CONSENSUS STATEMENT

Screening for Depression in the Perinatal Period in BC Revisited



April 2014







Contents

	CONSENSUS STATEMENT				
Scr	eening for Depression in the Perinatal Period in BC Revisited	2			
	Background	2			
	Objectives	2			
	Recommendations	3			
	Rationale	3			
	Sponsor	5			
REF	ERENCES	6			
Pro	PENDIX vincial Perinatal Depression Screening es of Consensus Meeting	8			
	Morning Session.	9			
	Afternoon Session	15			
	Substantive points in the discussion and related recommendations	16			
	Meeting Attendees	19			

CONSENSUS STATEMENT Screening for Depression in the Perinatal Period in BC Revisited

Background

Perinatal depression (PND) can be successfully treated, particularly if identified early. There is evidence that early rather than later treatment leads to better outcomes. Treatment has been shown to positively impact women and their children and families.^{1,2}

While there is good evidence of success in treating PND, current research designs make it difficult to determine whether screening itself contributes to this success or whether the outcome would have been the same using traditional case finding methods.

The current guidance on mental health screening for perinatal women in BC is found in Addressing Perinatal Depression: A Framework for BC's Health Authorities (2006).³ 'Screening and Diagnosis' is one of four pillars which form the basis of the Framework. Advancing the implementation of the Framework is a key action identified in Healthy Minds, Healthy People: A Ten-Year Plan to Address Mental Health and Substance Use in British Columbia (2010).⁴

The guidance in the Framework is to screen all women using the Edinburgh Postnatal Depression Screening Scale (EPDS) between 28 and 32 weeks of pregnancy and again at six to eight weeks postnatally. This aligned with the previous version of the Canadian Task Force on Preventive Health Care's guidance (2005) which recommended routine screening for depression in adults in primary care settings.⁵

Additionally, the document Healthy Start: Provincial Public Health Perinatal, Child and Family Health Services (2013)⁶ includes EPDS screening as a universal public health service, with all women to be offered EPDS screening by eight weeks postpartum. This aligns with the recommendation for universal depression screening in the Core Public Health Functions for BC: Model Core Program Paper on Reproductive Health and Prevention of Disabilities (2009).⁷

In May 2013, the Canadian Task Force on Preventive Care on Screening for Depression in Adults recommended against universal screening for depression, including screening of subpopulations at increased risk of depression. This included women in the perinatal period.⁸ However, the Task Force graded the recommendation as weak with very-low-quality evidence.

The 2013 Canadian Task Force recommendation led to a re-examination of BC's guidance on perinatal depression screening for BC health care professionals. A meeting was convened on January 17, 2014 in Vancouver, BC to bring together clinical and public health experts and researchers from across Canada to present the evidence and other related contextual information to key provincial decision-makers and to facilitate a discussion about the benefits and harms of depression screening in perinatal women (pregnancy through to one year postpartum). The Expert Panel, a sub-group of participants at the consensus meeting, was tasked with developing this Consensus Statement which makes recommendations to direct future practice in BC in the area of perinatal depression screening. Refer to the appendix for a summary of the proceedings of the meeting and the Canadian Task Force recommendations.

Objectives

- 1. To assist provincial government and health authority (HA) decision-makers in formulating policies and making decisions about screening for perinatal depression (PND).
- 2. To assist health care providers in making decisions about screening for PND in their practices.

^{*} Routine screening is also referred to as "universal screening". Routine/universal screening is the screening of a whole population (e.g., perinatal women). This differs from "targeted screening" which is the screening of a sub-group of a population (e.g., living in a specific geographic area and/or in an "at-risk" group).

Recommendations

The recommendations of the Expert Panel in BC differ from the recommendations in the 2013 Canadian Task Force on Preventive Health Care which concluded there was insufficient high quality evidence to justify the establishment of a universal depression screening program. The Expert Panel, on the other hand, concluded that the evidence was also insufficient to justify discontinuing existing screening programs in BC at this time. This was further supported by the opinion of clinical and public health experts suggesting there was greater potential benefits than harms from screening. As such, the consensus recommendations are:

- 1. Until higher quality evidence is available to further guide changes in practice, continue with the current practice recommendation in BC to screen all women for depression at least twice during the perinatal period (once in the antenatal and once in the postpartum period) using the Edinburgh Postnatal Depression Scale (EPDS).
- 2. Advocate for opportunities and resources to conduct high quality research that advances our knowledge about the benefits and harms of universal screening in the perinatal population. Research findings will help to inform future practice recommendations.

Rationale

The literature considered by the Canadian Task Force, the literature not considered by the Canadian Task Force and the experiences of expert clinicians on various aspects of PND and PND screening were reviewed and discussed extensively at the consensus meeting. The discussion was guided by an ethical decision-making framework which considered the potential benefits and harms of universal screening and no universal screening.

Key points which contributed to the recommendations for BC by the Expert Panel

- Untreated PND has been shown to adversely impact a woman⁹⁻¹¹ and may consequently affect her relationship with her child.¹²⁻¹⁴ The cognitive, behavioural and emotional development of the child may also be at risk.¹⁴⁻¹⁹ Further, PND has been associated with an increased risk of depression in fathers.^{20,21}
- Screening tools used to detect PND have been well researched and validated.²²
- The Edinburgh Postnatal Depression Scale (EPDS) is the most commonly used depression screening tool in the perinatal period. It is simple and inexpensive to administer, valid in studied populations, has 80–90% sensitivity and specificity at commonly applied cut-offs and is internationally recognized.
- The EPDS has been validated in multiple and diverse populations. While not yet validated in BC
 Aboriginal populations, it has been validated in Aboriginal populations in other Canadian jurisdictions
 and in Australia.^{23,24}
- Studies show high levels of acceptability (80-90%) amongst women for PND screening.²⁵
- Expert clinicians at the consensus meeting noted that, in their collective experience, there appears
 to be very few clinical harms (e.g., misdiagnosis, labeling and stigma) associated with depression
 screening in perinatal women. Further, the impact of these harms can be minimized by systematically
 following up all positive screens (e.g., repeat screen and, if necessary, conduct a diagnostic interview).
- Expert clinicians provided many examples of where a positive screen resulted in women seeking help for their depression. Since the 2006 recommendation for universal screening in BC, expert clinicians reported a shift toward earlier referrals and, therefore, earlier treatment and better outcomes for PND.
- Universal screening depends upon well established referral and treatment pathways for women that screen positive.³ These pathways have been established in BC in all regional health authorities.²⁶ For those diagnosed with PND, a range of services is available.
- Using the ethical decision-making framework, the benefits of universal PND screening were considered by the Expert Panel to outweigh the harms. The potential harms attributable to not universally screening for PND were recognized as a significant concern.

Considerations which influenced the Expert Panel in BC to differ from the Canadian Task Force in its position on PND screening

Primary consideration

The Canadian Task Force reported that there is a lack of high quality research to demonstrate the benefits of universal depression screening. They also acknowledged a lack of high quality research to demonstrate that screening is harmful. Because the Task Force placed a high value on the evidence of the benefits and the lack of harms associated with screening *and* the evidence for both was weak, they recommended against universal screening for all populations, including at-risk populations such as perinatal women.

The opinion of the expert clinicians at the consensus meeting was that, in their experience, depression screening in the perinatal population is associated with few clinical harms and leads to earlier detection and treatment of PND than would have occurred in the absence of screening. Earlier treatment has been shown to result in significant health benefits for women, children and their families.

Given the lack of high quality research on the harms of screening and the experience of expert clinicians weighing the harms against the benefits, the Expert Panel did not feel there was sufficient justification to warrant a recommendation to cease universal PND screening in BC at this time. Integral to the recommendation to continue PND screening in BC is that a strategy be developed for conducting high quality research on its benefits and harms. This, in turn, will inform future practice recommendations.

Other considerations

- The Canadian Task Force categorized its recommendations for depression screening as weak and based on very-low-quality evidence. The Canadian Task Force defines weak recommendations as ones where the balance between desirable and undesirable effects is small and the quality of evidence is lower. In these situations, they acknowledge that policy-making will require substantial debate and involvement of various stakeholders and clinicians must recognize that different choices will be appropriate for different individuals. The policy debate on the desirable and undesirable effects of depression screening occurred at the consensus meeting and, in the opinion of the Expert Panel, sufficient rationale was put forward to warrant a position that differed from the Canadian Task Force recommendations for the perinatal population.
- The 2013 recommendations of the Canadian Task Force on Preventive Care revised the 2005 recommendations. The 2005 recommendations supported universal screening for depression in adults (opposite from the conclusions of the 2013 Task Force).
- The Canadian Task Force based its recommendations on a literature review which considered only randomized clinical trials evaluating the direct effect of screening vs. no screening on health outcomes. While the Task Force was correct in that there is no high-quality evidence on the direct effects of screening on health outcomes, there is randomized clinical trial evidence to suggest that screening in the clinical setting combined with low intensity interventions positively impacts intermediary maternal mental health outcomes (i.e., improved EDPS or SF-12 scores), as compared with identification of cases and treatment in the clinical setting as per usual care. ^{22,27-29} The latter was not considered by the Task Force in their recommendations, but was deemed by the Expert Panel to still provide relevant information on the potential benefits of screening in the absence of higher-quality studies.
- The Canadian Task Force recommendations are intended to guide the practice of family physicians and other primary care providers, most of whom have an ongoing relationship with their patients. This may have influenced the direction of the recommendations by the Task Force. This BC Consensus Statement is intended to guide a variety of perinatal providers, including public health nurses.
- The Expert Panel recommendations were made with the recognition that, based on a systematic review done by the US Agency for Healthcare Research and Quality,²² the false positive screen rate could be between 9% and 18% (e.g., 3,600 to 7,200 women of the approximately 40,000 deliveries per year in BC). This burden was weighed against the opinion of expert clinicians that few clinical harms appear to result from false positive screens, that systems are in place in BC to follow-up all women who screen positive and that the time required for the follow-up of women with positive screens was small in comparison to the potential benefits gained from earlier detection and treatment of women with PND.

• The recommendation to continue universal PND screening in BC is consistent with recommendations from some, but not all, jurisdictions. Australia (2011)³⁰ and the US Preventive Services Task Force (2009)³¹ recommend universal screening in the perinatal and general adult populations, respectively, while the American College of Obstetricians and Gynecologists (2012)³² and the United Kingdom National Screening Committee (2011)³³ do not support universal screening. The United Kingdom Royal College of Obstetricians and Gynaecologists (2011)³⁴ is less explicit about universal screening but does recommend asking women about their current mental health at each antenatal clinic visit.

Sponsor

The consensus meeting that developed this Statement was sponsored by the BC Reproductive Mental Health Program, a program of BC Mental Health and Addictions Services, and Perinatal Services BC. Both are agencies of the Provincial Health Services Authority in BC. No external financial support has been received for any portion of the statement's preparation.

Sarah Bell, Executive MBA, RN, CHE

Executive Director

Children and Women's Mental Health

and Substance Use Program

BC Mental Health and Substance Use Services

An agency of the Provincial Health Services Authority

P2 - 308 Mental Health Building

4500 Oak Street

Vancouver, BC V6H 3N1 Office: 604.875.2343 Fax: 604.875.2541 Email: sjbell@cw.bc.ca Web: bcmhsus.ca BC MENTAL HEALTH & SUBSTANCE USE SERVICES

An agency of the Provincial Health Services Authority

Kim Williams, RN, MSN

Kim Williams

Provincial Executive Director

Perinatal Services BC

An agency of Provincial Health Services Authority

West Tower, Suite 350, 555 W. 12th Avenue

Vancouver, BC V5Z 3X7

Phone: 604.877.2121 ext. 223768 Email: kim.williams@phsa.ca Web: www.perinatalservicesbc.ca



REFERENCES

- 1. Gunlicks ML, Weissman MM. Change in child psychopathology with improvement in parental depression: A systematic review. *Journal of the American Academy of Child & Adolescent Psychiatry*. 2008;47(4):379-389.
- 2. Wickramaratne P, Gameroff MJ, Pilowsky DJ, et al. Children of depressed mothers 1 year after remission of maternal depression: Findings from the STAR* D-child study. *Am J Psychiatry*. 2011;168(6):593.
- 3. BC Reproductive Mental Health Program & BC Ministry of Health. Addressing perinatal depression: A framework for BC's health authorities. 2006.
- 4. Ministry of Health Services & Ministry of Child Development. Healthy minds, healthy people: A ten-year plan to address mental health and substance use in British Columbia. 2010.
- 5. Harriet L, MacMillan C, Patterson J, Wathen N, Canadian Task Force on Preventive Health Care. Screening for depression in primary care: Recommendation statement from the Canadian Task Force on Preventive Health care. *CMAJ*. 2005;172(1):33-35.
- 6. Population and Public Health, BC Ministry of Health. Healthy start initiative: Provincial perinatal, child and family public health services. 2013.
- 7. BC Health Authorities & BC Ministry of Healthy Living and Sport. Model core program paper: Reproductive health and prevention of disabilities. 2009.
- 8. Canadian Task Force on Preventive Health Care. Recommendations on screening for depression in adults. *CMAJ*. 2013;185(9):775-792.
- 9. Dennis C, Doswell T. Psychosocial and psychological interventions for preventing postpartum depression. The Cochrane Collaboration; 2013.
- 10. Patel M, Bailey RK, Jabeen S, Ali S, Barker NC, Osiezagha K. Postpartum depression: A review. *J Health Care Poor Underserved*. 2012;23(2):534-542.
- 11. Banti S, Borri C, Camilleri V, et al. Perinatal mood and anxiety disorders. clinical assessment and management. A review of current literature. *Giornale Italiano di Psicopatologia / Italian Journal of Psychopathology*. 2009;15(4):351-366.
- 12. Atkinson L, Paglia A, Coolbear J, Niccols A, Parker KC, Guger S. Attachment security: A meta-analysis of maternal mental health correlates. *Clin Psychol Rev.* 2000;20(8):1019-1040.
- 13. Martins C, Gaffan EA. Effects of early maternal depression on patterns of infant-mother attachment: A meta-analytic investigation. *Journal of Child Psychology and Psychiatry*. 2000;41(6):737-746.
- 14. National Research Council. Chapter 4: Associations between depression in parents and parenting, child health, and child psychological functioning. In: England MJ S, LJ, ed. *Depression in parents, parenting and children: Opportunities to improve identification, treatment, and prevention.* Washington, DC: The National Academies Press; 2009:119-181.
- 15. Brand SR, Brennan PA. Impact of antenatal and postpartum maternal mental illness: How are the children? *Clin Obstet Gynecol*. 2009;52(3):441-455.
- Grace SL, Evindar A, Stewart D. The effect of postpartum depression on child cognitive development and behavior: A review and critical analysis of the literature. *Archives of Women's Mental Health*. 2003;6(4):263-274.
- 17. Sohr-Preston SL. Implications of timing of maternal depressive symptoms for early cognitive and language development. *Clin Child Fam Psychol Rev.* 2006;9(1):65-83.
- 18. Stein A, Malmberg L, Sylva K, Barnes J, Leach P. The influence of maternal depression, caregiving, and socioeconomic status in the post-natal year on children's language development. *Child: care, health and development*. 2008;34(5):603-612.
- 19. Goodman SH, Rouse MH, Connell AM, Broth MR, Hall CM, Heyward D. Maternal depression and child psychopathology: A meta-analytic review. *Clin Child Fam Psychol Rev.* 2011;14(1):1-27.
- 20. Kim P, Swain JE. Sad dads: Paternal postpartum depression. Psychiatry (Edgmont). 2007;4(2):35.
- 21. Wee KY, Skouteris H, Pier C, Richardson B, Milgrom J. Correlates of ante-and postnatal depression in fathers: A systematic review. *J Affect Disord*. 2011;130(3):358-377.

- 22. Myers E, Aubuchon-Endsley N, Bastian L, et al. Efficacy and safety of screening for postpartum depression. comparative effectiveness review 106. Prepared by the duke evidence-based practice center under contract no. 290-2007-10066-I. 2013;AHRQ Publication No. 13-EHC064-EF.
- 23. Clarke PJ. Validation of two postpartum depression screening scales with a sample of First Nations and Métis women. *CJNR*. 2008;40(1):112-125.
- 24. Bowen A, Muhajarine N. Prevalence of antenatal depression in women enrolled in an outreach program in Canada. *Journal of Obstetric, Gynecologic, & Neonatal Nursing: Clinical Scholarship for the Care of Women, Childbearing Families, & Newborns.* 2006;35(4):491-498.
- 25. Gemmill AW et al. A survey of the clinical acceptability of screening for postnatal depression in depressed and non-depressed women. *BMC Public Health*. 2006;6:211.
- 26. BC Ministry of Health. Environmental scan report: Addressing perinatal depression: A framework for BC's health authorities. 2011.
- 27. Leung S, Leung C, Lam T, et al. Outcome of a postnatal depression screening programme using the Edinburgh Postnatal Depression Scale: A randomized controlled trial. *J Public Health*. 2011;33(2):292-301.
- 28. Yawn B, Dietrich A, Wollan P, et al. TRIPPD: A practice-based network effectiveness study of postpartum depression screening and management. *Ann Fam Med*. 2012;10(4):320-329.
- 29. Morrell C, Slade P, Warner R, et al. Clinical effectiveness of health visitor training in psychologically informed approaches for depression in postnatal women: Pragmatic cluster randomised trial in primary care. *BMJ*. 2009;338(7689):276-279.
- 30. Austin M-P, Higher N and the Guidelines Expert Advisory Committee. Clinical practice guideline for depression and related disorders anxiety, bipolar disorder and puerperal psychosis in the perinatal period. *Melbourne: Australian Government: Beyond Blue: The National Depression Initiative*. 2011.
- 31. U.S. Preventive Services Task Force. Screening for depression in adults: U.S. preventive services task force recommendation statement. *Ann Int Med.* 2009;151(11):784-792.
- 32. American College of Obstetricians and Gynecologists. Screening for depression during and after pregnancy. committee opinion no. 453. *Obstet Gynecol*. 2010;115:394-395.
- 33. UK National Screening Committee. Postnatal depression screening policy position statement. 2011.
- 34. Royal College of Obstetricians and Gynaecologists. Management of women with mental health issues during pregnancy and the postnatal period. 2011;Good Practice No. 14.

APPENDIX Provincial Perinatal Depression Screening Notes of Consensus Meeting

Date: January 17, 2014 **Time:** 0900 – 1600 hours

Location: Perinatal Services BC, #350, West Tower, 555 West 12th Avenue, Vancouver

Present & regrets: Refer to last page of these notes.

The day was divided into two parts:

- 1. Morning: The morning consisted of a series of presentations whereby experts discussed the evidence and their views and/or experiences with perinatal depression (PND) and PND screening.
- 2. Afternoon: The afternoon focused on analyzing the information presented in the morning, identifying the benefits and harms of screening/not screening and on making a recommendation about PND screening in BC.

References are made throughout these notes to the recommendations of the **Canadian Task Force on Preventive Care on Screening for Depression in Adults** (2013). The recommendations are as follows:

- 1. For adults at average risk of depression, we recommend not routinely screening for depression. (Weak recommendation; very-low-quality evidence)
- 2. For adults in subgroups of the population who may be at increased risk of depression,[†] we recommend not routinely screening for depression.[‡] (*Weak recommendation; very-low-quality evidence*)

The notes that follow summarize the presentations and discussions in the morning and afternoon sessions. Highlights will be compiled and incorporated into a Consensus Statement on Screening for Depression in the Perinatal Period in BC.

^{*} The average-risk population includes all individuals 18 years of age or older with no apparent symptoms of depression who are not considered to be at increased risk.

[†] Subgroups of the population who may be at increased risk of depression include people with a family history of depression, traumatic experiences as a child, recent traumatic life events, chronic health problems, substance misuse, perinatal and postpartum status, or Aboriginal origin.

[‡] Clinicians should be alert to the possibility of depression, especially in patients with characteristics that may increase the risk of depression, and should look for it when there are clinical clues, such as insomnia, low mood, anhedonia and suicidal thoughts.

Morning Session

1.0 Welcomes by Kim Williams, Kate Thomas-Peter and Dr Deirdre Ryan

The presenters, the panel and the participants were introduced and welcomed to the session. Kate sent regrets on behalf of Carolyn Solomon (MOH). Carolyn was unable to attend but Kate acknowledged her work as colead in the organization of the meeting.

2.0 Context for the Day: Dr Deirdre Ryan, Reproductive Psychiatrist, BC Reproductive Mental Health Program

Deirdre discussed the lead up to/rationale for the meeting:

- For the past year, the BCRMHP and PSBC have been working on updating the 2003 guideline on *Mental Health Disorders in the Perinatal Period*. The 2014 guideline endorses the four Pillars of Action identified in the 2006 *Addressing Perinatal Depression: A Framework for BC's Health Authorities*. "Screening and diagnosis" is one of the four Pillars.
- May 13, 2013, Canadian Task Force on Preventive Health Care recommended NOT ROUTINELY' SCREENING for depression, including women in the perinatal period.
- Prior to finalizing the guideline, the BCRMHP, PSBC and MOH wish to jointly re-examine the question of screening for depression in the perinatal period (during pregnancy and up to one year after the birth of the baby), given the recent recommendation of the Canadian Task Force on Preventive Health Care.
- This meeting was convened to bring together experts from across Canada to present the evidence and
 other related contextual information and to facilitate a discussion and hopefully reach consensus on
 depression screening for women in the perinatal period in BC. Recommendations will be incorporated
 into a BC Consensus Statement and the soon-to-be released BCRMHP/PSBC Best Practice Guidelines
 for Mental Health Disorders in the Perinatal Period.

3.0 Keynote Address: Dr Cindy-Lee Dennis, University of Toronto (PhD)

The first half of Cindy's presentation provided an overview of PND and the reasons that it is important to address PND:

- Women are at increased risk of depression during the reproductive years. Prevalence of depression during the perinatal period is high.
- For 30–50% of adults, depression is a persistent and/or chronic recurring condition (especially when left untreated).
- Women who experience depression during pregnancy have much higher rates of postpartum depression (PPD).
- PPD occurs at a time that is critical for the infant it occurs when the infant is maximally dependent on parental care and is highly sensitive to the quality of the interaction. If PPD persists and/or is recurrent, this has been shown to impact child development (cognitive, behavioural and emotional) as parental depression can impact parenting cognitions and behaviours and the stressful home environment can cause children significant distress. Further, depressed mothers are less likely to engage in health-promoting behaviours (e.g., breastfeeding, attending well-child visits, completing immunizations, etc).
- The consequences of antenatal depression are less well studied, although the studies that have been done suggest that untreated antenatal depression can also have severe outcomes (poorer obstetrical, maternal and infant outcomes, antisocial interactions, behavioural and emotional problems, etc).
- PPD can also affect fathers. Some evidence suggests that PPD in fathers begins later than in mothers and often follows the onset of maternal depression (creating the added risk of dual parental depression). Risk factors and consequences of paternal PPD on attachment/interaction and child development are similar to maternal PPD (although less well studied).

April 2014

^{*} Routine screening is also referred to as "universal screening" in these minutes. Routine/universal screening is the screening of a whole population (e.g., perinatal women). This differs from "targeted screening" which is the screening of a sub-group of a population (e.g., living in a specific geographic area and/or in an "at-risk" group).

There is evidence to suggest that treatment for maternal PND can change the trajectory of a child's
development. The earlier the treatment, the better the outcome for the child. It was noted that even
after successfully treating a mother for depression, ongoing parenting support is important to maximize
child health outcomes.

The second half of Cindy's presentation focused on depression screening:

- Strategies to detect depression have been well researched. Screening has been shown to be effective
 in detecting *current* depressive symptoms. It has not, however, been proven effective in predicting
 future depression in non-depressed women.
- The Edinburgh Postnatal Depression Scale (EPDS) is the most commonly used tool to screen for PND. The most commonly applied cut-off scores to identify probable and possible depression are >12 and >9 respectively. Sensitivity and specificity of the EPDS ranges from 80–90% using these cutoff points. The EPDS includes a question regarding thoughts of self-harm and suicidal ideation. The tool is internationally recognized and has been validated among diverse cultures, for antenatal and postpartum use and for use in fathers.
- The United Kingdom (UK) National Institute for Health and Clinical Excellence (NICE) guidelines recommend a two-question (Whooley questions) plus one "help" question approach to PND screening in their 2007 PND guideline. Evaluation of this approach has been very limited. In many settings, the Whooley questions +/- this "help" question are used as a triage test to identify women needing a fuller assessment with a screening tool such as the EPDS. The downside of this approach is that it requires administering two screens for women that screen positive on the first set of screening questions.
- Regardless of the tool used, screening also is of benefit in that it opens up a conversation between clinicians and women about emotional health.
- Studies show high levels of acceptability (80–90%) amongst women for PND screening. Most studies on acceptability use the EPDS.
- Screening alone is insufficient to ensure the provision of appropriate treatment and thus improve clinical outcomes. Systems to promote accurate diagnosis, effective treatment and follow-up are also required.
- The harms from screening (e.g., misdiagnosis, labeling, stigma, etc) can be minimized by systematically following up ALL positive screens (e.g., repeat screen, diagnostic interview).
- Opinion on screening: PND is a serious, prevalent, under-detected and treatable health condition that
 impacts the mother, child and family. There is a simple, acceptable screening tool of known accuracy
 available which has the potential to result in early detection and treatment of depression, which
 has been shown to improve outcomes for mothers and their children. The recommendation is that
 depression screening be offered to perinatal women as a first step in a systematic integrated approach
 to the management of PND.

4.0 Dr Michel Joffres, 2013 Canadian Task Force on Preventive Care Recommendations on Screening for Depression in Adults

Michel outlined the Canadian Task Force on Preventive Care (2013) recommendations for depression screening and discussed the rationale for the recommendations:

- The 2013 recommendations were an update on the 2005 recommendations. The 2005 recommendations supported routine screening for depression in adults (conclusion of the 2013 Task Force was the opposite of the conclusion of the 2005 Task Force).
- Recommendations from other countries:
 - UK NICE guidelines (UK), 2009 (adults) and 2007 (perinatal women): Recommended routine screening using the Whooley questions (2 questions for adults and 1 additional "help" question for perinatal women).

^{*} Whooley questions: During the last month, have you often been bothered by feeling down, depressed or hopeless? During the last month, have you often been bothered by having little interest or pleasure in doing things? If the patient answers Yes to either of the Whooley questions, a third question should be considered: Is this something you feel you need or want help with?

- US Preventive Services Task Force, 2009: Recommended routine screening for depression in clinical practices with systems in place for accurate diagnosis, effective treatment and follow-up.
- Canadian Preventive Task Force (2013) advised against routine screening, even in subgroups of the
 population at higher risk. The Task Force acknowledged the recommendations were weak and based
 on very low quality evidence.
- The rationale for the 2013 recommendations considered:
 - Benefits versus harms of screening:
 - Benefits of screening: The systematic review of the literature did not find any eligible studies that evaluated the benefits of screening (i.e., earlier identification and successful treatment)
 versus usual care
 - Harms of screening: The systematic review of the literature did not find any eligible studies that evaluated the harms of screening. Potential harms identified by the Task Force related to false positives with subsequent unnecessary treatment, adverse effects of medical therapy among people correctly identified with depression and the consequences of labeling and stigma.
 - Given the absence of high quality evidence in the literature on both the benefits of screening and on whether any benefits outweigh potential harms, the Task Force recommended against routine screening for depression in adults. As the systematic review of the literature also did not find any eligible studies on the benefits versus harms of screening for high-risk sub-groups of the population, the recommendation to not routinely screen also applies to high-risk sub-groups.
 - Clinicians should be alert to the possibility of depression/patients with clinical clues to depression: Clinicians can use symptoms of depression (e.g., insomnia, low mood) to identify patients with potential depression. This will likely identify patients with more severe depression, who may be more likely to benefit from treatment. Task Force developed a knowledge translation tool which is available at http://canadiantaskforce.ca/guidelines/depression.
 - Patient preferences and values: There was high variability in the studies re patient preferences and values around the acceptability of screening.
 - Resource implications: The time clinicians take to screen for depression reduces their availability to deliver other services known to be beneficial.
- Michel noted that the systematic review of the literature which led the Task Force to the recommendations considered only direct evidence (screen vs. no-screen control group).

Questions (John Carsley):

- 1. Was there any new evidence that came out between the previous and new guideline to indicate that for high risk groups there should not be screening? No studies mentioned.
- 2. At what point does the team decide there are no symptoms? Need to consider this question in conjunction with the knowledge translation tool that was released at the same time. The tool discusses symptoms to watch for (close to DSM-IV).

5.0 Kate Thomas-Peter (BCRMHP): Perinatal Depression Screening – the BC Context

Kate provided an overview of current activities in BC in the area of PND and PND screening:

- Each HA has a PND plan. Plans are based on the four Pillars outlined in the 2006 PND Framework. In 2011, the MOH reviewed the status of the HA plans. The status of implementing HA plans varied across the province. Barriers, facilitators and recommendations were identified.
- BCRMHP team advocated for universal screening in the 2006 PND Framework. Felt the EPDS was a
 good way of starting the discussion with women around emotional health. The Framework noted that
 the EPDS is not intended as a diagnostic tool and care pathways need to be in place for screening to
 be effective.
- The 2013 BCRMH/PSBC guideline (Draft) advocates for screening but proposes 3 options: universal, targeted and no screen.

- Most HAs in BC use the EDPS for PND screening. Some physicians may use the PHQ-9. The Whooley
 questions are also used in some HAs, most commonly as an initial screen during the antenatal period. If
 the Whooley questions screen positive, an EPDS is administered. Screening rates are low across HAs,
 but are increasing.
- Recommended timeframes to screen for PND in the BC guideline are more based on pragmatics than evidence (28 32 weeks prenatally and 6 16 weeks postpartum).

6.0 Jennifer Hutcheon (PSBC): Screening for PND in BC - Epidemiological Considerations

Jennifer discussed the evidence used to inform the Canadian Task Force recommendations. She also discussed the benefits of screening and the impact of false positives associated with screening:

- Canadian Task Force recommendations were based on a literature review conducted by the McMaster Evidence Review & Synthesis Centre. The review concluded that there was no good evidence for or against screening – relevant studies have not been done.
- The Task Force was clear in their values and what was guiding their decisions. They put a high value on having evidence prior to recommending a new service (screening). Because the evidence was not clear, they recommended against screening.
- The Task Force also recognized that people may differ in their values. Thus, they added a statement
 that physicians who believe that their patients (or a subset) place a high value on the potential benefits
 of screening and are less concerned with potential harms could reasonably choose to implement
 depression screening in these patients.
- While the Task Force was correct in that there is no evidence on the direct effect of screening on health outcomes, there is evidence on the positive effects of screening on intermediary outcomes (early diagnosis and treatment of women). The latter was not considered by the Task Force in their recommendations.
- False-positives are a very real concern when implementing a screening program (emotional impact, time for follow-up, redirection of resources). Both false positives and true positives need to be considered in a decision to implement a screening program. Must consider cut-off values, false positives (do not have depression but shown by screening to have depression) and false negatives (i.e., have depression but not picked up by screening) in the analysis.
- When applied to a US population, screening using the EPDS resulted in higher numbers of false
 positives than true positives. If these figures are applied in BC (40,000 pregnancies per year), 6,240
 women would screen positive. Of these, 3,680 would be false positives and 2,560 true positives. This is
 a high number of false positives.
- The Agency for Healthcare Research and Quality (US) recommended a 2-stage approach to screening to reduce the number of false-positives:
 - Step 1: Screen with a highly sensitive test (wide net e.g., Whooley questions)
 - Step 2: Follow up positive screens women with a more specific screening test (e.g., EPDS).
- Opinion on screening: A two-step screening approach in BC may be a good option to consider as it reduces the potential impact of false-positives.

7.0 Carol Weller, Alberta Health Services: PND in Alberta

Carol provided an overview of PPD screening activities in Alberta:

- Carol's presentation focused on screening done by Public Health services in Alberta as that is under the jurisdiction of the Ministry/Alberta Health Services.
- Alberta started to focus on PND in 2007. The focus was stalled for a couple of years due to system
 restructuring but was resurrected in 2011 as part of Creating Connections: Alberta's Addiction and
 Mental Health at Strategy.
- All zones (5 zones based on geography) in Alberta use the EPDS and 70% of eligible women are screened at 2-months postpartum. There is lots of variation across the zones.

- Using Alberta Physician Billing Data, 11.6% of women received a PPD diagnosis in 2009/10
 (~5,500 women per year). This diagnosis was more than twice as common in perinatal women as a
 diagnosis of hypertension, gestational diabetes, etc.
- Policy work on a provincial approach to PND has been done, including the development of guidelines.
 The implementation of the policy work is on hold, pending further discussion of the implications of the recent Canadian Task Force recommendations.
- Alberta Health Services is currently working on recommendations for a Public Health surveillance reporting system for infant/child growth measurement, breastfeeding and PPD.
- Question: Is there any information about PND prevalence and First Nations women? There were no First Nations identifiers in the physician billing data; however, there was noted to be a correlation between high PND prevalence rates and geographic areas where First Nations women live.

8.0 Trish Bowering: Experience in Clinical Practice (Reproductive MH Psychiatrist)

Trish discussed her personal experiences as a reproductive MH psychiatrist working in two BC reproductive mental health clinics (St Paul's and Royal Columbian Hospitals) with respect to PND and PND screening:

- In Trish's experience, early detection leads to earlier treatment and less chronicity and, thereby, improved outcomes. With early treatment, women are more likely to access less intensive, communitybased resources and less likely to require the highly intensive specialty resources such as the Reproductive Mental Health Clinics.
- PND is an under-recognized disorder. Trish noted that women are not educated enough about the risks
 and signs and symptoms. Anxiety, in particular, is minimized by care providers, family and friends. Guilt,
 shame and fear prevent women from seeking help.
- In Trish's experience, patients are accepting of PND screening. While some referrals turn out to be women that do not have depression, only one appointment is necessary and these women leave the appointment feeling well informed and equipped to manage potential concerns in the future. Other women are ill and know it but held off telling their primary care provider about their concerns until they screened positive. Screening also uncovers other forms of previously untreated mental illness. Since the "push" on screening, Trish has observed a shift toward earlier referrals and, therefore, earlier treatment.
- Opinion on screening: Screening is acceptable to most women. There are few clinical harms that result
 from false positives (biased sample in Reproductive Mental Health Clinics). Other factors that favour
 screening vs no screening: Perinatal population is at higher risk for PND, it is a window of opportunity
 for change, there is a possible increased risk of stigma in the perinatal population, treatment during
 the acute phase is important to prevent chronicity and the treatment for depression is effective. Thurs,
 some form of screening in pregnancy and postpartum is essential.

9.0 Karen Buhler: Family Physician's Experience

Karen summarized her experiences and those of 31 of her colleagues (17 family physicians, 4 obstetricians and 10 midwives) with respect to PND screening:

- Midwives were the most likely to screen for PND (two-thirds) and obstetricians the least (0%).
- Less than half of family physicians reported using the EPDS or another formal screening tool to screen
 for PND. Those that did screen were more likely to be part of group perinatal care and women filled in
 the tool during a group session. PPD was later a discussion topic by the group.
- Most providers think screening is important but prefer to ask questions about a woman's mood, fatigue and risk factors over administering the EPDS.
- Barriers to screening using the EPDS were multiple: time consuming, felt they knew their patients well
 and information would be forthcoming in routine care, asking a mood question was as effective as
 screening, cultural variations, difficulty scoring, lack of reimbursement for physicians for screening, lack
 of resources to offer women with at-risk scores and a perception that screening makes little difference
 to outcomes.

Opinion on screening: Screening for PND is important. The EPDS is easy to use, may encourage
women to be more specific and honest than answering a simple mood question, might uncover a
hidden mood disorder and/or intimate partner violence, provides an early alert and allows supports to
be put in place. Also, by doing the EPDS, women are educated about the symptoms of PPD and may
bring it to the care of clinicians later if they are aware of the symptoms.

10.0 Hilary Planden - Island Health Public Health

Hilary provided the history and current status of PND screening in Island Health.

- 2001 to 2011: EPDS/PPD education was introduced at the time of the first client contact. Universal
 screening was initiated during the 2 and 6-month visits to the Child Health Clinics (CHCs) (80% of
 women/babies are immunized through CHCs). Four PHN-led PND support groups were started in the
 South Island. Referrals are made to counsellors, family physicians and mental health across Island
 Health, as required.
- 2012 and 2013:
 - Prenatal: Initiated "Right from the Start" perinatal registration program. Prenatal screening form is sent to all women and includes a mood screening question ("During the past month, have you often felt down, depressed or hopeless?"). Completed forms are reviewed by PHNs and the PHNs followup as necessary.
 - Phone calls to non midwife clients are made within 24 hours of discharge and again at 6 weeks. Midwife clients are invited to call Public Health as needed and are called at 6 weeks postpartum.
 - Universal screening at CHCs ceased (high demand for CHCs so had to "streamline" activities).
 PPD support groups continue, as do referrals to counsellors, family physician and mental health clinicians, as required.
- Opinion on screening: PHN experience is that by the time depression is discovered, women have
 often been struggling with it for some time (often >4 months postpartum). Many are also identified with
 anxiety. Most PHNs are happy about the increased focus on screening for PND and that PND has been
 brought "out of hiding" and "de-stigmatized". Some commented on the need for more timely services
 to follow-up on those with PND.

11.0 Pam Munro – Fraser Health Public Health

Pam discussed the experiences in Fraser Health with PND screening (17,000 births and 17 public health units):

- Best Beginnings Program offers perinatal services for pregnant women, postpartum women and children up to 2 years of age and their families.
- Prenatal:
 - Prenatal registration form (available in hard copy or on-line) includes 17 questions about vulnerabilities (including the two Whooley questions to screen for depression).
 - Clinical pathway bases PHN actions on responses to the questions.
 - 20% of women answer positively to enough of the 17 questions to warrant a call from a PHN. If a woman answers positively to either of the Whooley questions (first-level screening), the PHN completes a prenatal assessment and offers the EPDS (second-level screening). A variety of interventions are offered depending on the results of the screening.
 - ~60% of women complete the registration form (goal is to get to 80-100%). Currently putting lots of effort into getting more women to register (including an option to register on-line).
 - In 2010 (n=8,567), 13% of women reported depression symptoms (Whooley first-level screening). About half of these women also displayed other vulnerabilities.
- Postpartum:
 - FH PHNs contact all women at 6–8 weeks postpartum to complete the EPDS and complete the public health prenatal assessment.

- Key issues similar to those identified by other presenters: coordination across care providers (shared clinic record, feedback loop, collaborative protocols, access to mental health services, PHN role and scope of practice, PHN education and cultural/language issues.)
- Opinion on screening: Continue 2-step screening process for pregnant women. Consider implementing a similar 2-step process for postpartum women at 6-8 weeks.

Afternoon Session

Lori d'Agincourt-Canning, Clinical Ethicist, reviewed the principles of ethical decision-making and proposed a framework for examining the benefits and harms of PND screening versus not screening.

Ethical decision-making:

- There is often not a right or wrong decision. The more appropriate question iswhat is the best decision given the situation?
- Four principles of bioethics:
 - Beneficence: promotes benefits
 - Non maleficience: avoid causing harm
 - Respect for autonomy: respect decision-making capacities of autonomous persons
 - Justice: fairness in distribution of benefits and harms; access and allocation of healthcare resources

What is our task today and what is our authority?

- The group agreed that our task was to make recommendations about PND screening for inclusion in a soon to be developed BC Consensus Statement on Screening for Depression in the Perinatal Period in BC. The recommendations in the Consensus Statement will be incorporated into the soon-to-be released BCRMHP/PSBC Best Practice Guidelines for Mental Health Disorders in the Perinatal Period.
- If the recommendation in the guideline is to continue with PND screening, individual health authorities will make their own decision on whether to support the recommendation or not (and, if supported, the logistics of implementation).

Cost-Benefit Analysis of PND screening:

• The majority of the afternoon discussion was about the benefits and harms of (1) "formal screening" vs no "formal screening" for PND. Key points are noted in Tables 1 and 2.

Table 1: Potential Benefits and Harms of "Formal" PND Screening

"Formal" PND Screening					
Potential Benefits	Potential Harms				
 Potential for improved outcomes for both mother and child. Way of opening up discussion with mothers re MH issues. Assists in developing a therapeutic relationship between mother and provider. Early diagnosis and early treatment; therefore, can treat more patients (less chronicity in patients). More opportunities for interprofessional collaboration (e.g., PHNs, MDs, etc) Normalizes mental health. Could attract more resources. Can decrease gaps in health inequities. Useful when mother does not have a family physician who knows the woman well. Standardizing care and offering reliable care. Relief/validation for the woman's experience/ feelings. Opportunities for secondary preventive interventions. Provides increased attention and resources for marginalized populations (potential). 	 False positives. Stigma. Resources issues and follow-up of false positives. If care pathways do not exist. Opportunity cost of practitioners time if no link to services. Potential to increase the gap/increasing inequities. Time spent screening reduces practitioner time/resources to deliver other services with known benefits. Not enough financially supported resources once PND diagnosed. Resources may be taken from other areas of care (diversion of resources). May increase inequities for marginalized populations (potential). Research has shown that universal programs increase inequities unless policies are put into place to counteract. 				

Table 2: Potential Benefits and Harms of No "Formal" PND Screening

No "Formal" PND Screening				
Potential Benefits	Potential Harms			
 Less complicated practice for health care providers. 	 Not asking (potentially) how women are. Lost opportunity to diagnose/treat. 			
 Saving money on care pathways and, therefore, no established needs. 	Lots of undiagnosed, treatable patients.More anxious providers (?).			
 Implementation of programs would be easier. 	Lost opportunity for early treatment.			
Less anxious providers (?)	Potential increased long-term costs.			
Time benefits for practitioners.	Lose momentum in diagnosis/treatment of PND.			

Substantive points in the discussion and related recommendations

To screen or not to screen

- The need to focus on PND from a population health perspective is well established. The prevalence
 of PND is high and most people that receive treatment for PND benefit from that treatment t (i.e.,
 treatment changes their trajectory).
- However, with respect to the benefits of screening, there is little or no research to answer the question
 "does population-based screening result in earlier and more consistent detection of PND than individual
 case-finding (or "usual care")?" The current research tells us that screening plus treatment results
 in positive outcomes for women it does not tell us whether any of these benefits are attributable

- to screening (i.e., "usual care" may have produced the same outcome) or whether the benefits of screening outweigh the potential harms.
- The experience of expert clinicians at the meeting was that there appears to be very few clinical harms (e.g., misdiagnosis, labeling and stigma) associated with depression screening in perinatal women. Further, the impact of these harms can be minimized by systematically following up all positive screens (e.g., repeat screen and, if necessary, conduct a diagnostic interview).
- Expert clinicians provided many examples of where a positive screen resulted in women seeking help for their depression. Since the 2006 recommendation for universal screening in BC, expert clinicians reported a shift toward earlier referrals and, therefore, earlier treatment and better outcomes for PND.

The Canadian Task Force reported that there is a lack of high quality research to demonstrate the benefits of universal depression screening. They also acknowledged a lack of high quality research to demonstrate that screening is harmful. Because the Task Force placed a high value on the evidence of the benefits and the lack of harms associated with screening *and* the evidence for both was weak, they recommended against universal screening for all populations, including at-risk populations such as perinatal women.

Given the lack of high quality research on the harms of screening *and* the experience of clinical experts weighing the harms against the benefits, most meeting participants supported universal depression screening in the perinatal population. There was one dissenting viewpoint. The participant believed the evidence was too weak to support a recommendation that favoured universal screening, even in the perinatal population.

The group agreed that there was a lack of high quality research on the harms and benefits of screening in the perinatal population. However, they also felt that while there may be a lack of evidence to support initiation of PND screening in a new context, there was also NOT enough evidence to justify discontinuing screening programs that are already in place such as in BC.

The participant with the dissenting viewpoint agreed with this updated position of the group with a proviso that our recommendations include support to make resources available in BC to conduct high quality research that will advance our knowledge about the benefits and harms of universal screening in the perinatal population. Research findings will help to inform future practice recommendations.

Screening tool(s)

- The EPDS is the most commonly used tool in BC to screen for depression in the perinatal population.
 While it has been well validated and has good sensitivity and specificity, routine screening will result in significant numbers of false positive results (3,000+ women per year).
- One strategy suggested to mitigate the risk of a high number of false positives was to utilize a two-step
 process use the Whooley questions as an initial screen and, if one or both questions screen positive,
 administer the EPDS. It was noted that some HAs include the Whooley questions on their prenatal form
 and, if one or both questions elicit a positive response, the Public Health Nurse contacts the woman
 and offers the EPDS.
- Concerns about recommending a two-step process (Whooley questions plus EPDS) at this time included: (1) the lack of studies validating the Whooley questionnaire (2 studies in the perinatal population to date) or the two-step process (none done to date done through computer simulation only); (2) the confusion it might cause for clinicians to make changes in their current practice or to have two options for screening (one and two step processes); (3) the Whooley questionnaire does not have questions about anxiety or suicidality and is not used in research; and (4) the logistics of implementing a two-step process.
- While the group agreed that it was important to be open to considering a two-step option in the future if
 further research demonstrated its validity, they also agreed that it would be premature to recommend a
 two-step approach at this point. They felt it would be less confusing for clinicians and more in keeping
 with the evidence to continue the current practice of recommending the EPDS for PND screening.
- For HAs that that have incorporated the Whooley questions into their prenatal registry intake forms, there was support to continue with this approach because the EPDS is part of the process for Public Health Nursing follow-up.

• The Expert Panel recommendations were made with the recognition that the false positive screen rate could be between 9% and 18% (e.g., 3,600 to 7,200 women of the approximately 40,000 deliveries per year in BC). This burden was weighed against the opinion of expert clinicians that few clinical harms appear to result from false positive screens, that systems are in place in BC to follow-up all women who screen positive and that the time required for the follow-up of women with positive screens was small in comparison to the potential benefits gained from earlier detection and treatment of women with PND.

Points made about the Canadian Preventive Task Force recommendations

- The Task Force acknowledged that their recommendation to NOT screen was weak and based on lowquality evidence.
- The 2013 recommendations of the Canadian Task Force on Preventive Care updated the 2005 recommendations. The 2005 recommendations supported routine screening for depression in adults (opposite from the conclusions of the 2013 Task Force).
- The Task Force based its recommendations on a literature review which considered only randomized clinical trials which evaluated the direct effect of screening vs. no screening on health outcomes. While the Task Force was correct in that there is no high-quality evidence on the direct effects of screening on health outcomes, there is randomized clinical trial evidence to suggest that screening in the clinical setting combined with low intensity interventions positively impacts intermediary maternal mental health outcomes, as compared with identification of cases and treatment in the clinical setting as per usual care. The latter was not considered by the Task Force in their recommendations, but was deemed by the Expert Panel to still provide relevant information on the potential benefits of screening in the absence of higher-quality studies.
- The Canadian Task Force recommendations are intended to guide the practice of family physicians and other primary care providers, most of whom have an ongoing relationship with their patients. This may have influenced the direction of the recommendations. This BC consensus Statement is intended to guide a variety of perinatal providers including public health nursing.

Recommendation

- 1. Until higher quality evidence is available to further guide changes in practice, continue with the current practice recommendation in BC to screen all women for depression at least twice during the perinatal period (once in the antenatal and once in the postpartum period) using the Edinburgh Postnatal Depression Scale (EPDS).
- 2. Advocate for opportunities and resources to conduct high quality research that advances our knowledge about the benefits and harms of universal screening in the perinatal population. Research findings will help to inform future practice recommendations.

It was also recommended that the Consensus Statement and supporting rational should be provided to the Task Force on Preventive Health Care for not accepting the recommendations in their report for perinatal women (refer to points made throughout the meeting for rationale).

Meeting Attendees

Panel Participants

- Dr Deirdre Ryan, Reproductive Psychiatrist, BCRMH
- Kim Williams, Executive Director, PSBC
- Sylvia Robinson, Joint Director, Public and Primary Care Collaboration, MOH
- Dr John Carsley, Medical Health Officer and medical Advisory to Maternal/Child Health Programs, Vancouver Coastal Health (VCH)
- Dr Naomi Dove, Director of Health Promotion and Prevention, First Nations Health Authority

Presenters

- Kate Thomas-Peter, Project Manager, BC Reproductive Mental Health (BCRMH)
- Dr Cindy-Lee Dennis, Professor in Nursing and Medicine, University of Toronto
- Dr Michel Joffres, Canadian Task Force on Preventive Health Care (by teleconference)
- Jennifer Hutcheon Perinatal Epidemiologist, Perinatal Services BC (PSBC)
- Dr Tricia Bowering, Reproductive Mental Health psychiatrist, St Paul's and Royal Columbian
- Dr Karen Buhler, Family Physician, BC
- Hilary Planden, Clinical Coordinator, Child, Youth & Family Community Health, Island Health
- Pam Munro, Clinical Nurse Specialist, Fraser Health
- Carol Weller, Health Promotion Facilitator, Alberta Health Services

Participants

- Dr Lori d'Agincourt-Canning, Clinical Ethicist, BC Children's and Women's Hospital, Facilitator
- Janet Walker, Provincial Lead, Education and Quality, PSBC
- Sarah Bell, Executive Director, BC Mental Health and Substance Use Services for Children and Women's Mental Health Program
- Sheila Duffy, Director, Pacific Post Partum Support Society
- Joanne Wooldridge, Regional Leader, Early Childhood Development, VCH
- Dr Brenda Wagner, Obstetrician, VCH
- Jan Tatlock, Prevention Director, Island Health
- Deborah McNeil, Director, Research and Innovation Public Health, Surveillance and Infrastructure, Population and Public Health Adjunct Associate Professor, University of Calgary
- Teresa Chiesa, Director, Women's and Maternal Health, for Joan Geber, Executive Director, Healthy Development and Women's Health Directorate, MOH
- Vanessa Salmons, Northern Health Authority (by videoconference)
- Janet Williams, Consultant

Regrets

- Carolyn Solomon, Manager, Maternal and Women's Health, Ministry of Health (MOH)
- Nadine Johnson, Practice Lead, Promotion and Prevention, Interior Health
- Kathleen Friesen, Prevention Director, FH