



# The 4<sup>th</sup> Trimester Clinic

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## Defining the Problem

Preeclampsia (PE) is a hypertensive disorder of pregnancy and affects approximately 10% of pregnant women. Women with history of PE have a higher risk of maternal morbidity and mortality. More specifically, PE is linked to early vascular aging and risk of cardiovascular (CV) events earlier in life. Women with history of early, severe or recurrent PE have the highest risk for CV events. "The 4th trimester" refers to the first 42 days postpartum, a unique window of opportunity to screen, educate, and implement strategies to reduce the risk of future CVD.

**Problem Statement:** TOH currently has no dedicated multidisciplinary team to offer specialized postpartum care for women at high-risk of CV disease. These women are sent back to their GP for postpartum care. A gap in care and opportunity to mitigate CV risk has been identified.

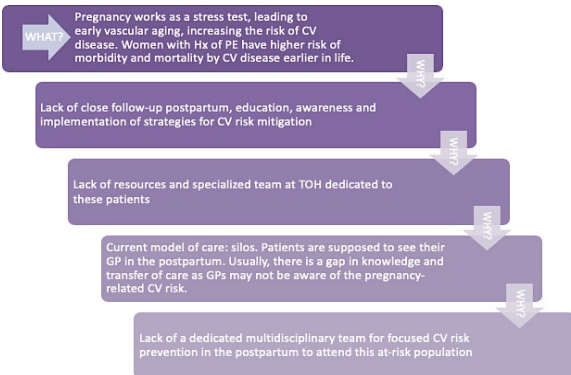
### Project Objective:

Create and implement "The Fourth Trimester clinic" at The Ottawa Hospital, a longitudinal multidisciplinary postpartum clinic for all women identified at high-risk of CV events by Fall 2023

## Methods of Analysis



TOH: 6000 deliveries per year; 350 patients seen per year in OB triage in the postpartum with hypertensive



## Intervention

**Checklist for Postpartum Discharge of Women with Hypertensive Disorders**

This checklist is a SAMPLE only. It should be modified to fit facility-specific circumstances.

**Medical Education:**

- Provide all education in patient's own language (interpreter if necessary).
- Reiterate all education with a handout in patient's own language.
- Review warning symptoms and when to seek medical care.
- Discuss anti-hypertensive medications including dosage, schedule, potential side effects, hold parameters, and impact on breastfeeding.
- Discuss the diagnosis, recurrence risk in future pregnancy, and recommendation for annual screening of blood pressure, and lifestyle interventions to reduce risk (diet, weight management, exercise, smoking cessation).

**Follow-Up:**

- Provide contact information for obstetrical provider (phone, electronic patient portal).
- Schedule follow-up within 3 weeks after delivery (in-person or telehealth).
- Identify and address barriers to care, such as:
  - Transportation and childcare for visits.
  - Access to telephone (needed to call provider or reschedule appointments).
  - Access to interpretation services if needed.

If remote BP monitoring will be used by telehealth, smartphone app:

- Validate and address barriers to use, such as:
  - Access to blood pressure cuff.
  - Access to necessary technology (smartphone, internet).
  - Literacy, ability to read and interpret numbers, symbols.
- Provide instruction on how to measure blood pressure.
- Discuss target blood pressures (systolic less than 150 mm Hg, diastolic less than 100 mm Hg).
- Discuss blood pressures requiring prompt notification (systolic 160 mm Hg or greater, diastolic greater).

If remote BP monitoring will not be used:

- Severe hypertension: Schedule office visit for BP check within 72 hours.
- Nonsevere hypertension: Schedule office visit for BP check at 7 to 10 days after delivery.

Version date:



## Lock-in Improvement

- Survey when returning to antenatal care for new pregnancy
- Measure impact of 4<sup>th</sup> trimester education and intervention and compare to patients referred from outside services (not followed by 4<sup>th</sup> trimester clinic).
  - Intrapartum interval
  - Total weight loss, current BMI
  - Breastfeeding
  - Exercise and lifestyle changes
  - Awareness of CV risk (pre-conception counseling)
  - Awareness need for ASA every pregnancy
  - MAP and UtA Doppler at first visit
- Number of patients presenting to OB triage with postpartum hypertensive emergencies compared to data prior to intervention
- Multicentre study interviewing patients and providers after a pregnancy affected with preeclampsia scoping their education regarding CV risk (in progress).

## Results

- Our novel quality strategy envisioned a longitudinal multidisciplinary model of care that aims to improve women's health by identifying and mitigating CV risks, and measuring the impact of this strategy in future perinatal care
- We aim to share this model with other healthcare centers aiming to close the gap in the postpartum of women with history of PE
- This high impact strategy changes outcomes for women who conceive after an episode of preeclampsia, decreasing risk of recurrence, optimizing maternal and fetal outcomes; hence, decreasing maternal morbidity and mortality by CV disease

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