes	Yes	Yes (3 rd trimester)	5
Manitoba	No	No ^c	No	No	No	No	0
New Brunswick	Yes	Yes	No	No	No	Yes (28-32 weeks)	3
Newfoundland & Labrador	No	No ^c	No	No	No	No	0
Northwest Territories	Yes	No	No	No	No	Yes (28-32 weeks)	2
Nova Scotia	Yes	No	No	No	No	Yes (1 st , 2 nd , 3 rd trimester)	2
Nunavut	Yes	Yes	No	No ^d	No ^d	Yes (28-32 weeks)	3
Ontario	Yes	No ^e	No ^e	Yes	Yes	No ^f	3

Prince Edward Island	Yes	Yes	No	No	No	No	2
Quebec	No	No	No	No	No	No	0
Saskatchewan	Yes	No	Yes	Yes	Yes	Yes (28-32 weeks)	5
Yukon	Yes	No	Yes	Yes	Yes	Yes (3 rd trimester)	5
N across Canada	9	3	3	4	4	7	

^aPMI included as a topic for general discussion in the current pregnancy, but with no indication of timing for when this discussion should occur.

^bUnless otherwise indicated, the screening tool in use is the Edinburgh Postnatal Depression Scale (EPDS).

^cPMI is not listed as a discussion topic but is indicated as part of the patient's risk assessment.

^dMental health is not discussed but patients are asked about antidepressant use.

^ePresent mental health is asked about as part of the medical history taken at the initial visit, but mental health is not a discussion topic for the 1st trimester.

^fScreening with GAD-2 for anxiety and PHQ-2 for depression (with potential follow-up using EPDS) as part of the patient history taken at initial visit, but use of the tool is not indicated again during the present pregnancy.

Postpartum

Of the prenatal and antenatal records we examined, 7 included assessment of the delivery and/or postnatal examinations.

Six provinces and territories (BC/YK, MB, NWT, ON, and PEI) capture data elements related to the delivery/birth including the type of delivery and complications (e.g., blood loss, perineal tear, fetal death). BC/YK's birth record is perhaps the most comprehensive capturing information on the fetal presentation/position, analgesia, use of uterotonics, method of placenta delivery, cord management, and interventions, among other items.

Eight provinces and territories (AB, BC/YK, MB, NB, NWT, ON, and PEI) capture information from postnatal visits on their prenatal/antenatal records, including breastfeeding, pelvic function, vaccination, and family planning, among other topics. Of the forms that include postnatal assessment, only AB, BC/YK, and ON ask about and screen for postnatal mental illness. ON's perinatal record contains the most thorough postnatal visit assessment for PMI including data fields related to emotional wellbeing, relationship, family support/community resources, family violence and safety, and substance use, in addition to depression screening. BC/YK indicates screening with EPDS and AB lists postpartum depression as a topic for discussion, but the overall mental health assessment in these forms is far less detailed than ON.

As mentioned above in relation to obstetrical history, severe maternal morbidity, high-risk pregnancies, obstetrical complications, and caesarean delivery²¹ can significantly increase the risk of PMI, particularly in the postpartum period. Among women with severe morbidity during pregnancy, rates of PMI were almost two times the prevalence reported in the general obstetric population^{22,23} and PTSD related to a traumatic childbirth can be as high as 19% in those who experienced high-risk pregnancies.²⁴ PTSD is also a common psychosocial outcome after emergency caesarean delivery.²⁵

It is imperative that a summary of delivery, including any complications, are noted in a patients' antenatal record. Screening for PMI and, in particular, postpartum depression, is also crucial at postnatal visits and should be standardized for all women. By not including postpartum follow-up for PMI on the prenatal/antenatal data forms, many women may be falling through the cracks. This is especially true in cases where care is transferred following birth, or the patient had a difficult or complicated delivery.

Mental health resources

Screening tools or questionnaires

As mentioned previously, many prenatal/antenatal records make use of standardized questionnaires or tools to assess patients for alcohol use (T-ACE and TWEAK), intimate partner violence (WAST) and PMI (GAD-2, EPDS, PH-2). In total, 7 provinces and territories (BC/YK, NWT, NS, NT, ON, and SK) recommend screening using a validated tool or questionnaire and include the tool as an appendix in the data form.

There is significant variation in the recommendations for the use of screening tools, particularly the EPDS, during the perinatal period. Currently, the American College of Obstetricians and Gynecologists (ACOG) and the United States Preventive Services Task Force recommend that all patients are screened at least once in the perinatal period using a validated tool, such as the EPDS.^{26,27} Recommendations from The Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) are similar.²⁸ The Royal College of Obstetrics and Gynaecologists (RCOG) in the United Kingdom, however, recommends against systematic screening programs using instruments, such as a questionnaire, as does the Canadian Task Force on Preventative Health Care.²⁹ ACOG is updating their guidelines for publication in Summer 2023.

The recommendations from the Canadian Task Force stem from a lack of evidence as to whether screening confers benefit above the usual clinical care, which is assumed to include inquiry and attention to mental health and wellbeing. In addition to a lack of evidence regarding the effectiveness of screening tools, there is significant variation regarding patients' values, comfort levels, and preferences regarding screening methods. It is also known that many of the existing measures used to identify and screen for PMI, including questionnaires such as the EPDS, do not have cultural validity in many racial/ethnic groups, as the expression of mental illness can vary between cultures.³⁰

This lack of consensus on screening, globally and within Canada, is reflected in the differences in prenatal/antenatal records from different provinces and territories. This means that follow-up treatment and referrals are dependent on different metrics; either a cut-off score and “positive” screen using a validated tool, or the judgement of the health care provider based on their individual assessment of the patient. Whether all data forms should require screening with EPDS, or other validated tools, this must be decided upon at a national level to ensure that all patients are assessed in a standardized manner across all jurisdictions.

Referral pathways

Care for patients in the perinatal period is often a multidisciplinary effort between obstetricians, midwives, family physicians, nurses and other health care providers. As such, providing treatment and/or referrals for pregnant or postpartum patients is often fragmented due to frequent transfer of care, the scope of practice, and lack of clear processes for referrals to specialists or supports.

Of all the prenatal/antenatal records, only 4 (NFL, NS, NWT, and PEI) include defined referral pathways related to PMI. NFL, NS, and NWT are similar in that they simply include a checkbox for a referral made for mental health. PEI's suggested referral pathway provides a clearer indication of the recommended supports; referrals for psychosocial

assessment are directed to family doctors, while patients with indications of substance use and stress are directed to public health nurses, and those with eating disorders are referred to community dietitians.

AB, BC/YK, MB, and SK also make mention of referrals in their perinatal records for lifestyle/substance use and screening results (WAST, T-ACE, EPDS), but the process is much vaguer as they do not provide recommendations for where these referrals should be made, or if these referrals are specifically for PMI. Speciality clinical services for managing PMI are only available in 6 provinces and territories and only 6 have cross-cultural considerations for screening and treatment.¹⁸ As such, referral processes are subject to change and depend on the available supports and programs within a specific community or region where perinatal care is provided. While it is not feasible to include detailed pathways in perinatal records due to the breadth of resources available across provinces and territories, local resources and care pathways should be known to healthcare providers and any referrals made for PMI should be clearly noted including the type of support/treatment provided, date, and concern.

Strengths, weaknesses and opportunities for standardization

Strengths

- The majority of data forms are capturing a wide breadth of sociodemographic information that, when captured, can help inform prevalence data and risk factors for PMI. These include items such as education and occupation. BC/YK and NS provide the most comprehensive demographic information of all the provinces and territories with 9 and 8 indicators captured, respectively.
- Some provinces and territories (BC/YK, NS, ON) have created more inclusive prenatal/antenatal records by incorporating demographic fields related to gender, preferred pronouns, and sexuality. These patient-centred data fields can positively impact quality of care in a population at greater risk of PMI.
- All data forms capture a personal history of mental illness. This is incredibly important when it comes to addressing a patients' risk for new onset of PMI and monitoring a patient's pre-existing conditions for recurrence and changes in severity. ON's data form captures the most comprehensive data on a history of PMI with 8 data fields, followed by BC and NS with 7.
- The majority of provinces and territories (9/13) include some discussion and/or screening for PMI as part of their patient assessment in the present pregnancy. BC and SK offer the most comprehensive screening across pregnancy with discussions taking place in each trimester and screening using the EPDS in the 3rd trimester.

Gaps

- While a variety of demographic information is collected, just half (7/13) of the provinces and territories collect information related to race/ethnicity. NS captures this information in the health history rather than demographics section. The lack of data on race/ethnicity and its relationship to pregnancy outcomes, including PMI, is an ongoing issue in Canada and, given the higher risk of PMI in minority/marginalized populations, should be captured for appropriate risk assessment.
 - Even less data forms (5/13) ask specifically about patients' Indigenous Identity as either an option for race/ethnicity or as a separate demographic field. Indigenous Identity is most prominently represented on the data forms of NT and BC/YK where a large proportion of the population has Aboriginal (Indigenous) identity¹. Despite the high proportion of Indigenous peoples in NWT, MB, and SK, these provinces and territory do not ask about Indigenous identity.
- The patient's preferred language is only included on 7/13 data forms, which could lead to problems with communication among refugee and immigrant populations at higher risk of PMI.
- A family history of mental illness is only recorded by 6/13 provinces and territories, which means that a major risk factor for new onset PMI is not being detected in these patients.
- While almost all province and territories are capturing some data related to PMI in the present pregnancy, there is no standardization or consensus across regions, especially when it comes to the timing for these discussions and the use of screening tools.

- Four provinces (AB, MB, NFL, and QC) do not include any data fields for PMI in the present pregnancy.
 - MB and NFL include mental illness/ depression as risk factors during pregnancy, but whether discussions around PMI take place outside of the patient’s medical history is unclear as these issues are not listed among other topics for discussion.
 - Postpartum assessments or considerations for the transfer of care are not widespread among data forms, which may cause patients at risk of PMI in the postnatal period to be missed.

Opportunities for standardization

Standardizing prenatal/antenatal data forms across provinces and territories with diverse population demographics and healthcare systems is a complicated and considerable endeavour. As the federal government pushes for more open sharing of data across jurisdictions, the timing may be ideal to standardize perinatal records across Canada.

Consensus must also be created at a national level regarding how and when screening for PMI should be undertaken, including the mandated use of screening tools such as the EPDS. There must also be educational or training opportunities available to healthcare providers in all regions to ensure that they are qualified to incorporate PMI screening into their clinical care. At a local or regional level, care pathways for referral should be available to all healthcare providers and patients to provide them with knowledge of available supports/ services and help find care that is suitable for patient needs. In order to create such a data set, we must bring together healthcare representatives, data users, and policy makers from across Canada to form a consensus on what is needed.

Based on our analysis of the data forms, we propose the following data fields be included in a minimum data set for PMI:

Demographics

- Highest education level
- Employment status
- Maternal ethnic group (including Indigenous Identity)
- Maternal race
- Immigration status
- Language
- Sexual orientation
- Gender and preferred pronouns
- Partner involvement (father should be used unless “biological father” is specified)
- Available support person (yes/no and name)

History

- Family history of mental illness
- Personal history of mental illness (yes/no)
 - Specification of mental illness diagnosis/type (past or ongoing with duration)
 - Current treatment plan including medications and dosage
- Discussion of any lifestyle/social risk factors or concerns (yes/no)
 - Past/present substance use
 - If yes, type of substance, how often and how much consumed, any treatment plan
 - Intimate partner/family violence
 - History of trauma or abuse
- Safety and security (food, housing, financial)
- Social supports and relationship



Present pregnancy

- Inquiry into lifestyle/social risk factors or concerns (above)
 - As indicated in medical history
- General discussion of mental health at each prenatal visit
 - Regardless of indication in history – for every patient
 - Potential supplemental screening with EPDS

Postpartum

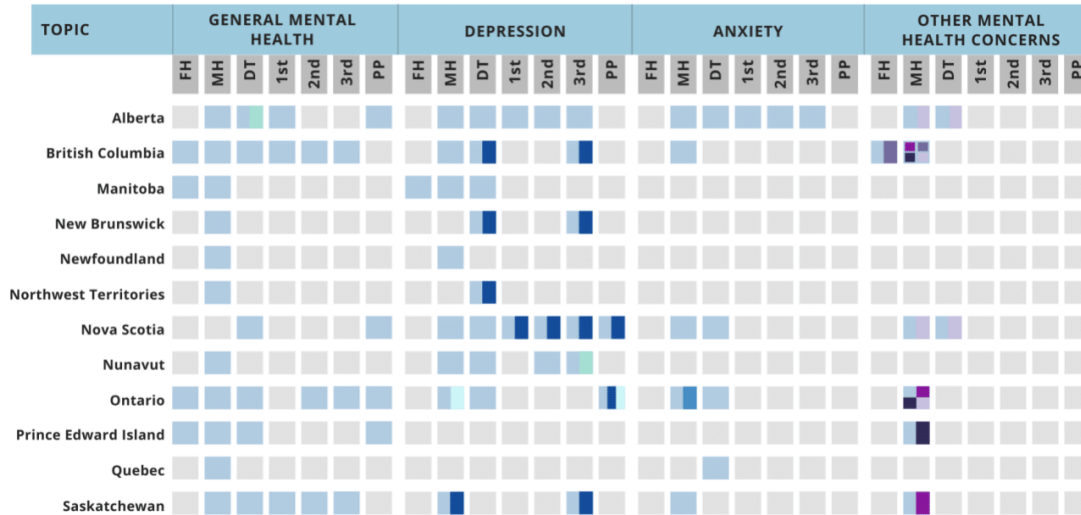
- Delivery record
 - Mode of delivery
 - Spontaneous or induced (method of induction)
 - C/S - planned, unplanned emergent
 - Vaginal - VBAC, assisted, breech
 - Timing of birth (GW)
 - Pregnancy outcome
 - Live birth, stillbirth, termination, loss
 - Complications
 - Maternal (including major maternal morbidity)
 - Fetal
 - Neonatal
- Postpartum discussion of mental health
 - Potential supplemental screening with EPDS
- Referrals (reason behind referral, when it was made, where it was made to)
 - Based on local supports/services, severity, and patient needs

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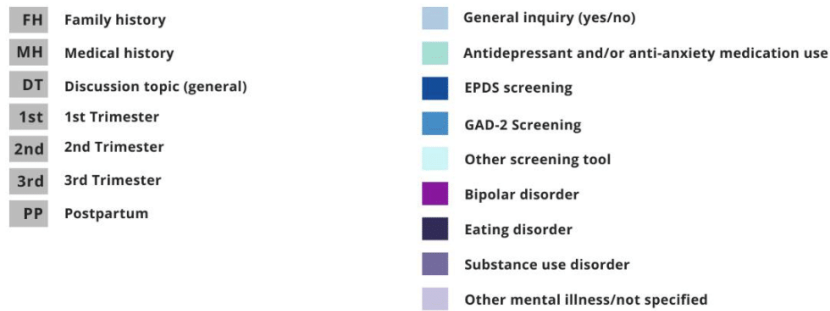
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Appendix 1: Gantt Chart: Analysis of Provincial/Territorial Perinatal Forms



Legend:



65332151546953219%%121561456122121 15156886512129941412
15195889451 156151
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