BC WOMEN'S HOSPITAL+ HEALTH CENTRE
An agency of the Provincial Health Services Authority

MEMO

To: Obstetrical care providers, BCW MAP US reporting MDs, sonographers ultrasound and MFM clerical staff

RE: **BCW Placental Health Clinic**

From: Dr Chantal Mayer, Medical lead BCW Ultrasound

Date: **April 16 2025**

Summary of Changes to BC Women's Placental Health Clinic (previously EMMA clinic):
**** new referrals as of May 5 2025 ****

1. **The checklist for ASA for the prevention of pre-eclampsia and fetal growth restriction has been updated and is now separate form the referral form**
2. **Updated referral pathway and referral forms to BC Women's Placental health clinic**

1. **ASA for the prevention of pre-eclampsia and fetal growth restriction: who should be on Low dose ASA?**
Low-dose acetylsalicylic acid (ASA) can help reduce the risk of preeclampsia for pregnant individuals at elevated risk.

All pregnant people should be screened for risk factors for preeclampsia and fetal growth restriction before 16 weeks gestational age and offered ASA prophylaxis when appropriate. In addition, physical exercise, adequate calcium intake and vitamin D are also recommended. Provincially, MFM and OB Internal Medicine have endorsed the US Task Force Recommendations[1] which recommend ASA for patients with a baseline preeclampsia risk of ≥ 8% (compared to the population baseline risk of 2-5%). In addition, low dose ASA is also recommended in the setting of prenatal serum screening where serum analytes are abnormally elevated or decreased due to increased associated risk for pre-eclampsia, fetal growth restriction and related adverse outcomes as per table below[2].

It is recommended that pregnant individuals with either **1 high risk factor**, **or 2 or more Moderate risk factors** start low dose ASA at 11-16 weeks gestational age, until 36 weeks gestational age (see Appendix A).
With respect to **ASA dosing**, it remains unclear whether 162mg is more effective than 81mg. Additional randomized trial evidence comparing effectiveness of these two dose options is required. Currently 81 or 162mg are acceptable choices, however a daily dose of 81 mg may maximize maternal safety.

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2. Referral for Placental Insufficiency Ultrasound risk assessment – PRISM (previously EMMA)

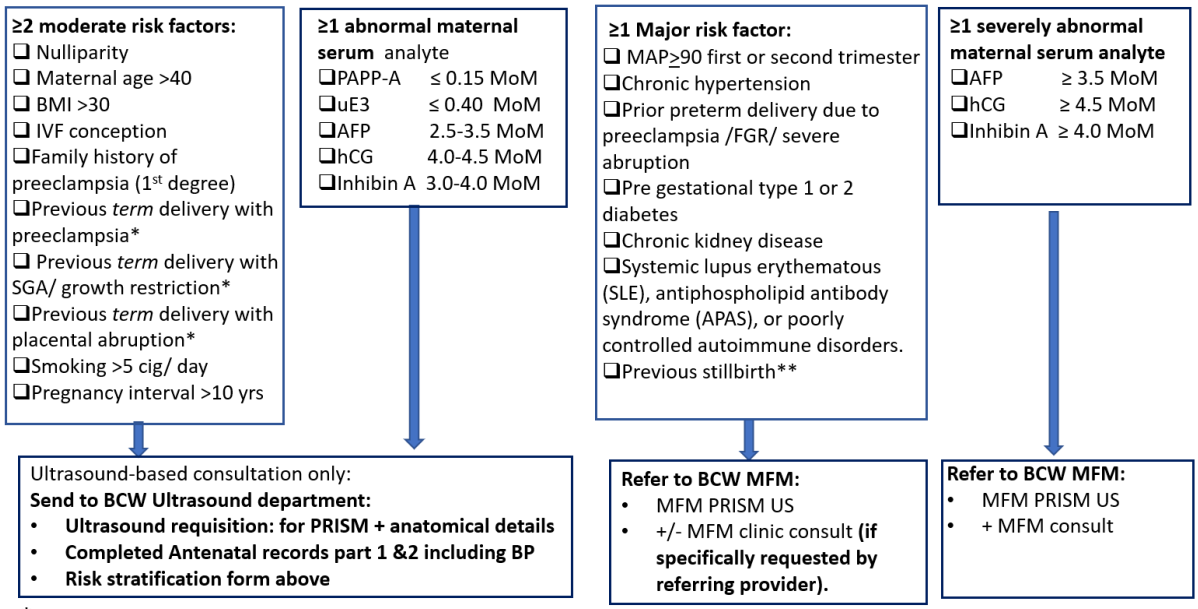
The objectives of the referral pathway updates are to:

1. Improve overall efficiency of triage process through direct referral and booking of patients >2 moderate risk factors to BCW Ultrasound department for "ultrasound-based consult".
2. Provide clarifications about which patients will be booked for MFM clinic visit in addition to PRISM/placental assessment ultrasound.
3. Implement follow up and management recommendations informed by updated published literature and BCW EMMA clinic data audit as part of the ultrasound-based consultation.

The BCW Placental Health Clinic referral form can be found on the BCW Ultrasound web page.

Referral for Placental Insufficiency Ultrasound risk assessment (PRISM): ASA for prevention of pre-eclampsia is recommended as per MFM OBIM Provincial Guideline

Clinic referral triage based on clinical risk factors and serum analyte profile



**As isolated risk factors, fetal growth assessment is recommended at 32-34 weeks*

***where cause of stillbirth is either suspected to be related to placental insufficiency or unexplained*

Explanatory notes:

1. Patients ≥2 **moderate risk factors** in the absence of any major risk factors or **abnormal serum analytes** that are not in the "severely abnormal" range: *Submit referral to BCW Ultrasound:*

- An ultrasound-based placental insufficiency risk assessment-PRISM, which includes a limited ultrasound-based consult may now be *requested directly through the BCW ultrasound department*.
- The ultrasound examination will be booked at 19-21 weeks and will components of a routine anatomical details scan, other components as per usual indications (eg extended heart views, cervical length assessment) placental assessment and MFM recommendations for follow up. A separate anatomical detail scan is not required.

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- An MFM in person consultation will not be booked. In the event of unexpected findings warranting and MFM consult, this may be added after the ultrasound or on la later date, depending on factors such as the urgency and severity of the findings.

    1. **≥1 Major risk factor**: *Submit referral to BCW MFM*:
        i. **Option 1**: Ultrasound and PRISM only and follow up as per ultrasound findings in the context of patient's clinical picture. This is appropriate for cases that fall into OBGYN scope of practice eg: uncomplicated chronic hypertension or pregestational diabetes.
        ii. **Options 2**: Care provider can specifically requests MFM consultation where review +/- additional guidance is requested due to additional complexity.
    2. **≥1 *severely* abnormal maternal serum** analyte
        i. Refer to MFM for triage for in person consult and ultrasound at BCW MFM as those frequently have abnormal or unexpected ultrasound findings a the time of detail ultrasound.
        ii. Patients unable to travel can also be offered image review of local exam + virtual health visit

2. Suggested follow up where PRISM is not available/ accessible:

- **Two or more moderate risk factors:**
    - Low dose ASA 81-162mg qhs until 36 weeks GA.
    - Routine antenatal care visit schedule.
    - Third trimester growth scan at *35-36* weeks GA, or as per other clinical indications,
    - Baseline "pre-eclampsia blood work" not routinely recommended.
- **Major risk factors**:
    - Low dose ASA 81-162mg qhs until 36 weeks GA.
    - Antenatal care visit schedule as per clinical condition; home BP monitoring where possible.
    - q4 week growth scan from 28 weeks to 36 weeks GA for chronic hypertension and DM (per SOGC). Frequency of assessment as per OBGYN otherwise.
    - Baseline "pre-eclampsia blood work" at 20-24 weeks: CBC, ALT, albumin, Cr, uric acid and LDH, urine PCR

3. Notable changes from the previous EMMA/placental health clinic referral pathway:

Removed:

- Echogenic bowel: consider MFM US (separate clinical pathway, see PSBC care pathway page 4)
- Heavy bleeding: consider referring large, >5cm subchorionic hematoma to OB or MFM when *persisting* at detail scan.

Added:

- First trimester mean arterial blood pressure (MAP) ≥ 90 in first or second trimester due to associated risk equivalent to that of chronic hypertension [3].
- MAP = DP + 1/3(SP – DP) or use online calc
- Rule of thumb: any DP ≥ 80 as long as SB ≥ 110 mmhg

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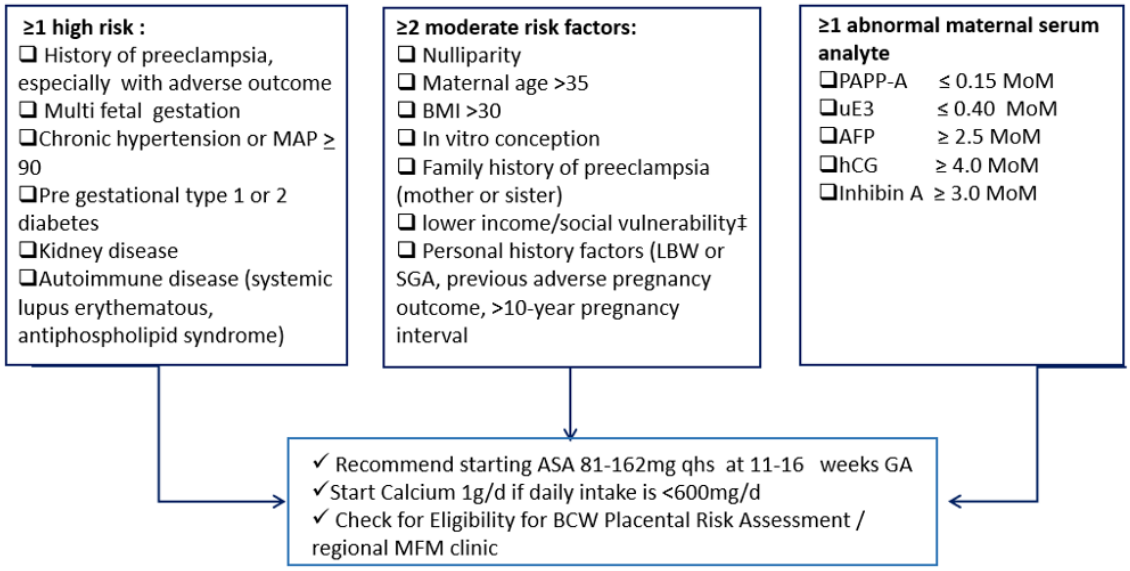
APPENDIX A:

BC Provincial OBIM and MFM Checklist for Aspirin for preeclampsia prevention



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2. Metcalfe, A, Langlois, S, Macfarlane, J, Vallance, H and Jospeh K.S.: Prediction of obstetrical risk using maternal serum markers and clinical risk factorsPrenatal Diagnosis 2014, 34, 172–179

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