

Improving health while reducing costs:
Increasing the rates of exclusive breastfeeding to six months
in the Province of British Columbia

A Policy Paper

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author at Rhoda.Taylor@viha.ca

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Executive Summary

British Columbia sustains significantly increased costs to its health care system and increased cases of avoidable illnesses as a result of failure to provide effective support for breastfeeding mothers. The duration of breastfeeding, especially exclusive breast milk feeding, remains low across the province, particularly in high risk populations, and shows no increasing trend despite decades of discussion and persistently high initiation rates. There is clear evidence that low cost interventions at the hospital and public health level would result in significant cost savings, improved health outcomes and increased health equity.

British Columbia has done an excellent job in encouraging the initiation of breastfeeding and it continues to have the highest rate of initiation in the country. These

rates drop almost immediately with exclusive breastfeeding rates low at hospital discharge and a rapid drop continuing over the next 6 months. Several economically advanced jurisdictions have demonstrated that significant change in the maintenance of exclusive breastfeeding is possible for all populations and risk groups. Some of these jurisdictions are in Canada, specifically Nova Scotia, Newfoundland and Labrador, Quebec and Ontario. Implementation of policy change in these provinces has resulted in improvements to the duration of exclusive breastfeeding particularly in the first weeks of life. Similar policies have resulted in increases in exclusive breastfeeding rates in international jurisdictions with initiation rates equivalent to those in British Columbia.

British Columbia has policies regarding breastfeeding which include statements of support from the Ministry of Health and recommendations resulting from the several core reviews which have highlighted the value of breastfeeding. No requirements exist for evidence based action. There is limited or no requirement for reporting on recommended actions and no target dates have been established. Continuing the current policy path or withdrawing current policies without replacement will result in increasing and persistent costs to the health care system and unnecessary illness both in early childhood and from chronic disease. This burden of disease will rest predominantly on low income and at risk families.

This paper recommends that policy be established to provide clear and specific evidence-based goals with defined reporting standards and target dates for implementation specified within the Ministry of Health Service Plan. The policy should:

1. Align with the Baby Friendly Initiative Ten Steps,
2. Expand the role of the provincial lead for breastfeeding to provide support and to permit oversight of progress by health

authorities, 3. Require a designated individual with a recognized specialty in breastfeeding to take a lead role in each health authority to oversee implementation and staff education, 4. Require substantive reporting on progress with an established date by which health authorities are to achieve implementation of Baby Friendly designation, or an agreed upon equivalent, for all hospitals and health centres which provide maternity care, and 5. Require provincially funded child and family health services to establish a policy which complies with the International Code of Marketing of Breastmilk Substitutes and relevant World Health Assembly Resolutions.

1. Introduction

“Once we assist families in making educated decisions about breastfeeding, we need to provide supportive environments in our hospitals, medical practices, workplaces and communities that implement the best ways to support breastfeeding.”

(Brenner & Buescher, 2011, p. 1767)

Breastfeeding is recognized as the normal and optimal method of infant feeding. The World Health Organization (WHO), the Public Health Agency of Canada (PHAC), Health Canada, the Canadian Paediatric Society, the Canadian Medical Society and the Dietitians of Canada strongly recommend exclusive breastfeeding to 6 months with continued breastfeeding for up to two years and beyond (Health Canada, 2014; Chalmers, 2013). Initiation rates in B.C. vary slightly by the agency reporting but are above 90% and may be as high as 95% (B.C. Ministry of Health, 2012; Health Canada). This indicates strong intent to breastfeed by British Columbia mothers. However exclusive breastfeeding at hospital discharge is only 72% and by 6 months of age exclusive breastfeeding rates have fallen below 34% and may be below 20% (Health Canada;

Chalmers, 2013). The most likely causes are hospital practices and inadequate staff training rather than population health factors (Chalmers, 2013; Davis, Stichler & Poeltler 2012). Increasing the number of infants who are exclusively breastfed to six months would result in significant cost savings to the health system and an improvement in the health of BC infants (B.C. Ministry of Health, 2012). The current provincial policy in support of breastfeeding has been in place for several years and has not resulted in change. Experience in other jurisdictions indicates significant improvements would result from an expanded, evidence based provincial breastfeeding policy which directly addresses health facility practice and training.

2. Background

Lack of breastfeeding has a significant long term cost to both the individual child and the health system. One of the most cost effective ways to reduce infectious and chronic diseases in both children and women is through increased breastfeeding. Breastfed infants in high income countries have reduced rates of childhood diseases including juvenile diabetes, gastrointestinal infections, inflammatory bowel disease, meningitis, childhood lymphoma, asthma, otitis media (ear infections), and necrotizing enterocolitis (American College of Obstetricians and Gynecologists, 2014; B.C. Ministry of Health, 2012; Brenner & Buescher, 2011; Chalmers, 2013; Kramer & Kakuma, 2012; Renfrew, Pokhrel, Quigley, McCormick, Fox-Rushby, Dodds, Duffy, Trueman & Williams, 2012; Ip, Chung, Raman, Chew, Magula, DeVine, Trkalinos, & Lau, 2007). There are significantly lower rates of sudden infant death and infant mortality (BC Ministry of Health, 2012; Renfrew, et al, 2012; Wall, 2013). Children who are not breastfed are hospitalized in industrialized countries 2.5 times more often in the first year

of life (Kramer & Kakuma, 2012; Wall, 2013). There are long term health impacts of not breastfeeding. Infants who have breastfed longer are at reduced risk of chronic inflammation and a lower risk of cardiovascular and metabolic disease in adulthood (McDade, Metzger, Chyu, Duncan, Garfield, and Adam, 2014; Wall, 2013). Women who breastfeed have a significant reduction in the risk of breast and ovarian cancer, reduced risk of postnatal weight gain and increased bone density (ACOG, 2014; Wall, 2013; BC Ministry of Health, 2012; Chalmers, 2012; Renfrew et al, 2012; Ip et al, 2007). These benefits are dose dependent with the most significant protection resulting from exclusive breastfeeding for the first 6 months of life and for two years and beyond (World Health Organization, 2011; Renfrew et al, 2012; Health Canada, 2014).

Several studies have looked at the potential costs savings of increased breastfeeding rates and particularly exclusive breastfeeding rates to both health care systems and specific health care facilities in economically developed nations (Renfrew et al, 2012; Bartok & Reinhold, 2010). These cost savings have been dramatic in jurisdictions with low breastfeeding initiation rates (Renfrew et al, 2012; Weimer, 2001). The investment required to achieve those savings are also significant. The Province of British Columbia would not require as significant an investment given how much success has been achieved to date. Breastfeeding initiation rates in the mid ninety percent provides evidence of a highly motivated population. This is a significant advantage which should not be underestimated. Mothers entering into the health care system have made the decision to breastfeed. Action needs to be taken to ensure they are provided with adequate and appropriate support to assist them to meet their goals. Investment in staff education and policy enforcement will be the primary cost to the system. The overall

health system would see significant savings over both the short and long term (Breastfeeding Committee for Canada, 2013; Renfrew et al, 2012; Cattaneo, Ronfani, Burmaz, Quintero-Romero, Macaluso & Di Mario, 2006; Smith & Ingham, 2005; Weimer, 2001).

3. Policy Status Quo

Messages from public health authorities and social groups have been effective in convincing British Columbia families of the importance of feeding their infants at the breast. Mothers understand that breastfeeding is important, that formula feeding comes with risk and that infants are healthier if they receive breastmilk. Mothers demonstrate this by the rates with which they initiate breastfeeding (B.C. Ministry of Health, 2012; Chalmers, 2013; Brenner & Buescher, 2011). Initiation rates vary across the regional Health authorities from 93.75% to 97.14% with exclusive breastfeeding rates at hospital discharge between 65.83% to 78.64% (Table 1). Research by Health Canada indicates that 60%, and the Maternal Experiences Survey indicates that more than 80%, of infants were not exclusively breastfed for the recommended first 6 months (Health Canada, 2011, Chalmers, 2013).

Table 1.

Health Authority	Newborn Breastfeeding Initiation Rate - Percentage 2009/2010)	Exclusive (Breast Milk Only) Breastfeeding at Hospital Discharge - Percentage (2009/2010)
Fraser Health Authority	95.57	69.81
Interior Health Authority	93.75	78.64
Island Health Authority	95.87	78.63
Northern Health Authority	92.24	76.82
Vancouver Coastal Health Authority	95.04	70.31
Provincial Health Services Authority	97.14	65.83

B.C. Ministry of Health, 2012

The primary reason given for stopping breastfeeding was a belief that a mother did not have enough milk (B.C. Ministry of Health, 2012). Fewer than 5% of women have a medical condition which might impact milk production. Milk supply issues are primarily due to poor management and lack of support (Skouteris, Nagle, Fowler, Kent, Sahota & Morris, 2014; Chalmers, 2013; American College of Obstetricians and Gynecologists, 2013; Center for Disease Control, 2013). The rapid reduction in exclusive breastfeeding in British Columbia is primarily a reflection of the failure of the current professional perinatal and postnatal support system, not a failure of the promotion of breastfeeding or the decision making of the family.

The B.C. public health core review process identified breastfeeding programs/support as core public health activities but in BC's Guiding Framework for Public Health only one in-passing mention is made of breastfeeding. It takes place in a discussion of the public health role in health equity. "Many parents and newborns benefit from short-term services with more intensity – for example breastfeeding support." (BC Ministry of Health, 2013, p. 9). There is no mention of breastfeeding or its potential impact both on health care costs and health outcomes in the Ministry of Health 2012/13 Service Plan Report or in the Ministry of Health, 2014/15 – 2016/17 Service Plan presented in February 2014. (BC Ministry of Health, 2013; BC Ministry of Health, 2014).

A BC and Pan-Canadian jurisdictional scan was undertaken by the Ministry of Health in 2012 which reviewed breastfeeding practices and programs both across the country and within BC Health Authorities (Ministry of Health, 2012). While all health authorities report moving ahead with steps towards implementation of the Baby Friendly Initiative (BFI) only two sites have achieved designation: GR Baker Hospital in Quesnel

and BC Women's Hospital in Vancouver. (Breastfeeding Committee for Canada, 2014). There has been enhanced breastfeeding education for health care professionals provided through the BC Institute of Technology but it is not mandatory for existing staff. (Breastfeeding Committee for Canada, 2014). Ongoing strategies exist to educate families on the importance of breastfeeding. These policies and practices have served to develop and maintain the high rate of breastfeeding initiation. They have proven inadequate to impact the rate of exclusive breastfeeding even during the initial days of life. With no substantive alteration in the statistics having taken place in the past decade there is no evidence to indicate continuing with the existing policy structure will have a significant positive impact on existing exclusive breastfeeding statistics although it does appear successful in maintaining initiation rates (Health Canada, 2009/10).

4. Policy is eliminated.

The existing policy has not resulted in long term alteration in the rates of exclusive breastfeeding to six months and some breastfeeding to two years and beyond as recommended internationally and nationally (World Health Organization, 2011; Health Canada, 2014). While it has resulted in the highest rates of breastfeeding initiation in Canada there is no indication it is proving effective in achieving substantive change (Health Canada, 2009/10; Chalmers, 2013). Given this lack of success it could be acknowledged that the existing policy has failed and should be eliminated. This would eliminate province wide standards and result in health authorities determining individually how best to support families. The risk of this lack of central support would be a substantive risk for health inequity. Those families who lived in health authorities which choose to provide substantive breastfeeding support would receive significant

benefits beyond that provided in health authorities who chose to either hold stable or reduce breastfeeding support services. This would be in addition to the existing inequity resulting from the variable support in existence at present and reflected in Table 1. It would also exacerbate current social inequities by increasing barriers service within communities. Higher income families may be able to access private health care providers for assistance and support. There would also be the potential for increased costs across the health care system if breastfeeding initiation rates were to reduce as a result of the loss of existing supports and promotions. While clearly there is a social expectation in BC for the initiation of breastfeeding relying on this to maintain the work done in prior years is highly questionable. Despite the lack of success in meeting or in advancing to meet the recognized standards for optimal breastfeeding it is not recommended that existing breastfeeding support policies be eliminated due to the risk of eliminating existing policy successes.

5. Policy is enhanced.

Nationally and internationally, those policies which have resulted in substantive improvements have been largely based on the international standard of the Baby Friendly Initiative (Skouteris et al, 2014; PHAC, 2014; CDC, 2013; ACOG, 2013; BC Ministry of Health, 2012; Davis et al, 2012). In Canada this initiative is supported by the Breastfeeding Committee of Canada (BCC) which reports regularly on the progress of all provinces and territories (BCC, 2013). The committee has developed a Canadian version of the Baby Friendly Initiative (BFI) Ten Steps which is provided in Appendix 1: Integrated 10 Steps & WHO Code Practice Outcome Indicators for Hospitals and Community Health Services. In support of the BFI the Public Health Agency of Canada

publishes a workbook for community based maternity services specific for non hospital services (PHAC, 2014). Those provinces which have established clear and unequivocal positions which support the BFI and the International Code of Marketing of Breastmilk Substitutes (WHO, 1981) are Ontario, Quebec, Nova Scotia, New Brunswick, Newfoundland and Labrador. Quebec was the first to initiate change establishing firm breastfeeding policies with required implementation in 2001 (Gouvernement du Quebec, 2001; Semenic, 2010). It is clear from the experience of other jurisdictions in Canada that the most effective and substantive changes take place when the implementation of policy is required, reportable and has an expected date of both initiation and achievement (Semenic, 2010; Newfoundland and Labrador Network, 2006; Toronto General Hospital, 2013). Evidence shows that the most successful interventions are conducted in the postnatal period and provide support overtime (Skouteris et al, 2014).

The present policy would benefit from building upon the work of the provincial health core reviews. Specific outcome indicators should be outlined in the BC Guiding Framework for Public Health and specified within the Ministry of Health Service Plan. Designation of specific leadership with experience and training in recognized breastfeeding credentials, such as International Board Certified Lactation Consultants (IBCLC), to provide direction and support within and between the BC Ministry of Health and all health authorities is required to ensure policy moves forward effectively. Health authorities must work towards a negotiated date for completion of the BFI Ten Steps. This date will vary depending upon the number of hospitals and health centres which are already designated or close to designation. Requiring all provincially funded agencies to comply with the International Code for the Marketing of Breastmilk

Substitutes provides protection for the work being done. While regulation of breastmilk substitutes is within federal jurisdiction, ensuring compliance by provincially funded family agencies reduces the influence of marketing firms.

6. Recommended Policy.

This paper recommends that a provincial breastfeeding policy be established in British Columbia which builds upon existing work and provides clear and specific evidence-based goals with defined reporting standards and target dates for implementation. It should be included in BC Framework for Public Health and reinforced in the Ministry of Health Service Plan. The policy should:

1. Align with the Baby Friendly Initiative Ten Steps as established by the Breastfeeding Committee for Canada,
2. Expand the role of the provincial lead for breastfeeding to provide support and to permit oversight of progress by health authorities,
3. Require a designated individual with a recognized specialty in breastfeeding to take a lead role in each health authority to oversee implementation and staff education,
4. Require substantive reporting on progress with an established date by which health authorities are to achieve implementation of Baby Friendly designation, or an agreed upon equivalent, for all hospitals and health centres which provide maternity care, and
5. Require provincially funded child and family health services to establish a policy which complies with the International Code of Marketing of Breastmilk Substitutes and relevant World Health Assembly Resolutions.

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Appendix 1.

Integrated 10 Steps & WHO Code Practice Outcome Indicators for Hospitals and Community

Health Services: Summary

The World Health Organization (WHO) 10 Steps to Successful Breastfeeding (1989) and the Interpretation for Canadian Practice (2011)

Step 1 WHO: Have a written breastfeeding policy that is routinely communicated to all health care staff.

Canada: Have a written breastfeeding policy that is routinely communicated to all health care providers and volunteers.

Step 2 WHO: Train all health care staff in the skills necessary to implement the policy.

Canada: Ensure all health care providers have the knowledge and skills necessary to implement the breastfeeding policy.

Step 3 WHO: Inform pregnant women and their families about the benefits and management of breastfeeding.

Canada: Inform pregnant women and their families about the importance and process of breastfeeding.

Step 4 WHO: Help mothers initiate breastfeeding within a half-hour of birth. WHO

2009: Place babies in skin-to-skin contact with their mothers immediately following birth for at least an hour. Encourage mothers to recognize when their babies are ready to breastfeed and offer help if needed.

Canada: Place babies in uninterrupted skin-to-skin¹ contact with their mothers immediately following birth for at least an hour or until completion of the first feeding or as long as the mother wishes: encourage mothers to recognize when their babies are ready to feed, offering help as needed.

Step 5 WHO: Show mothers how to breastfeed and how to maintain lactation, even if they should be separated from their infants.

Canada: Assist mothers to breastfeed and maintain lactation should they face challenges including separation from their infants.

Step 6 WHO: Give newborns no food or drink other than breastmilk, unless medically indicated.

Canada: Support mothers to exclusively breastfeed for the first six months, unless supplements are medically indicated.

Step 7 WHO: Practice rooming-in - allow mothers and infants to remain together 24 hours a day.

Canada: Facilitate 24 hour rooming-in for all mother-infant dyads: mothers and infants remain together.

Step 8 WHO: Encourage breastfeeding on demand.

Canada: Encourage baby-led or cue-based breastfeeding. Encourage sustained breastfeeding beyond six months with appropriate introduction of complementary foods.

Step 9 WHO: Give no artificial teats or pacifiers (also called dummies or soothers) to breastfeeding infants.

Canada: Support mothers to feed and care for their breastfeeding babies without the use of artificial teats or pacifiers (dummies or soothers).

Step 10 WHO: Foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic.

Canada: Provide a seamless transition between the services provided by the hospital, community health services and peer support programs. Apply principles of Primary Health Care and Population Health to support the continuum of care and implement strategies that affect the broad determinants that will improve breastfeeding outcomes.

The Code WHO: Compliance with the International Code of Marketing of Breastmilk Substitutes.

Canada :Compliance with the International Code of Marketing of Breastmilk Substitutes.

1 The phrase « skin-to-skin care » is used for term infants while the phrase « kangaroo care » is preferred when addressing skin-to-skin care with premature babies.

Source: Baby Friendly Committee for Canada. (2012). http://www.breastfeedingcanada.ca/documents/2012-05-14_BCC_BFI_Ten_Steps_Integrated_Indicators_Summary.pdf