Re-Imagining Perinatal Mental Health Services:

Towards an integrated model of care

THE UNIVERSITY OF BRITISH COLUMBIA

Providence Health Care
Mental Health Program

Michael Smith Health Research BC

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Graphic design by Alyssa Lauren Designs.

For more information, please contact:
Reproductive Mental Health Program
St. Paul's Hospital
Vancouver, British Columbia
Email: phcreproductivepsychiatryclinic@providencehealth.bc.ca

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Acknowledgements

Project Team

- **Michelle Carter**, RN, MSN, Clinical Nurse Specialist (Psychiatry), Providence Health Care; Adjunct Professor, School of Nursing, University of British Columbia
- **Emily Jenkins**, RN, PhD, Associate Professor, School of Nursing, University of British Columbia
- **Wendy Hall**, RN, PhD, Professor Emeritus, School of Nursing, University of British Columbia
- **Christine Ou**, RN, PhD, Assistant Professor, School of Nursing, University of Victoria
- **Angela Russolillo**, RPN, PhD, Research Director, Department of Psychiatry, Providence Health Care
- **Nichole Fairbrother**, RPsych, PhD, Director, Perinatal Anxiety Research Lab; Clinical Associate Professor, Department of Psychiatry, University of British Columbia
- **Brittany Bingham**, PhD, Research Director, Indigenous Health, Vancouver Coastal Health
- **Dr. Valerie Rychel**, MD, Obstetrician & Physician Program Director, Maternity Program, Providence Health Care
- **Sheila, Duffy**, Director, Pacific Post Partum Support Society
- **Enav, Zusman**, Pharm D, PhD student, Reproductive and Developmental Sciences, University of British Columbia
- **Zachary Daly**, PhD student, School of Nursing, University of British Columbia

Key Contributors

- **Dr. Diedre Ryan**, Psychiatrist, BC Women's Hospital
- **Dr. Pulkit Singh**, Psychiatrist, St. Paul's Hospital
- **Dr. Bryony Corbyn**, Psychiatrist, Victoria General Hospital
- **Tammy Stott**, RPN, Reproductive Mental Health Therapist, Fraser Health
- **Serena Kullar**, MSW, Social Work Lead, FIR, BC Women's Hospital
- **Katie Henthorne**, RN, MN-NP, Family Nurse Practitioner, Granville Medical Clinic
- **Teghan Evans**, RN, Senior Practice Leader, Neonatal Intensive Care, BC Women's Hospital
- **Tamara Olson**, RN, Public Health Nurse, Vancouver Coastal Health
- **Nicole Wong**, RPN, Case Coordinator, Reproductive Mental Health Clinic, St. Paul's Hospital
- **Zoe Hodgson**, RM, PhD, Clinical Advisor, Midwives Association of BC
- **Ellie Rushton**, RM, MPH, Midwife, Westside Midwives
- **Olivia Louie**, Doula, ekw'ĺ7tl Indigenous doula collective
- **Tatiana Popovitskaia**, MPH, Project Manager, Perinatal Services BC
- **Miranda Kelly**, MPH, Director, Maternal and Family Health, Vancouver Coastal Health
- **Catriona Hippman**, PhD, Postdoctoral Fellow, BC Women's Hospital
- **Jasmine Everson**, Client/Family Partner, Pacific Post Partum Support Society
- **Karen Glanzberg**, Client/Family Partner, Pacific Post Partum Support Society
- **Satoko Imai**, Client/Family Partner, Pacific Post Partum Support Society

Summary

Background

Approximately 10–20% of birthing people will experience a perinatal mental illness. Without treatment, perinatal mental illnesses can negatively affect health outcomes in birthing people, children, and families. Unfortunately, many people experiencing perinatal mental illnesses are never identified and/or do not receive appropriate care.

Purpose

We aim to present an evidence-based, user-informed model of perinatal mental health care focused on improving access, coordination, and quality of perinatal mental health services in British Columbia and beyond.

Methodology

In March 2021, we conducted a review of scientific evidence (scoping review) to identify core domains of integrated perinatal mental health care. These core domains were then presented through online surveys to Canadian perinatal mental health experts and clients to reach consensus on their relevance, importance, and priority (Delphi study). Results informed a draft model of care. In June 2022, we met with BC stakeholders from a range of clinical, research, and client/family groups to refine our model of care and seek practical recommendations related to health systems, clinical practice, and education.

Model of Care

Here, we present a model of care that consists of 10 core domains: person-centred care; cultural safety, cultural humility, and anti-racism; integrated care delivery; health promotion and illness prevention; screening, assessment, and triage; biopsychosocial approach to treatment; transition and discharge planning; training and education; care model planning; and care model evaluation. With each core domain, we offer a definition of the domain, a list of key indicators and practical recommendations for implementation.

> “We aim to present an evidence-based, user-informed model of perinatal mental health care focused on improving access, coordination, and quality of perinatal mental health services in British Columbia.”

Abbreviations, Acronyms & Definitions

BC ..... British Columbia

Core Domain ..... Broad care model concept

CBT ..... Cognitive behavioural therapy

EPDS ..... Edinburgh Perinatal/Postnatal Depression Scale

Key Indicator ..... Attributes of quality or performance within a core domain

HCP ..... Healthcare providers such as nurses, physicians, midwives, or other regulated care providers that may support pregnant or postpartum individuals.

MOC ..... Model of care

Perinatal ..... Pertaining to the period around childbirth, from pregnancy to the first year after birth

PMH ..... Perinatal mental health

PMI ..... Perinatal mental illness

Background

Perinatal Mental Illness

Perinatal mental illness (PMI) is the most common complication of childbirth, affecting 10–20% of pregnant and postpartum individuals[1–4]. PMIs include common conditions such as depression and anxiety disorders, in addition to less common but often more severe illnesses such as bipolar and psychotic disorders (Figure 1)[1,2]. Risk factors for developing a PMI include history of mental illness, exposure to traumatic or stressful life events, overall poor health status, low social support, and being a member of a current or historically marginalized group[5,6]. When left untreated, PMIs are associated with profound adverse outcomes in birthing people including increased risk of obstetrical complications, future mental health complications, decreased quality of life, and suicide[6,7]. For children, there can be substantial impact to parent-infant attachment and to cognitive, behavioural, and psychosocial development (Figure 2)[6,8,9]. Despite the detrimental effects of PMIs, most individuals with PMIs do not receive appropriate and timely treatment in Canada[10–12].

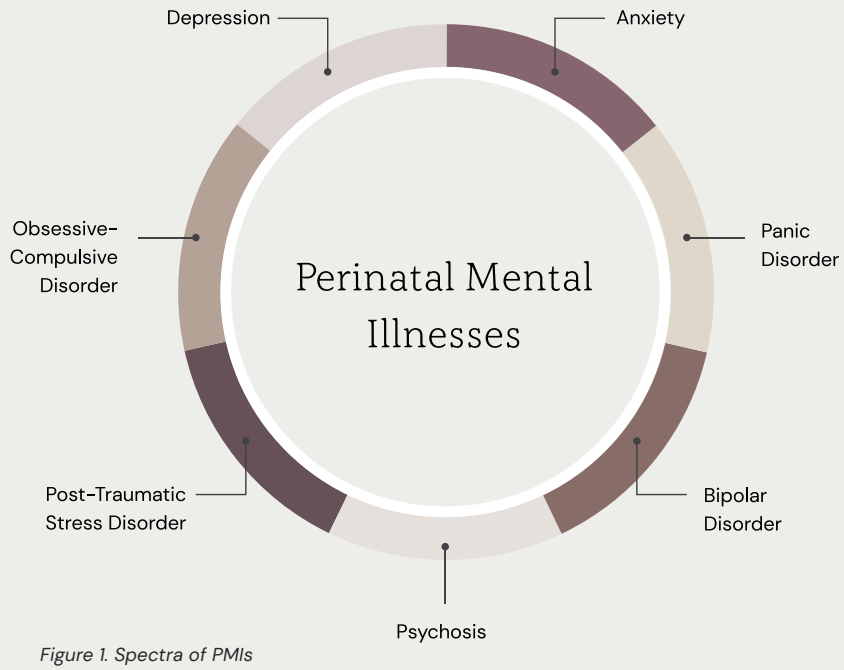

Figure 1. Spectra of PMIs

Figure 2. Impact of Untreated PMIs On Maternal, Infant, and Maternal-Infant Dyad Outcomes

Challenges in Perinatal Mental Health Care

PMIs are complex conditions to address and treat. Individuals with PMIs present to the health care system with unique obstetrical, mental health, and psychosocial histories, and symptoms experienced (e.g., low energy, sleep disturbances, muscle pain, etc.) can be difficult to interpret as they can be related to perinatal and/or mental health status [13]. Individuals with PMIs therefore require integrated care to disentangle the unique features of mental health and transcend a disease-oriented approach [13]. This integration must address multi-morbidity and clinical recommendations from multiple health care providers (HCPs) (e.g., obstetrician, psychiatrist, family physician, midwife, social worker, public health nurse), while supporting individuals' preferences, values, and needs [4]. Emerging evidence suggests that improved health outcomes are likely if perinatal mental health (PMH) services adopt a collaborative and coordinated approach to care [14,15]; however, this ideal has been difficult to achieve given current limitations to PMH services [11,12].

At present, there is no standardization or quality assurance to guide the care of Canadians with PMIs [11,12]. In the absence of routine screening standards, many individuals with PMIs are never identified [11,12]. Moreover, it can be difficult to access PMH care due to limited availability of both specialized services (i.e., inpatient Mother Baby Units, day programs, home-based treatment, psychotherapy, etc.) and trained PMH HCPs [11-14]. Silos in the healthcare system further reduce accessibility to quality care in Canada. Oftentimes, HCPs work in isolation without the involvement of other disciplines or specialists to address multi-morbidity [16,17]. These silos fragment communication, coordination, and care processes to the detriment of care continuity, care quality, and patient safety (Figure 3) [16,17].

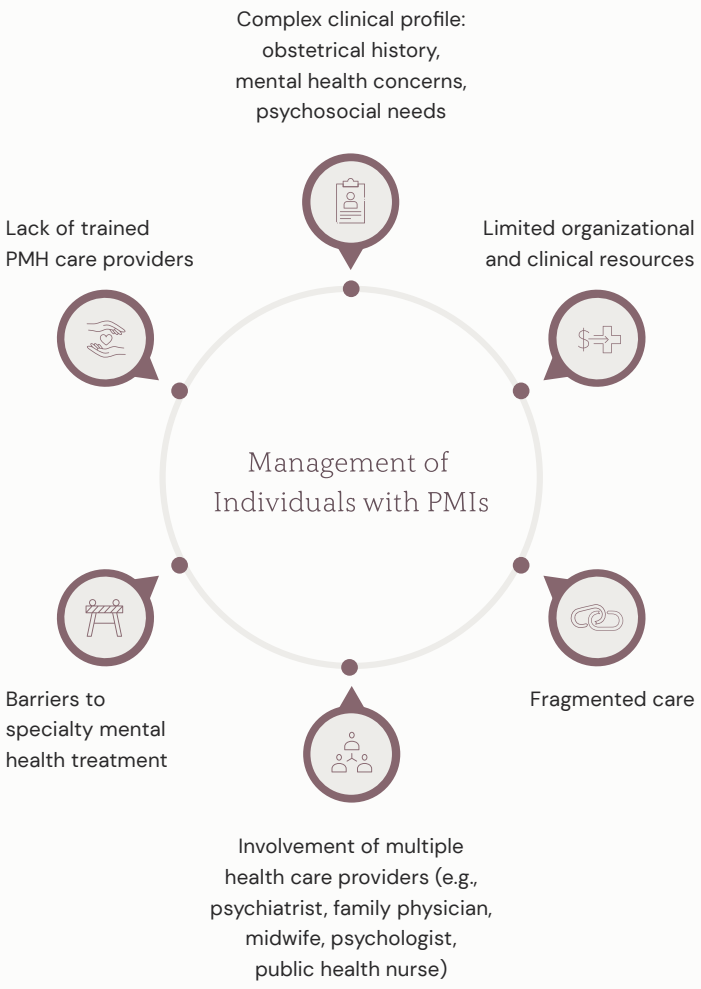

Figure 3. Challenges in the Management of Individuals with PMIs

- 75% of individuals with PMIs are not identified [18]
- 15% of individuals with PMIs receive appropriate care [10]
- Marginalized groups, including immigrant and Indigenous populations, are at higher risk of PMIs [19]
- Rates of PMIs have increased since the onset of the COVID-19 pandemic [20,21]
- Specialized inpatient psychiatric units for individuals with severe PMIs do not exist [12]
- Based on a Canadian survey of perinatal HCPs [11]
  - 87% of HCPs do not have a standardized workplace policy for PMH screening
  - 42% of HCPs report a wait time of two months or more to access PMH services
  - 57% of HCPs have not received specialized PMH training

The Need for Change

JULIA

Julia is a 29-year-old elementary school teacher who lives with her partner in a one bedroom apartment. Julia's pregnancy goes smoothly but soon after giving birth, she begins to feel overwhelmed. Breastfeeding is extremely painful and despite seeing a public health nurse for support, she is unable to establish an effective latch and develops cracked nipples and mastitis. Julia attempts to manage her pain and alternates between pumping and breastfeeding every two hours for nearly six weeks before transitioning to formula. She becomes sleep deprived and experiences persistent negative thoughts about herself as a mother. Julia finds it difficult to bond with her baby and is ashamed to talk about her postpartum experience.

At her routine 1-month and 2-month well-baby visits, Julia's family physician assesses her and her baby but does not ask about her emotional wellbeing. At 3-months postpartum, her partner urges her to make an appointment to discuss her mental health. Julia's family physician assures her that the first few months of parenthood are challenging and encourages her to optimize sleep and nutrition. They plan for Julia to prioritize self-care and return for another appointment if she feels the need.

Over the next three months, Julia's mood worsens. At 6-months postpartum, she cries several times a day and struggles with feelings of guilt and worthlessness. Her energy diminishes, she is unable to rest, and she rarely leaves home. With encouragement from her partner, Julia makes another appointment with her family physician. At this visit, they discuss her mental health and her physician makes a referral to an outpatient reproductive mental health clinic. The waitlist to see a reproductive psychiatrist is four months long, but the clinic is too busy to communicate wait times to Julia or her family physician.

Finally, almost 10-months after her initial symptoms, Julia sees a reproductive psychiatrist. A diagnosis of postpartum depression is confirmed and Julia is given a list of potential clinical counsellors to see for therapy. The counsellor and reproductive psychiatrist do not share care plans. Julia continues to feel overwhelmed, struggles with sleep, and isolates at home. At 11-months postpartum, the reproductive psychiatrist initiates an anti-depressant, and Julia is placed on a waitlist for cognitive behavioural therapy (CBT). At 16-months postpartum, Julia's symptoms begin to improve. She looks back on her maternity leave with regret that she was unable to enjoy much of her time off from work with her family. When Julia and her partner discuss having a second child two years later, she is fearful that she may develop postpartum depression and is unsure how care might unfold.

Integrated Care

Integrated care offers a solution to fragmented PMH services through streamlined communication and coordination across care teams and practice settings [16,17,21,22]. Integrated care is defined by the World Health Organization as "*the management and delivery of health services such that people receive a continuum of health promotion, health protection and disease prevention services, as well as diagnosis, treatment, long-term care, rehabilitation, and palliative services through the different levels and sites of care within the health system and according to their needs*" [23]. A successful integrated approach to care would place the client at the centre, with PMH specialists and care teams sharing information and working together to address clients' needs holistically and preventatively to achieve optimal health outcomes [22]. Considering the impact integrated care models can have on treatment quality, care experience, and client outcomes, we conducted this project with the aim of co-developing an evidence-informed, user-driven model of integrated PMH care.

Purpose

This document offers a high-level approach to optimize PMH service delivery (e.g., access, coordination, and quality of services) across the continuum of perinatal care. Drawing on a scientific review of the evidence (a scoping review), expert consensus process (Delphi study), and provincial stakeholder meeting, we present a proposed model of care organized into **core domains** (broad care model concepts), **key indicators** (attributes of quality or performance within each domain), and **recommendations** (suggested actions for health systems, clinical practice, and education).

Intended Use

The MOC is not intended to serve as a *"how to"* manual, but rather a tool to support the initiation and planning of integrated PMH care delivery. By outlining core domains, key indicators, and recommendations, this document provides a framework to guide how health services might be purposefully designed, coordinated and delivered to effectively care for individuals with or at risk for PMIs. As you read through this document, consider what type of care should be delivered, where care should be delivered, and who should deliver care in the context of your organization and care environment. We encourage you to adapt the MOC in ways that are practical, acceptable, and feasible in your specific practice setting.

Scope

This document focuses on current evidence and practical recommendations related to integrated PMH care delivery in British Columbia. The perinatal period refers to the time around childbirth, from pregnancy to the first year postpartum. This document does not include guidance on the treatment of specific mental health and/or substance use disorders.

Methodology

In 2021, a team of clinicians, researchers, and clients came together to re-imagine PMH care in British Columbia. With representatives from Providence Health Care, Vancouver Coastal Health, the University of British Columbia, University of Victoria, the Canadian Perinatal Mental Health Collaborative and Pacific Post Partum Support Society, the team shared a goal of co-developing an evidence-informed, user-driven model of care (MOC) focused on improving access, coordination, and quality of PMH services. This project was funded by a Michael Smith Health Research BC Convening and Collaborating Award.

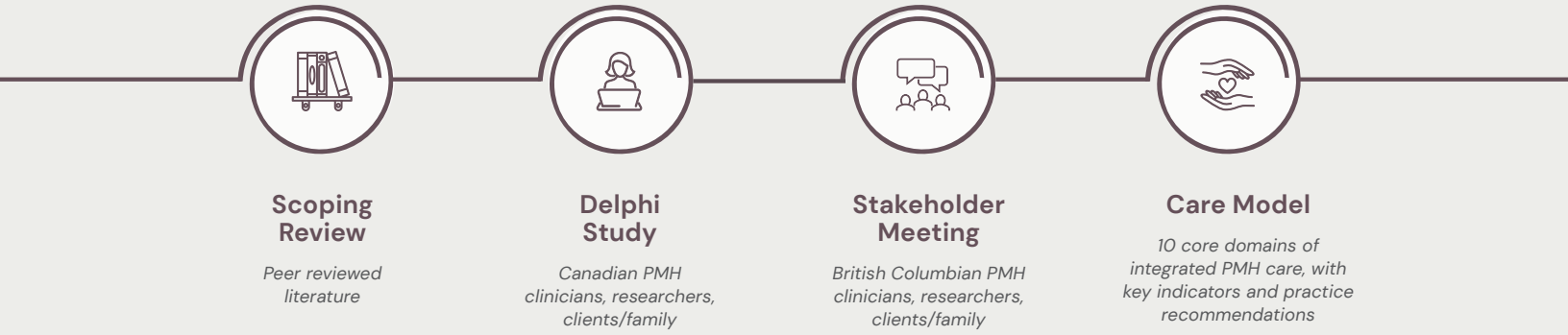

Figure 4. Key Stages in MOC Development

Scoping Review

Our team conducted a scientific review of current evidence (scoping review) to identify core domains (broad care model concepts) and indicators (attributes of quality or performance within each domain) of integrated PMH care. We searched several scientific databases for research published between 1995 and 2021. We included peer-reviewed articles published in English that described integrated care in the context of perinatal mental health. Two team members independently reviewed 3985 articles by title and abstract, followed by full-text (n = 114). A total of 28 relevant studies were identified. The team generated the following core domains of integrated PMH care: person-centred care; care delivery; health promotion and illness prevention; screening, assessment, and triage; biopsychosocial approach to treatment; transition and discharge planning; training and education; care model planning; and care model evaluation.

Delphi Study

In our Delphi study, the core domains of integrated PMH care and their indicators were presented through online surveys to PMH experts and clients to reach consensus on their relevance, importance, and priority. Three rounds of online Delphi surveying were completed. Participants included a diversity of clinicians, researchers, and people with personal or lived experience. For example, in the final survey round (April 2022), we had a total of 31 participants, with 17 identifying as clinicians/researchers, 11 as people with personal or lived experience, and three participants endorsing both professional and personal experience. Based on survey responses, our team revised core domains and indicators to incorporate participant feedback, which included the addition of a domain reflecting *Cultural Safety, Cultural Humility and Anti-Racism*.

In all three rounds of surveying, there was consensus (>75% agreement) to keep all indicators across all domains, with suggestions for how some indicators could be modified.

Participants commented that the proposed domains and indicators were imperative, however, some struggled to rank importance noting that they were all critical. Participants also used open-ended comments to emphasize the centrality of accessible, integrated, culturally competent, and person-centred care. They noted that there is a particular need for improvement in screening, continuity of care, and preparing clients for potential challenges in the postpartum period. Some participants highlighted that professional practice can be constrained by health system structures, indicating a need for systems-level advocacy and change. Through this process, a total of 10 core domains were retained for inclusion in our proposed model of integrated PMH care.

BC Stakeholder Meeting

In June 2022, our team held a virtual meeting professionally facilitated by the Wosk Centre for Dialogue. This meeting convened key PMH stakeholders to refine the MOC. With representatives from a range of clinical (e.g., psychiatrists, midwives, nurses, social workers, psychologists, doulas), research, and client/family groups across British Columbia, we engaged in small group discussions focused on applying the core domains of integrated PMH care to health systems, clinical practice, and education. Stakeholders shared their experiences and perspectives on PMH and social services, best practices, and facilitators/barriers to timely and effective care. Many participants also expressed the need for a national PMH strategy with clearly defined health policies, funding, and resources to promote PMI awareness, establish universal PMI screening, expand (and reduce barriers to) specialized PMH services, ensure timely access to PMH treatment, address social determinants of PMH, and improve PMH training for HCPs. Based on stakeholder input, we developed recommendations for each MOC domain but acknowledge that a national action plan, with government endorsement and funding, is required to ensure all perinatal people in Canada have access to timely, equitable, and integrated PMH services.

Proposed Model of Integrated Perinatal Mental Health Care

Model of Care Overview

Incorporating findings from the scoping review, Delphi study, and BC stakeholder meeting, we have constructed an aspirational model for delivering integrated mental health care to pregnant and postpartum individuals and their families/support person(s). It is structured around a quality framework that is evidence-informed, user-driven, and equity oriented, and which targets improvements in care experience, symptoms, functioning, and quality of life for individuals. The MOC is presented in terms of **domains** (broad care model concepts), **key indicators** (attributes of quality or performance within each domain), and **recommendations** (suggested actions for health systems, clinical practice, and education).

Core Domains of Integrated Perinatal Mental Health Care

1. Person-centered care
2. Cultural safety, cultural humility, and anti-racism
3. Integrated care delivery
4. Health promotion and illness prevention
5. Screening, assessment and triage
6. Biopsychosocial approach to treatment
7. Transition and discharge planning
8. Training and education
9. Model of care planning
10. Model of care evaluation

Types of Recommendations

The recommendations in this document apply to PMH care across a range of health care settings (e.g., acute care, public health, primary care, outpatient, etc.), disciplines (e.g., nursing, social work, medicine, etc.), and specialities (e.g., obstetrics, psychiatry, family practice). All recommendations are evidence-informed and user-driven and have been organized according to three main categories.

- **Health Systems recommendations** apply to managers, administrators, practice leaders, and policy makers responsible for developing programs, policies, processes, and tools that promote best practice within healthcare organizations.
- **Practice recommendations** are intended to guide clinicians (e.g., physicians, nurses, midwives, allied health care professionals) who provide direct care to pregnant and postpartum individuals at risk for or experiencing PMIs.
- **Education recommendations** are directed to those responsible for educating clinicians, such as educators, quality improvement teams, and academic/professional institutions.

Model of Care Domains and Key Indicators

Domain 1: Person-Centered Care

This domain incorporates an intersectional understanding of PMH clients, recognizing each person's unique preferences, values, and circumstances in decision-making, and the ways in which they may experience oppression within and beyond health services.

KEY INDICATORS

1. PMH clients are an integral part of decision-making processes, in collaboration with the care team.
2. The care team shares information with PMH clients clearly, fully, and in a timely manner to support informed decision-making.
3. PMH clients are supported by the care team to develop individualized goals of care that reflect personal preferences, values, cultural traditions, and life circumstances.
4. The care team facilitates involvement of (client-identified) family/advocates in PMH care settings.
5. The care team acknowledges that PMH inequities (e.g., access to care, quality of care, health outcomes) – rooted in power asymmetry and systemic hierarchies – are shaped by the interaction of multiple overlapping social factors such as race, income, education, age, ability, sexual orientation, immigration status, ethnicity, and geography. The care team practices ongoing critical reflection to examine social determinants of health, issues of equity, processes of stigmatization, experiences of oppression, and the operation of power in PMH policy-making, care delivery, and resource allocation.
6. The care team practices ongoing critical reflection to examine social determinants of health, issues of equity, processes of stigmatization, experiences of oppression, and the operation of power in PMH policy-making, care delivery, and resource allocation.
7. The care team seeks to address PMH disparities through policies and programs that enhance health equity and integrate gender-affirming, anti-discrimination, and human rights-based approaches.

DOMAIN 1: Recommendations

HEALTH SYSTEMS (LEADERS):

- Develop programs and initiatives that enable clients and their support people to become co-creators of PMH services.
- Conduct ongoing evaluation of clients' experiences of care and incorporate findings in PMH service design and delivery.
- Develop peer support programs that strengthen emotional and practical support available to perinatal clients and their support people.
- Use a variety of media and formats to provide PMH program and service information to perinatal clients, support people, and staff.

PRACTICE (CLINICIANS):

- Respectfully explore a client's circumstances and identify what is important and meaningful to them.
- Understand the impact of social factors on PMH inequities
- Speak out to actively challenge discriminatory attitudes. Promote acceptance and inclusion.
- Acknowledge clients' support people and with the client's consent, work to include them as partners in care planning.
- Facilitate timely access to information, treatment, and resources in line with a client's preferences, needs, and goals.
- Describe the risks and benefits of different treatment options to promote informed decision-making.
- Create safe environments where clients can explore options, co-design their care plans, and strive for wellness.

EDUCATION (EDUCATORS):

- Explore approaches to care that demonstrate sensitivity and inclusion when working with clients and support people from a diverse range of backgrounds and experience.
- Teach communication techniques (e.g., motivational interviewing, reflective listening) that promote clients' self-advocacy and expression of goals, needs, challenges, and strengths
- Discuss issues related to the concepts of social determinants of health and intersectionality to help HCPs understand, identify, and respond to PMH inequities

Domain 2: Cultural Safety, Cultural Humility and Anti-Racism

This domain focuses on culturally safe care, an outcome based on respectful engagement that recognizes and addresses power imbalances in the health care system. Cultural safety results in an environment free of racism and discrimination, where people feel safe when engaging with health care professionals and receiving health care. [24]

KEY INDICATORS

1. The care team practices cultural humility, a process of life-long self-reflection to examine personal and systemic biases, assumptions, and power imbalances that can serve to restrict cultural norms or values of Black, Indigenous, and People of Colour (BIPOC) and create harm.

2. The care team acknowledges the history of racism in Canada and the effects of systemic racism on individual and population health, wellness, and health care experiences.

3. The team commits to, and enacts, the Truth and Reconciliation Commission of Canada Calls to Action.

4. The care team seeks to improve their provision of culturally safe care by undertaking ongoing education on BIPOC health care, determinants of health, cultural safety, cultural humility, and anti-racism.

5. The care team creates and maintains physical spaces that are culturally safe, welcoming, and connected with other culturally safe services.

6. The care team engages in culturally appropriate and respectful communication by reducing language barriers and avoiding communication that disempowers, humiliates, or excludes people.

7. The care team engages in meaningful partnerships with BIPOC in the planning and delivery of culturally-safe PMH services, integrating traditional cultural practices into individualized care that meets the health care needs of individuals and families.

8. Cultural safety is continually assessed by the systematic monitoring and evaluation of inequities in care experiences and health outcomes.

DOMAIN 2: Recommendations

HEALTH SYSTEMS (LEADERS):

- Advocate for all levels of government to improve health and social services for BIPOC people.
- Commit to, and enact, the Truth and Reconciliation Commission of Canada Calls to Action.
- Increase education opportunities for HCPs on the history of BIPOC health, as well as concepts of cultural safety, cultural humility, and anti-racism.
- Develop policies and clinical guidelines, for increasing cultural safety, cultural humility, and anti-racism in PMH practice settings.
- Develop a strategy to mobilize a workforce that includes BIPOC leadership, PMH HCPs, and staff.
- Create Indigenous Patient Navigator positions to support Indigenous people in their health system interactions during the perinatal period.
- Build meaningful relationships with BIPOC communities for co-development of strategies and services to foster cultural safety, cultural humility, and anti-racism in PMH practice settings.
- Create and maintain physical spaces that are culturally safe, welcoming, and connected with other culturally safe services.
- Develop mechanisms for staff, clients, and support people to provide feedback. Develop systems to thoughtfully address concerns in a timely manner and in ways that acknowledge traditional approaches (e.g., inclusion of Elders).
- Develop criteria to assess cultural safety, cultural humility, and anti-racism and evaluate service delivery against the identified criteria. Develop action plans to address areas needing change.

PRACTICE (CLINICIANS):

- Self-reflect on personal biases, assumptions, and power within the health care system.
- Humbly acknowledge oneself as a life-long learner when it comes to understanding another person's experience.
- Work in collaboration with Elders, traditional practitioners, and support people.
- Address racism and discrimination, whether they are expressed through individual behaviour or present within systems and institutions.
- Learn about the role of history, colonization, and traumatic experiences, in shaing health and health care experiences.

EDUCATION (EDUCATORS):

- Provide education on cultural safety, cultural humility, and anti-racism in the context of PMH care. Content should include (at minimum): the impacts of colonization in Canada; racism and discrimination in health care; approaches to reducing health inequities; and strategies to enhance cultural safety.

Domain 3: Integrated Care Delivery

This domain describes the design and delivery of integrated care systems that provide interdisciplinary PMH services to improve care quality, care continuity, client experience, and health outcomes.

KEY INDICATORS

1. The care team is interdisciplinary, with defined competencies, roles, responsibilities, and boundaries to deliver a comprehensive continuum of PMH care.
2. In concert with clients, protocols are developed for specialty referrals and communication across the care continuum.
3. The most effective, least resource intensive, care is offered first, 'stepping up' to progressively specialized, intensive PMH services as clinically indicated.
4. Processes are in place to ensure coordinated movement from one care team (or level of care) to another.
5. Information systems (e.g., health records) and decision support tools (e.g., clinical protocols) are structured to promote data sharing, care coordination, and collaborative decision-making among clients, approved family/ support people, and other PMH team members.

DOMAIN 3: Recommendations

HEALTH SYSTEMS (LEADERS):

- Develop PMH services with step up and step down levels of care appropriate to the needs of perinatal people, infants, and families along the continuum of care, such as inpatient PMH units (i.e., Mother Baby Units), intensive day programs, outpatient clinics, home-based treatment and support groups.
- Design PMH services to maximize client accessibility and minimize duplication of resources. Develop a centralized referral, triage, intake, and tracking system.
- Co-locate related care teams and offer both virtual and in-person services.
- Create clinical pathways that ensure coordinated movement of clients from one care team (or level of care) to another based on illness severity, risk stratification, and clients' needs, goals and preferences.
- Develop a PMH care coordinator role to optimize communication and coordination within and across care teams and to guide client monitoring, care planning, and transition planning across the continuum of care.
- Create/use evidence-informed decision support tools (i.e., practice guidelines) to promote clear PMH care standards consistent across practice settings and care teams.
- Develop a diverse, skilled, and sustainable interdisciplinary workforce with the competencies necessary to deliver integrated PMH care.
- Implement a team based care approach to deliver a range of PMH interventions across the continuum of care.
- Implement an information system that enhances communication, care planning, and information flow across levels of care. This system should also support data management and tracking of service utilization and client outcomes.

PRACTICE (CLINICIANS):

- Understand the range and scope of PMH and social services available to perinatal people, infants, and families.
- Ensure clients receive the most effective, least resource intensive care first, offering progressively specialized, intensive services as clinically indicated and stepping down when no longer indicated
- Value and seek input from HCPs of various disciplines, specialties, and care teams, wherever possible including those with PMH expertise.
- Participate in interdisciplinary team meetings to ensure care plans are routinely reviewed, monitored, and modified based on treatment effectiveness and clients' needs, goals, and preferences.
- Using a shared information system, document all referrals, assessments, treatment information, and care plans.

EDUCATION (EDUCATORS):

- Offer joint integrated care training to HCPs working in perinatal and adult mental health care settings. Content should include key integrated care concepts (e.g., team based care, stepped care, shared information systems, etc.); knowledge and skills required to implement integrated care; and an overview of PMH and social services available to perinatal people, infants, and families (e.g., scope of services, referral processes, etc.).

Domain 4: Health Promotion and Illness Prevention

This domain describes strategies to enhance individuals' agency to increase control over their PMH (health promotion) and prevent PMI (illness prevention).

KEY INDICATORS

1. PMH education is provided to all pregnant and postpartum persons and their support people.

2. PMH education includes information about PMI prevalence, risk factors, and symptoms; potential impacts of untreated PMI on family and child health; strategies to promote mental health; and access to community PMH resources and/or cultural support services.

3. Individuals who have pre-existing mental illness(es) and are planning a pregnancy receive timely preconception PMH care.

4. Preconception PMH care includes facilitating clients to optimize health behaviours (e.g., nutrition, exercise, sleep, time for self), respecting risky behaviours, providing harm reduction resources, mobilizing social and structural support (e.g., food or housing resources), identifying PMI risk factors/ individual triggers (including intergenerational trauma)/early signs or recurrence, and offering a client directed approach to treatment decision-making.

5. When an individual with mental illness(es) becomes pregnant, the client and care team co-develop an individualized plan to address mental health care, social circumstances, early signs of illness recurrence, crisis management, prenatal care, labour management, postpartum care, and infant care.

DOMAIN 4: Recommendations

HEALTH SYSTEMS (LEADERS):

» Develop a PMH health promotion framework, with a focus on fostering healthy perinatal environments; promoting PMH knowledge, skills, and resilience; increasing help-seeking behaviours; and identifying people in need of PMH care. The framework should include programs and/or strategies for community engagement, health communication, client education, and universal PMH screening.

PRACTICE (CLINICIANS):

» Promote healthy attitudes (e.g., self-compassion) and behaviours (e.g., nutrition, physical activity, sleep, time for self, seeking support) in all perinatal people.

» Explore options for optimizing health behaviours, monitoring triggers and environmental stressors, and identifying early warning signs of changing capacity.

» Share community PMH resources and offer PMH education to all perinatal people.

» Promote recognition that for perinatal people with specific risk factors (e.g., pre-existing or history of mental illness, current life stressors, low social support, etc.), intervention(s) should begin during the period in which conception is considered.

» When an individual with mental illness(es) becomes pregnant, work with the client and care team to co-develop an individualized PMH care plan

» Ensure PMH interventions are provided as early as possible.

EDUCATION (EDUCATORS):

» Provide PMH health promotion and illness prevention training to HCPs working in perinatal and adult mental health settings. Content should include all topics listed in the PMH education key indicator.

Domain 5: Screening, Assessment and Triage

This domain focuses on processes related to identifying the risk or possible presence of PMI (screening), characterizing PMI to inform a diagnosis and care plan (assessment), and evaluating the nature and severity of PMI to determine type and timing of services (triage).

KEY INDICATORS

1. All pregnant and postpartum people are routinely screened for PMIs using a validated tool (e.g., Edinburgh Perinatal Depression Screen, Patient Health Questionnaire-9).

2. A positive screen includes endorsed thoughts of self-harm or suicide and/or a total score above the cut-off value associated with a validated tool.

3. PMI screening ideally occurs in care settings that include PMH-educated clinicians, social support, and community resources for families, and client choice or self-referral protocol for follow-up when screening is positive.

4. Screening follow-up includes a comprehensive PMH assessment used to inform a possible diagnosis, identify safety risks (e.g., intimate partner violence), and the development of an individualized care plan, developed in partnership with the client.

5. The care team reflects on the nature and severity of symptoms, client preferences, and social circumstances to inform the type and timing of PMH services and supports (including traditional knowledge and teaching) offered.

DOMAIN 5: Recommendations

HEALTH SYSTEMS (LEADERS):

- Develop a universal PMI screening process at scheduled time-points in pregnancy and the postpartum period.
- Develop a comprehensive PMH assessment process focused on identifying clients' strengths and preferences, in addition to specific problems requiring intervention(s) with consideration to PMI acuity, severity, and complexity.
- Develop a triaging process that matches clients' needs and preferences to type and timing of PMH services offered.
- Develop referral pathways, and advocate for access, to PMH services.

PRACTICE (CLINICIANS):

- Offer PMI screening to all perinatal people at scheduled time-points. Communicate why and how screening is being done and ask clients if they have questions or concerns.
- In clients who screen positive and/or express PMH concerns, complete a comprehensive PMH assessment. A PMH assessment should include an evaluation of PMI severity and treatment urgency.
- Consider clients' needs, preferences and illness severity when offering treatment recommendations.
- Ensure timely completion of referrals to follow-up services.
- Provide clients with written information related to referrals, follow-up appointments, and relevant community supports and services.

EDUCATION (EDUCATORS):

- Teach HCPs how to offer and conduct PMI screening. Content should include rationale and process for screening, and risk factors for PMIs – especially those that can be addressed with appropriate social or community supports and services.
- Teach HCPs how to conduct a PMH assessment. Content should include assessment of symptoms (i.e., number, nature, and severity), safety risk(s), and impact of PMI on quality of life and daily functioning.
- Provide HCPs with a comprehensive list of PMH and community/social services.

Domain 6: Biopsychosocial Approach to Treatment

This domain describes evidence-informed treatment strategies that incorporate client preferences, as well as the physical, psychological, and social aspects of PMI, with a focus on symptom reduction and relapse prevention.

KEY INDICATORS

1. Treatment is offered within the context of an integrated, stepped-care model, ensuring intervention intensity matches client need and care is coordinated across clinical teams and care settings.
2. A treatment plan specifies a range of intervention options adaptable to clients' needs and preferences.
3. Evidence-informed interventions offered for PMI include psychoeducation, psychotherapy (e.g., cognitive behavioural therapy, interpersonal therapy, parent-infant psychotherapy), traditional healing approaches, and medication.
4. The treatment plan incorporates culturally-safe and trauma-informed solutions for mental health risk factors and symptoms, obstetrical/medical risk factors and symptoms, psychosocial needs, child care support, and community resources.
5. Ongoing assessment and monitoring focus on treatment effectiveness and potential treatment modifications.

DOMAIN 6: Recommendations

HEALTH SYSTEMS (LEADERS):

- Support the development of PMH services with step up and step down levels of care appropriate to the needs of perinatal people, infants, and families at different times along the continuum of care, such as inpatient PMH units (i.e., Mother Baby Units), intensive day programs, outpatient programs, home-based treatment and support groups.
- Develop a diverse workforce and clinical services capable of providing a range of PMH interventions including psychoeducation, psychotherapy, pharmacotherapy, genetic counselling, traditional healing, physical health care, substance use treatment and counseling, and psychosocial rehabilitation and support.
- Develop an integrated care planning process. Care plans should identify treatment options for biological, psychological, and social concerns; frequency of monitoring and assessment; and the roles of all HCPs involved in care during the perinatal period.

PRACTICE (CLINICIANS):

- Reflect on the impact and interaction of biological factors (e.g., genetics, medical/ obstetrical comorbidities, etc.), psychological factors (e.g., thoughts, emotions, behaviours, etc.), and social factors (e.g., life stressors, trauma, relationships, socioeconomic status, etc.) on health during the perinatal period.
- Address biological, psychological, and social needs simultaneously, and offer a range of treatment options.
- Following a comprehensive PMH assessment, develop an integrated care plan in consultation with the client, their support person(s), and care team. Share the care plan with HCPs involved in care during the perinatal period, allowing for modification based on treatment effectiveness and the client's preferences, needs, and goals.

EDUCATION (EDUCATORS):

- Provide education on the biopsychosocial model of PMI. Focus content on the biological changes, psychological demands, and social transitions that occur in the perinatal period (and early parenthood), and evidence-based interventions that target biological, psychological, and social outcomes in people with PMIs.

Domain 7: Transition and Discharge Planning

This domain refers to the coordination, communication, and resources required to effectively support PMH clients to move between health care settings and into the community.

KEY INDICATORS

1. Care transitions are guided by clear, written communication about care plans between care teams.
2. Care transitions address client goals, interventions and treatment, client/infant safety planning, and social needs.
3. Transitions such as discharge planning are guided by the client in collaboration with the health care team, (client-identified) family/advocates, and community supports.
4. Transition and discharge plans are aligned with the clients' goals and preferences.
5. Transition planning begins when a client engages in care with a PMH clinician or care team.
6. Transitions incorporate care team awareness of trauma-informed and culturally sensitive PMH community resources and client opportunities to access appropriate services and culturally-relevant programs.

DOMAIN 7: Recommendations

HEALTH SYSTEMS (LEADERS):

- Create and maintain a local service directory for PMH resources and services.
- Create a standardized process for developing, reviewing, and modifying transition and discharge plans.
- Create a system for communicating transition and discharge plans among HCPs within and across practice settings.
- Develop a client-centred discharge summary – a written tool with individualized health information and easy-to-understand discharge instructions (e.g., PMI diagnosis and comorbidities, triggers and early signs of illness recurrence/exacerbation, crisis management, medications, follow-up, community resources, etc.).

PRACTICE (CLINICIANS):

- Collaborate with the client, their support person(s), and care team to develop a transition/discharge plan that supports the needs, goals, and preferences of the client while promoting safety and continuity of care.
- Assess the client for transition/discharge readiness, evaluating a client's physical and psychological status, health knowledge, coping ability, availability of social support, and access to health, social, and community resources.
- Identify and address potential barriers to care transitions and discharges.
- Educate the client and their support persons(s) about their health status, plan of care, and transition process, tailoring the information to their needs and stage of care. Wherever possible, provide a written summary of transition/discharge information (e.g., client-centred discharge summary).
- Assess the client's understanding of their health status, care plan, and transition process. Encourage clients to ask questions.
- Promote timely exchange of client and treatment information among HCPs at care transitions.

EDUCATION (EDUCATORS):

- Identify the roles and responsibilities for each interdisciplinary team member in transition and discharge planning.
- Teach HCPs key principles of transition and discharge planning (e.g., collaborating with client and their support person(s), assessing readiness, providing written information, etc.).
- Review standardized transition and discharge processes, communication strategies, and documentation tools.

Domain 8: Training and Education

This domain focuses on education and training to enhance the skills and competencies (including cultural competency) of clinicians and support people working with PMH clients.

KEY INDICATORS

1. PMH education focuses on building capacity to acknowledge, respect, and integrate clients' past experiences, cultural beliefs, and personal values (e.g., trauma-informed care, Indigenous cultural safety, harm reduction) into care.

2. Core PMH training competencies include application of (1) biological and psychosocial/cultural underpinnings of perinatal transitions; (2) risk factors and spectra of mental illness(es) across the perinatal period, appropriate screenings, assessments, and interventions; and (3) application of PMI treatment approaches (e.g., psychotherapy, medications, inpatient care, social referrals) that acknowledge systemic racism and incorporate parental, infant, and family wellbeing.

3. On-the-job performance support (e.g., clinical supervision, peer mentoring, team huddles, client feedback, and written resources) to reinforce and strengthen PMH training and competencies.

4. Plan for PMH education revisions to ensure current culturally safe and trauma-informed content and team support.

DOMAIN 8: Recommendations

HEALTH SYSTEMS (LEADERS):

- Advocate for the inclusion of both theoretical and clinical PMH education into academic curricula for HCPs (e.g., medicine, nursing, midwifery, social work, pharmacy, psychology, etc.).
- Promote the development and use of a PMH competency framework that defines the knowledge and skills required to provide evidence-based PMH care.
- Develop a standardized process to orient HCPs to their roles and responsibilities in the delivery of integrated PMH care.
- Identify strategies (e.g., performance assessments, supervised clinical training, etc.) to monitor HCPs' skills and knowledge to provide PMH care within their practice setting(s).
- Develop processes for HCPs to access on-the-job PMH performance support.
- Implement education frameworks which improve coordination and delivery of PMH training, integrated care training, and equity-oriented (e.g., trauma-informed care, Indigenous cultural safety, harm reduction) training across disciplines and practice settings.
- Offer and promote ongoing opportunities for PMH professional development.

PRACTICE (CLINICIANS):

- Seek opportunities to develop and maintain PMH knowledge (e.g., education courses, case reviews, conferences, etc.) and skills (e.g., practice sessions, clinical supervision, etc.).
- Routinely engage in self-assessment by reflecting on your practice, identifying areas of strength and areas for enhancing knowledge and skills, and developing learning goals.
- Participate in learning activities to address identified areas for enhanced PMH knowledge and skills.

EDUCATION (EDUCATORS):

- Develop learning content, activities, and assessments based on PMH core competencies.
- Design learning activities (e.g., in-services, case scenarios, practice sessions, debriefing, etc.) to accommodate diversities in HCP needs, knowledge, learning preferences, and ability.
- Offer joint training opportunities for HCPs from a variety of disciplines (e.g., medicine, nursing, midwifery, social work, pharmacy, psychology, etc.) and specialties (e.g., obstetrics, primary care, mental health, etc.).
- Provide on-the-job performance support.
- Establish partnerships with educational institutions to improve PMH training for HCPs.

Domain 9: Model of Care Planning

This domain describes the relationship between people, processes, and systems needed to prepare an organization for implementation of a culturally-safe, trauma-informed, integrated PMH model of care.

KEY INDICATORS

1. A planning team conducts a local needs assessment to identify systemic racism, and gaps and needs in PMH services.
2. A planning team identifies guiding principles underpinning aims and objectives to support decision-making.
3. A planning team defines the nature of clients, scope and relevance of clinical services, and team composition (including roles and responsibilities) for the care model.
4. A planning team assesses care model feasibility and acceptability through stakeholder engagement (emphasizing client perspectives).
5. A planning team identifies space and resource requirements to support a culturally-safe and trauma-informed PMH care model.
6. A planning team identifies systemic barriers to accessing PMH services (e.g., stigma, awareness of services, language/cultural barriers, child care, etc.).
7. In concert with communities served and clients, a planning team develops resources to reduce barriers, including funding when specialty services require client relocation.
8. A planning team develops materials to support care model operationalization (e.g., workflows, communication forums, protocols, educational materials, etc.), with a planned schedule for updating supporting materials.

DOMAIN 9: Recommendations

HEALTH SYSTEMS (LEADERS):

- Define the problem – conduct a local needs assessment to summarize the current PMH MOC, establish baseline data, and identify areas for improvement.
- Describe the change – define MOC objectives and guiding principles.
- Define MOC s – identify the range of clients, clinical services, care teams, and partnerships involved.
- Establish a planning team with change leaders across stakeholder groups (e.g., management, information systems, clinical teams, community partners, clients, etc.).
- Seek project sponsorship to provide strategic direction and access to resources.
- Assess organizational readiness for change, including resource requirements and barriers/facilitators to MOC implementation.
- Develop a project work plan to meet MOC objectives through manageable work streams with associated tasks, timelines, and accountabilities.
- Seek endorsement of the workplan and proposed MOC from appropriate stakeholders and sponsors.

PRACTICE (CLINICIANS):

- Understand the vision for the PMH care, including the need for change, planning activities, and expected outcomes.
- Participate in a local needs assessment of current PMH services.
- Offer feedback related to MOC acceptability and feasibility when there are opportunities for stakeholder engagement.

EDUCATION (EDUCATORS):

- Conduct a learning needs assessment with HCPs to identify opportunities for knowledge and skill enhancement across the core domains of integrated PMH care.
- Develop learning content, activities, and resources required to support core integrated PMH competencies.
- Prior to MOC implementation, offer joint training opportunities for HCPs from a variety of disciplines (e.g., medicine, nursing, midwifery, social work, pharmacy, psychology, etc.) and specialties (e.g., obstetrics, primary care, mental health, etc.).

Domain 10: Model of Care Evaluation

This domain focuses on the evaluation of care models to facilitate continuous learning and improvement.

KEY INDICATORS

1. An evaluation plan specifies the purpose of the evaluation, key evaluation questions, and key indicators.
2. An evaluation plan indicates how data will be collected, analyzed and reported.
3. Evaluation questions include systemic features influencing care model access and utilization, cultural safety associated with clinical service delivery/treatment options, and clients' experiences/outcomes.
4. Results identify effective care model practices, indicators of barriers/problems, and areas for quality improvement.

DOMAIN 10: Recommendations

HEALTH SYSTEMS (LEADERS):

- Establish an evaluation team with a broad mix of skills and perspectives (e.g., evaluation specialist, data analyst, clinical team member, community partner, etc.).
- Identify intended users of MOC evaluation findings (e.g., program managers, HCPs, funding agencies, clients, etc.).
- Create a logic model identifying MOC's resources, activities, outputs, and outcomes.
- Develop an evaluation plan outlining the purpose of the evaluation, key evaluation questions, key indicators, and evaluation methods.
- Develop an evaluation framework summarizing key indicators and associated data source(s), data collection frequency/responsibility, and methods for data recording, analysis, and reporting.
- Establish an evaluation review process to guide the interpretation of findings, development of recommendations, and improvement planning.
- Create a communications strategy to disseminate evaluation findings to intended users.

PRACTICE (CLINICIANS):

- Reflect on the importance of MOC evaluation on improving PMH services, care experiences, and health outcomes.
- Work with the evaluation team to identify MOC components that are important to HCPs and users.
- Consider MOC evaluation activities that you might be interested in supporting (e.g., developing evaluation questions, interpreting evaluation findings, planning for improvement, etc.).

EDUCATION (EDUCATORS):

- Create opportunities for HCPs to engage in learning conversations with the evaluation team. Facilitate knowledge exchange through appreciative inquiry (e.g., "*what evaluation findings are important to your practice?*").

Ideal Patient Experience

Jen is a 36-year-old first-time parent with a two-month old son, Jackson. She has a history of generalized anxiety disorder and is currently on maternity leave from work. Jen and her husband recently immigrated to Canada from Vietnam and do not have family or many friends in the city. At her routine well-baby visit, Jen's family physician sensitively inquires about how she is feeling and coping. Jen describes feeling worried about breastfeeding (e.g., baby's latch, milk supply, feeding schedule, etc.) and Jackson's health (e.g., weight gain, developmental milestones, risk of COVID infection, etc.). She is often irritable and has noticed a decrease in her appetite and energy level. Jen has also started to isolate at home. Timing errands between naps and feeds has become increasingly stressful so she has started to avoid leaving the house.

As a first step, Jen's family physician screens her for PMIs using validated measures and conducts a medical work-up to address possible perpetuating conditions (e.g., anemia, thyroid dysfunction, etc.). Her family physician also provides education about PMH including information about prevalence, symptoms, and risk factors of PMIs and together, they discuss strategies to promote mental health (e.g., getting adequate sleep, asking for support, eating healthy, and getting exercise). In the context of Jen's symptoms and screening scores (EPDS score of 12, GAD-7 score of 13), Jen's family physician refers her to the local Outpatient PMH Clinic.

The next day, Jen is contacted by a PMH nurse case coordinator who assesses her eligibility and suitability for their program. The nurse case coordinator has specialized PMH training and will act as a *'navigator'* in Jen's care, coordinating with other clinical teams and specialists as needed. Jen is given an appointment in clinic within a week of her referral. At her first visit, the reproductive psychiatrist conducts a comprehensive PMH assessment, which includes an evaluation of Jen's personal goals, strengths, stressors, and social supports, in addition to mental status, physical status, and safety risks. Jen is diagnosed with postpartum anxiety and collaborates with the reproductive psychiatrist and nurse case coordinator to co-develop an individualized care plan that includes cognitive behavioural therapy (CBT), breastfeeding support, a weekly Postpartum Support Group for Vietnamese parents and a follow-up psychiatric appointment in four weeks. Before the appointment ends, the nurse case coordinator reviews the care plan with Jen, including details of her upcoming appointments (e.g., CBT group with the clinic's psychologist, lactation consultation at the Breastfeeding Clinic), and sends Jen a copy of the care plan via email. Jen is able to contact the nurse case coordinator via phone if she has additional questions or requires mental health nursing support. The nurse case coordinator reviews the electronic health record system to ensure the reproductive psychiatrist's consultation note is shared with Jen's HCPs including her family physician, psychologist, and lactation consultant.

Over the next month, Jen's breastfeeding challenges improve with support from the lactation consultant. She also begins to use CBT skills to manage her anxiety and forms a new friendship through the Vietnamese Postpartum Support Group. Although Jen is less worried about breastfeeding and feels more connected, she remains distressed about Jackson's health and safety. She checks his breathing several times throughout the night and finds

it difficult to leave him in the care of her husband. Jen is curious about starting medications alongside the other components of her care plan. At her next PMH clinic appointment, Jen and her reproductive psychiatrist engage in a conversation about starting medications. They discuss the effectiveness, safety profile (in the context of breastfeeding) and side effects of selective serotonin reuptake inhibitors (SSRIs), in addition to Jen's values, goals, and priorities related to treatment. Together they compare the risks and benefits of taking an SSRI versus remaining on her current treatment plan. Jen feels she can make an informed decision and chooses to start citalopram, an SSRI that Jen has found effective in the past. The PMH nurse case coordinator collaborates with Jen to update her care plan and provides Jen with a client handout on SSRIs. The reproductive psychiatrist's consultation note, prescription, and updated care plan is added to Jen's electronic health record and shared with her HCPs.

Over the next three months, Jen continues to attend a weekly Postpartum Support group and routinely visits the PMH clinic, seeing a psychologist for CBT and psychiatrist for ongoing anxiety management. Her tolerance and response to citalopram is closely monitored and she reaches an optimal dosage that is effective for her. Jen feels well connected to her nurse case coordinator who calls Jen monthly to conduct a wellness check. The nurse case coordinator liaises with the PMH psychologist and psychiatrist to coordinate same-day appointments in clinic when possible.

After six months, Jen's symptoms have significantly improved. She is more social and leaves the house to attend parent-infant activities, run errands, and see friends. She is sleeping well, and both her appetite and energy have retuned. She walks daily, seeks practical and emotional support from her husband, and uses CBT skills to identify and manage anxious thoughts. She worries less intensely and frequently about Jackson's health and is able to rest when he is sleeping or with a caregiver. Jen is discharged from the outpatient PMH clinic with a written wellness plan that outlines her triggers, warning signs, coping strategies, and sources of support (including low-cost PMH counselling and crisis resources). Jen is advised that she can return to the PMH clinic if she feels the need. The PMH nurse case coordinator sends a discharge note to Jen's GP, psychiatrist, and psychologist summarizing her care and discharge from clinic.

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