Infant Feeding and Institutional Adherence with the Baby-Friendly Initiative: An Assessment through Maternal Experience and Review of Policy and Protocol

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Executive Summary

The World Health Organization and the United Nations International Children's Emergency Fund recommend exclusive breastfeeding for the first six months of life for optimal infant health and development. *Exclusive breastfeeding* means feeding an infant with breastmilk and no other liquids, foods, or breastmilk substitutes. Previous research indicates that the benefits of breastfeeding extend beyond infancy and childhood to influence health outcomes throughout the life course. The rates of exclusive breastfeeding in Newfoundland and Labrador for the recommended six-month duration are significantly lower than the national average at 5.8% and 14.4% respectively (Chalmers et al., 2009).

The Baby-Friendly Hospital Initiative (BFHI) is a global health promotion initiative committed to improving maternal-infant health by improving rates of exclusive breastfeeding. The initiative and its Ten Steps to Successful Breastfeeding provide guidelines to hospitals and birthing facilities for implementing evidence-informed standards for patient care in pregnancy, childbirth, and the early post-partum period with a goal of improving breastfeeding initiation, duration, and exclusivity.

The purpose of this research was to examine hospital adherence with infant feeding guidelines at the Janeway Children's Hospital/Health Sciences Centre in St. John's, NL. This interpretative phenomenological study conducted in 2012 included a systematic review of hospital infant feeding policies and protocols and an exploration of maternal healthcare and infant feeding experiences generated from individual and focus group interviews. The study revealed discrepancies between BFI practice guidelines and hospital infant feeding healthcare practices, specifically a lack of full adherence with Steps 3-9 of the BFI, and inconclusive evidence about adherence with Step 10.

These findings reveal opportunities for improving breastfeeding initiation, duration and exclusivity. Nine key recommendations are to:

1. **Update existing policies:** Update Eastern Health infant feeding policies for healthy newborns to align with all Steps and Sub-Steps of the BFI Ten Steps to Successful Breastfeeding.

2. **Prioritize regular policy communication among allied health professionals**: Ensure health professionals working with mothers in pregnancy, labour/delivery, and post-partum recovery are knowledgeable of hospital policies about breastfeeding.

3. **Provide regular and mandatory BFI training for health professionals**: Ensure all health professionals providing care to mothers in pregnancy, labour/delivery, and the early post-partum period have completed BFI training, and have the knowledge and skills needed to confidently support the success of mother/infant dyads with breastfeeding.

4. **Provide allied health professionals with the organizational and supportive work conditions necessary to implement BFI practice guidelines**: Ensure all health

professionals working with mothers in pregnancy, labour/delivery, and the early post-partum period are supported (through, for example, appropriate scheduling, patient loads, length of shifts, access to resources) to provide mothers with high-quality and consistent infant feeding information, assistance, and support.

5. **Enhance communication between mothers and allied health professionals**: Ensure every mother has an opportunity, prior to discharge, to talk with a BFI-trained health professional about the importance and process of breastfeeding, and implications of supplementation, as well as how to recognize infant feeding cues, and signs of effective feeding. Ensure mothers are provided with regular opportunities during their hospital stay to talk with health care providers and ask questions.

6. **Prioritize skin-to-skin contact for one full hour or as long as the mother wishes:** Ensure skin-to-skin contact immediately after birth for the duration of one hour or as long as the mother wishes.

7. **Encourage overnight rooming-in the first night in hospital for all mother-infant dyads:** Ensure mothers and infants remain together in the same room overnight. Do not separate mother/infant dyads overnight unless required for medical reasons.

8. **Encourage cue-based feeding rather than feeding at timed intervals:** Encourage mothers to feed on demand by recognizing and responding to infant feeding cues. Ensure mothers are aware of signs of effective feeding.

9. **Provide mothers with access to a certified lactation consultant in hospital:** Ensure a certified lactation consultant is available to assist mothers with breastfeeding in hospital 7 days a week.

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Background

The nutritional, immunological, and social benefits of breastfeeding are well evidenced and promoted through World Health Organization (WHO) and United Nations International Children's Emergency Fund (UNICEF) guidelines for infant feeding practices. The WHO and UNICEF recommend exclusive breastfeeding for the first six months of life for optimal infant health and development. *Exclusive breastfeeding* means feeding an infant with breastmilk and no other liquids, foods, or breastmilk substitutes. Despite these recommendations, rates of exclusive breastfeeding in Newfoundland and Labrador (NL) for the recommended six-month duration are the lowest in Canada (Chalmers et al., 2009).

While many factors contribute to infant feeding practice, healthcare practices in the first minutes, hours, and days following birth have been shown to have a significant impact on breastfeeding rates of initiation, duration, and exclusivity (Kramer et al., 2001). Recognizing this, the WHO and UNICEF developed the Baby-Friendly Hospital Initiative (BFHI) to promote and support optimal infant feeding practices in healthcare settings. To achieve Baby-Friendly status, hospitals and birthing centers must follow best practices for infant feeding outlined in the WHO/UNICEF *Ten Steps to Successful Breastfeeding* guidelines. Although there are approximately 40 designated Baby-Friendly facilities in Canada, there are none located in the province of NL, highlighting an important opportunity to effect positive change in this province.

Breastfeeding – *Why is it important?*

The health benefits of breastfeeding are thoroughly examined in two systematic reviews and meta-analyses – one from the United States Agency for Healthcare Research and Quality (AHRQ) – *Breastfeeding and maternal and infant health outcomes in developed countries,* and the other from the WHO – *Evidence on the long-term effects of breastfeeding*. Both guiding documents analyze outcomes from hundreds of infant feeding studies to provide current data on the positive health outcomes of breastfeeding. While the AHRQ publication focuses on all potential short and long-term effects of breastfeeding for mothers and infants in high-income countries, the WHO publication is limited to the long-term impact of breastfeeding on adult disease outcomes for those who were breastfed in infancy.

The United States AHRQ reviewed approximately 400 systematic reviews, meta-analyses, randomized control trials, prospective cohort studies, and case-control studies appearing in MEDLINE, CINAHL and the Cochrane Library. The results of their multivariate statistical analysis indicated a statistically significant relationship between breastfeeding and reduced risk for acute otitis media, atopic dermatitis, asthma, childhood leukemia, necrotizing enterocolitis, obesity, severe lower respiratory tract infections, sudden infant death syndrome (SIDS), and type-1 and type-2 diabetes in infants and young children (Ip et al., 2007). Notably, there was no significant relationship found between breastfeeding and improved child cognitive development. For mothers, benefits of breastfeeding included a reduced risk of breast cancer, ovarian cancer, type-2 diabetes, and post-partum depression.

The WHO systematic review and meta-analysis assessed the long-term impact of breastfeeding on adult blood pressure, cholesterol, overweight/obesity, type-2 diabetes, and cognitive

development. Observational and randomized studies were drawn from MEDLINE and the Scientific Citation Index. Results indicated a statistically significant relationship between breastfeeding and lower rates of blood pressure, cholesterol, overweight/obesity and type-2 diabetes, as well as between breastfeeding and higher cognitive development for those who breastfed in infancy versus those who had not (WHO, 2007). This review suggests that benefits of breastfeeding extend beyond infancy and childhood to influence health outcomes throughout the life course.

Together these reports provide compelling evidence to support the multiple health benefits of breastfeeding for mothers, infants, and the broader population. Although the WHO review found a significant association between breastfeeding and cognitive development, blood pressure, and cholesterol while the AHRQ review did not, results of these reviews provide overwhelming evidence in support of breastfeeding as a beneficial practice with the potential to protect against illness and disease, and improve overall public and population health.

The WHO (2006) states, "Interventions to improve breastfeeding practices are cost-effective and rank among those with the highest cost-benefit ratio. The cost per child is low compared to that for curative interventions" (p. 3). As with other preventive health practices, breastfeeding has the potential to lower rates of illness and disease, reduce healthcare spending, and lower demands on the healthcare system through its protective effect against chronic diseases and conditions (WHO, 2006).

Breastfeeding is promoted widely by the WHO and UNICEF, along with other organizations, associations, and health authorities at the international, national, and community level for the promotion of optimal maternal-infant health. In Canada, the Public Health Agency of Canada (PHAC), Canadian Pediatric Society, Dieticians of Canada, Breastfeeding Committee of Canada, and others recommend exclusive breastfeeding for the first six-months of life, with complementary feeding for two years and beyond, for optimal infant and child growth and development.

What is the WHO/UNICEF Baby-Friendly Hospital Initiative (BFHI)?

The WHO/UNICEF BFHI is a global health promotion initiative committed to improving maternal-infant health by improving rates of exclusive breastfeeding. Targeted toward hospitals and birthing facilities, the BFHI encourages healthcare institutions to implement evidence-informed standards for patient care in pregnancy, childbirth, and the early post-partum period. BFHI guidelines are outlined in their *Ten Steps to Successful Breastfeeding*. Each step is informed by evidence and designed to improve breastfeeding initiation, duration, and exclusivity.

By promoting best practices within hospital settings, the BFHI works to ensure mothers receive the instruction, assistance, information, and support they need to successfully breastfeed in hospital and upon discharge. In their joint statement on breastfeeding the WHO and UNICEF (1989) acknowledge the critical role of health care delivery in the establishment of breastfeeding success:

> *Of the many factors that affect the normal initiation and establishment of breastfeeding, health care practices, particularly those related to the care of mothers and newborn infants, stand out as one of the most promising means of increasing the prevalence and duration of breastfeeding*. (p. 4)

Since the initiative was launched in 1991, it has grown to include more than 20,000 designated Baby-Friendly facilities in 156 countries around the world (UNICEF/WHO, 2009). Any hospital or birthing facility can achieve Baby-Friendly status if it can demonstrate compliance with each of the Ten Steps to Successful Breastfeeding and with the International Code of Marketing of Breast-milk Substitutes. In 2009, the WHO and UNICEF updated the BFHI to incorporate current evidence on infant feeding.

Although the WHO and UNICEF are the global authority for the BFHI, when appropriate, organizations can be appointed by the WHO/UNICEF to oversee BFHI implementation at a national level (UNICEF/WHO, 2009). National authorities are responsible for overseeing the implementation and designation of the BFHI and International Code for Marketing of Breast-milk Substitutes, monitoring and evaluating infant feeding programs, activities and outcomes, and developing national infant feeding plans and activities (UNICEF/WHO, 2009).

The Breastfeeding Committee for Canada is the national authority for the BFHI in Canada, which is referred to as the Baby-Friendly Initiative (BFI). The Breastfeeding Committee for Canada made this title modification to better "reflect the continuum of care" in Canada by acknowledging that baby-friendly healthcare practices extend beyond hospital environments to include birthing centers, community services, and supports post-partum (BCC, 2012a). The Breastfeeding Committee for Canada adapted each step of the international WHO/UNICEF Ten Steps to better reflect the Canadian context by providing guidelines for both hospitals and community health services (BCC, 2012a). See Table 1.

Infant Feeding Practices in Canada and NL

Rates of exclusive breastfeeding for the optimal six-month duration in Canada fall much below WHO and UNICEF recommendations (Chalmers et al., 2009; PHAC, 2009). A nationwide study found that 90.3% of women in Canada initiated breastfeeding in 2006, but only 14.4% exclusively breastfed for the recommended 6-month duration (Chalmers et al., 2009; PHAC, 2009). While national rates of exclusive breastfeeding are sub-optimal (especially for the 6-month recommended duration), rates of initiation and exclusive feeding in NL are among the lowest in Canada with 74.6% of mothers initiating breastfeeding (PHAC, 2009) and only 5.8% exclusively breastfeeding for 6-months (Chalmers et al., 2009).

Table 1: BFI Integrated 10 Steps and WHO Code Practice Outcome Indicators

Integrated 10 Steps & WHO Code Practice Outcome Indicators for Hospitals and Community Health Services: Summary		
The 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-skin[1] 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

[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.

		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.

(BCC, 2012b).

The NL Provincial Perinatal Program reported similar, albeit lower, rates of breastfeeding initiation in the province. Provincial Perinatal Surveillance System (2013) data reported a breastfeeding initiation rate[2] of 68.0% in 2012. Despite low rates of initiation, provincial data suggest steadily increasing rates of initiation in NL over the past two decades: “In 1986 the [breastfeeding initiation] rate was 35.3%, ten years later 56.3%, and in 2005, 63.6% with regional variations from a high of 70.7% in the Grenfell region, to a low of 44.5% in the rural Avalon region” (NL Provincial Perinatal Program, 2006).

Although trends reflect a positive change in provincial breastfeeding practice, they demonstrate significant regional variations, and opportunity for improvement. The potential for breastfeeding to promote health and protect against chronic conditions and disease in infancy and adulthood make it an important and cost effective practice worthy of promotion within the provincial healthcare sector and beyond.

[2] NL Provincial Perinatal Program initiation rates are taken 48 hours after birth during neonatal screening and therefore better represent breastfeeding rates upon discharge than breastfeeding initiation.

Research Purpose and Objectives

The purpose of this interpretive phenomenological study was to examine hospital adherence with Steps 3-10[3] of infant feeding guidelines outlined in the WHO/UNICEF Baby-Friendly Initiative (BFI) through an exploration of maternal healthcare and infant feeding experiences at the Janeway Children's Hospital/Health Sciences Centre in St. John's, NL in 2012.

The objectives of this research were to:

1. Provide detailed information on hospital infant feeding practices at the Janeway Children's Hospital/Health Sciences Centre

2. Assess compliance with Steps 3-10 of the BFI Ten Steps to Successful Breastfeeding through an exploration of maternal hospital infant feeding experiences (reported maternal experiences were used as an indicator of hospital compliance)

3. Review infant feeding documents (policies and protocols) from the Janeway Children's Hospital/Health Sciences Centre and compare them to international documents for infant feeding

4. Provide the Janeway Children's Hospital/Health Sciences Centre, Eastern Health Authority, NL Provincial Perinatal Program, and Baby-Friendly Council of NL with a detailed assessment of hospital adherence with Steps 3-10 of the BFI Ten Steps to Successful Breastfeeding

5. Provide the Janeway Children's Hospital/Health Sciences Centre, Eastern Health Authority, NL Provincial Perinatal Program, and Baby-Friendly Council of NL with recommendations that can be used to inform infant feeding programming, advocacy, and policy recommendations for the improvement of institutional adherence with BFI guidelines

Twelve semi-structured one-to-one interviews were conducted with mothers one to four weeks following delivery. Interview participants were recruited through a pediatrician during her routine pre-discharge rounds in the Janeway Children's Hospital/Health Sciences Centre Maternity Unit in March and April of 2012. Interviews ran from 20-75 minutes in length and were audio recorded with the permission of the participant. Research questions were designed to assess hospital adherence with Step 3-10 of the BFI, and the health care experiences of mothers. The research sample included first, second and third time mothers, mothers with vaginal deliveries and caesarian section deliveries, mothers ranging in age from their early 20's to early 40's, mothers who were married, unmarried, in a committed relationship and single, mothers who were exclusively breastfeeding, exclusively formula feeding, and combination feeding, and mothers living in rural and urban areas.

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[3] Adherence to Steps 1 and 2 were not assessed in this research, as the routine communication of hospital policies to hospital staff (Step 1), and the training of health care staff with necessary skills to implement BFI policy (Step 2) were expected to be outside the knowledge spectrum of mothers.

Three focus group discussions were held with groups of four to six mothers who gave birth at the Janeway Children's Hospital/Health Sciences Centre from May 1st, 2011 – May 1st, 2012. All participants were recruited through word of mouth and snowball sampling. Each discussion was 60-90 minutes in length, audio recorded, and moderated by the principal investigator. As with individual interviews, focus group discussion questions were designed to assess hospital adherence with Step 3-10 of the BFI, and the health care experiences of mothers. The women who participated in the focus groups were very similar to those in the interview sample in terms of marital status, living arrangements, and number of children although they were a bit younger ranging in age from their early 20's to late 30's. These groups were made of up women who were exclusively breastfeeding and combination feeding with none of the mothers exclusively formula feeding.

Hospital infant-feeding policies used to guide clinical practice for healthy full-term infants at the Janeway Children's Hospital/Health Sciences Centre were reviewed and compared to BFI guidelines. Policies were received in April 2012 from a lactation consultant and program coordinator of the NL Provincial Perinatal Program at the Janeway Children's Hospital/Health Sciences Centre. Updated versions were received from the same lactation consultant and program coordinator in June 2013. All updated/re-issued policies detailed the same clinical guidelines and procedures as their earlier versions. Discrepancies between hospital policies and BFI guidelines are highlighted and recommendations for policy improvement are provided in this report.

Findings

Maternal healthcare experiences at the Janeway Children's Hospital/Health Sciences Centre reveal a lack of complete adherence with optimal care practices outlined in the Steps 3-10 of the BFI Integrated Ten Steps. While accounts suggest that some healthcare practices are more closely aligned with guidelines than others, gaps are evident, and highlight areas for improvement with infant feeding healthcare provision. In total, 27 mothers participated in this study: 12 interview participants and 15 focus group participants. Results on Steps 3-10 are summarized.[4]

Step 3 – *Inform pregnant women and their families about the importance and process of breastfeeding*

Step 3 involves speaking with pregnant women of 32 weeks or more gestation who attended two or more prenatal appointments to assess the quality of prenatal information on breastfeeding received. This research engages only with maternal experiences in hospital from the time of delivery until discharge. Therefore, the assessment of adherence with this step was limited to information mothers received in hospital using four indicators to explore the degree to which mothers were informed of the "importance and process of breastfeeding" (Table 2).

Table 2: Step 3 Interview Data

	Yes	No
Asked about infant feeding plans	8	4
Discussed infant feeding with healthcare provider	7	5
Breastfeeding recommended by healthcare provider	6	6
Pamphlets provided on importance and management of BF	12	0

When asked if nurses or physicians talked about the benefits and management of breastfeeding one participant said:

> *"I think the first time someone was like, 'Okay, I'll just turn his head like this and hold him like this.' But no one talked to me about breastfeeding, except for [feeding every 3 hours. But no one actively talked to me about it."* (P8)

Similarly, focus group participants shared:

> *"There were lots of signs around, like I noticed there were a lot of signs saying, "breastfeed."* (P25)
> *"Yeah, but nobody actually said [to do so]."* (P22)

[4] Number counts are only provided from one-to-one interviews (n=12) with mothers one to four weeks post-partum to limit recall bias and reflect hospital care experience from the narrow time frame of May 15th, 2012 to April 5th, 2012. Quotes are drawn from both interview participants (n=12) and focus group participants (n=15).

Results indicate a lack of routine and consistent verbal communication about breastfeeding in hospital, highlighting room for improvement with in-hospital communication and breastfeeding promotion.

Step 4 – *Place babies in uninterrupted skin-to-skin 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 if needed.*

Maternal accounts indicated that skin-to-skin contact immediately following delivery was widely practiced at the Janeway Children's Hospital/Health Sciences Centre for both vaginal and caesarean section deliveries, however often occurred for a shorter duration than recommended (Table 3).

Table 3: Step 4 Interview Data

	Vaginal delivery (n=7)	C-section delivery (n=5)
Skin-to-skin provided:		
Yes	6	5
No	1	0
Infant held by mother for the first time:		
0-5 min after delivery	4	1
6-10 min after delivery	2	0
11-20 min after delivery	1	3
21-30 min after delivery	0	0
31-60 min after delivery	0	1
Duration of skin-to-skin contact (of those (n=11) who received skin-to-skin):		
0-5 min	2	0
6-10 min	0	0
11-20 min	1	3
21-30 min	2	0
31-60 min	0	1
61-90 min	1	1
Initiation of breastfeeding in hospital:		
Yes	6	5
No	1	0
Initiation of breastfeeding during skin-to-skin (of those (n=11) who received skin-to-skin):		
Yes	5	5
No	1	0

While skin-to-skin contact was widely reported by mothers in this research, maternal accounts highlight that the duration and quality of skin-to-skin varied considerably from mother to mother.

One mother said:

> "*They asked me before I delivered if I wanted him on my chest… I got to hold him right away, and I held him for about an hour and a half, and just kind of sat there and I fed him right away.*" (P4)

By contrast, another mother said:

> *"They brought her over for skin-to-skin, and I might have only got, say 10 minutes, and they [nurse] said, 'Okay, we've got to check her temperature now.' And I said, 'okay' and I thought they were just gonna check and bring her back, but when they brought her back she was fully dressed… I didn't get the opportunity. And I said, 'I thought I was supposed to get a full hour of skin-to-skin' and they said, 'Well yeah, but you don't really need that. It's not necessary.' And so I was kind of disappointed."* (P21)

Results indicate that uninterrupted skin-to-skin contact was often not practiced for the full-recommended duration of one hour and was not routinely offered to all. This indicates a shortcoming in the achievement of Step 4.

Step 5 – *Assist mothers to breastfeed and maintain lactation should they face challenges including separation from their infant*

Step 5 of the BFI includes the provision of initial and ongoing breastfeeding assistance and observation in hospital, but also instruction on how to hand express milk, how to recognize feeding cues,[5] how to determine if the infant is effectively breastfeeding, and where to access breastfeeding help if needed.[6] Although almost all breastfeeding mothers reported receiving assistance for their first feeding, some reported receiving no subsequent breastfeeding assistance/observation or offer of assistance/observation while in hospital (Table 4).

Table 4: Step 5 Interview Data

	Yes	No	N/A*
Breastfeeding assistance offered or provided for first breastfeeding	11	1	0
Breastfeeding assistance offered/provided at subsequent intervals or as needed	8	3	1
Instructed or told how to initiate and maintain lactation if separated from infant	0	11	1
Pumping and breast-milk storage discussed	2	9	1
Instructed or told how to recognize infant feeding cues	4	8	0
Instructed or told how to determine if infant is effectively breastfeeding	2	9	1

* Assistance with breastfeeding and maintaining lactation is not applicable for those exclusively formula feeding.

[5] Instruction on recognizing cue-based feeding is a component of Step 5, but study results on cue-based feeding are consolidated under Step 8.
[6] Resources provided to mothers to promote transition from hospital to the community are discussed under Step 10.

Some mothers reported very positive experiences with the quality and frequency of breastfeeding assistance and support received in hospital:

> "*They made sure I was latching her on properly and you know, if I had any questions or whatever, they were there to tell me, 'yes, no, well whatever feels good for you' or they would get a pillow for me. They were awesome. I've got to say, the nursing staff were awesome."* (P7)

Some reported less positive experiences:

> *"They would come in and just take your boob, and shove it in, and not stay and try. They would just do it for you because they didn't want to stay and teach you how to do it."* (P10)

Still others felt disinclined to ask for help:

> *"I asked for help once, and the response I got… I was like, 'I'm not gonna ask again. It was frustration… she was like, (impatient voice) 'Well what do you want?' And I was like, 'I just want, you know, some help with him latching.' And they're like, (frustrated sigh), and I'm cowering. So I didn't ring it again because I was like… well you know? But he ate, and I knew he would, but if I was a first time mom, oh my gosh, I would have jumped out of the window."* (P8)

The majority reported receiving no guidance on initiating or maintaining lactation if separated from their infant, or on pumping and breast milk storage. While a few reported receiving information/instruction on how to recognize and respond to infant feeding cues, and how to determine if their infant was effectively breastfeeding, the majority indicated they were not informed of this in hospital.

Step 6 – *Support mothers to exclusively breastfeed for the first six months, unless supplements are medically indicated*

Step 6 of the BFI focuses on supporting mothers to exclusively breastfeed for the first six months of life, unless supplementing is medically necessary. The BFI emphasizes that those who supplement should either be fully informed of their decision (through the provision of information on the importance of exclusive breastfeeding and implications of supplementation), or advised to supplement for medical reasons (BCC, 2012a). Data for Step 6 is focused on breastfeeding exclusivity in hospital from the time of birth to the time of hospital discharge. Data on the breastfeeding support available to participants up to 6 months and beyond were outside the scope of this study.

Table 5: Step 6 Interview Data

	Yes	No
Breastfeeding initiated in hospital	11	1
Exclusive breastfeeding in hospital	7	5
Exclusive formula feeding in hospital	1	11
Combination feeding in hospital	4	8*
Free formula samples provided in hospital	2	10

* Of these, seven were exclusively breastfeeding and one was exclusively formula feeding

While the majority of mothers reported initiating breastfeeding in hospital, a number began supplementing with formula in hospital before discharge. Maternal accounts indicate a lack of routine dialogue between healthcare providers and mothers who supplemented with formula about the importance of exclusive breastfeeding and implications of supplementation.

> *"I tried to breastfeed him. I breastfed him for the first couple of days and then I found it way too hard because I was so sore and I was so tired. So I just found bottle-feeding to be a lot easier then afterwards. They wanted breastfeeding but the nurse said it was okay if I found it easier to bottle feed, a lot of people did, especially if that was your first child and you didn't know what to expect."* (P5)

> "*All they did was they just asked me if I was bottle feeding or breastfeeding, and I just said bottle feeding, so they said that it was fine."* (P2)

Although exclusive breastfeeding was encouraged as routine practice in hospital, reported cases of supplementation occurred for non-medical reasons, and with little or no discussion about the importance of exclusive breastfeeding and implications of feeding with formula. Results suggest insufficient adherence with the guidelines outlined in Step 6.

Step 7 – *Facilitate 24-hour rooming-in for all mother-infant dyads: mothers and infants remain together*

Step 7 recommends that mothers and infants remain together in hospital 24 hours a day, and that mothers are able to have a support person with them in hospital 24 hours a day if desired (BCC, 2012a). Maternal accounts indicate routine mother-infant separation for infant bathing, examination, and the first night in hospital. Many mothers also noted that they were not able to have a support person remain with them for 24 hours a day (Table 6).

Table 6: Step 7 Interview Data

	Yes	No
Mother-infant separated first night in hospital	10	2
If separated overnight, infant brought in for breastfeeding	9	1*
24-hour rooming-in remainder of hospital stay (after 1st night)	12	0
Support person able to stay in hospital 24-hours a day	5	7

* This infant was exclusively formula fed and was not brought to mother for feeding during the first night

The following statements demonstrate the routine practice of overnight separation between mother-infant dyads at the Janeway Children's Hospital/Health Sciences Centre.

> *"Right after he was born, they took him and kept him. I was supposed to sleep but I couldn't sleep. They had him in the room where they keep all the little babies… Six hours they had him. I [delivered] him at 2 o'clock, and they brought him to me at 8 o'clock in the morning. I was supposed to sleep, but I couldn't because I didn't know where he was."* (P2)

> P21: *"I was told on my way up, 'We really recommend that you don't room-in, that you put the baby in the nursery.'"*
> P19*: "So you could sleep?"*
> P21: *"Yup, they said, 'They gotta get a bath anyway. We really recommend you don't take her' and I was like, 'Are you serious?' I was really disappointed but not ready to argue it I guess. So I couldn't sleep. I mean like I was in a ward with two people who were in labour, so I wasn't sleeping. And so at 4am when I knew I should be feeding, I buzzed and said, 'Can you bring the baby in?' and I said, 'You can leave her here now.' They really strongly encouraged her not to room in."*
> P20: *"Yeah, the first night he didn't stay with me."*
> P21: *"But that first night, like not being given the option, I felt really… like knowing that it should be policy."*
> P17*: "You're like, 'this is my baby.'"*
> P21*: "I know, and I'm like, 'You're taking her away?'"*
> P17: *"It wasn't an option for us."*
> P21: *"I mean, I suppose it could have been an option. I suppose I could have demanded it but I felt like it was strongly discouraged."*

Although most mothers reported rooming-in after the first night of separation, 24-hour rooming-in was not widely practiced during the first night in hospital, and was not practiced for the full duration of hospital stay or during routine infant care. Poor rooming-in practices during the first 24-hours and mothers' inability to have a support person remain in hospital 24-hours a day highlight important shortcomings in the implementation of Step 7.

Step 8 – *Encourage baby-led or cue-based breastfeeding. Encourage sustained breastfeeding beyond six months with appropriate introduction of complementary foods*

Step 8 involves ensuring that mothers are encouraged to practice cue-based feeding and feeding for an unrestricted frequency or duration. Mothers are to be informed of how to identify signs of effective breastfeeding,[7] and how to recognize their infant is ready for solid foods at 6 months of age or beyond (BCC, 2012a). Step 8 also recommends that mothers report being given an opportunity to discuss sustained breastfeeding with staff for the first 6 months following birth and beyond. Because interview data was collected from mothers within 4 weeks following delivery, data was not collected on sustained breastfeeding up to 6 months or the introduction of solid foods.

Results indicate that mothers who delivered at the Janeway Children's Hospital/Health Sciences Centre were encouraged to feed according to a fixed schedule rather than according to infant feeding cues (Table 7).

Table 7: Step 8 Interview Data

	Yes	No
Aware of infant feeding cues and feeding on demand in hospital	6	6
Encouraged to feed every 2.5 to 3 hours	12	0

As one mother shared:

> P24: *"I had one nurse get upset with me because I was on-demand feeding her. I fed her the 2-hour break in between, and I the nurse happened to walk by and she looked and she said, 'What are you doing?' And I said, 'I'm feeding her.' And she said, 'Well it's not time to feed her.'"*

Another mother stated:

> P7: "*They said to me, 'Feed her every 3 hours.' And that was like… it's law. It's every 3 hours, especially where they're trying to get your milk to come in. And they didn't really say, they just kind of woke her and me up every 3 hours."*
> I: "*Did they give you any indication of how long you should feed, or how to know when feedings over?"*
> P7: "*Um no. That's something that was confusing to me. It's like, anywhere you go, you ask ten different people, you get ten different answers. And they come and they ask, 'How was her feeding? How long was it?' Some people would say, 'Well, 20 minutes is not very long.' And sometimes she'd be there anywhere from 20 minutes to 45 minutes, and they'd say, 'Well 45 minutes is kind of too long, but 20 is not long enough.'"*

[7] Data on the signs of effective breastfeeding are discussed under Step 5.

Mothers reported that they were not consistently encouraged or instructed to practice cue-based feeding, were not well informed of infant feeding cues, and were not consistently instructed to breastfeed with unspecified frequency or duration, suggesting poor adherence with Step 7 of the BFI.

Step 9 – *Support mothers to feed and care for their breastfeeding babies without the use of artificial teats or pacifiers (dummies or soothers).*

Step 9 involves supporting mothers to feed and care for their babies without using artificial teats or pacifiers, and providing mothers with appropriate information on feeding and caring for their babies without using artificial teats (BCC, 2012a). It is recommended that when an infant is given a bottle or pacifier, the decision is either medically indicated, or an informed decision made by the mother.

Table 8: Step 9 Interview Data

	Yes	No
Use of pacifiers in hospital	0	12
Supplementing with formula in hospital	5	7
Use of artificial teat when supplementing (bottle with nipple attachment)	5*	0

*All who supplemented with formula in hospital did so using a bottle with an artificial nipple attachment

Focus group participants discussed using a bottle with a nipple attachment in hospital because no other option was available.

> P19: "*At the breastfeeding clinic, they try to do everything to try to get you to avoid using a bottle.*"
> P18: *"I wasn't given an option [in hospital] ... there was no other method."*

Although research results consistently demonstrate the absence of pacifier use in hospital (Table 9), they highlight a lack of full adherence to Step 9 due to the frequent use of artificial nipple attachments on bottles and evidence suggesting a lack of engagement with mothers about artificial nipple and pacifier use.

Step 10 – *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*

Step 10 recommends that mothers are provided with accessible support and resources to facilitate a smooth transition from the hospital to the community. This involves ensuring mothers are provided with a way to access breastfeeding support outside of office hours, have access to peer support programs, and live in a community that is supportive of breastfeeding (BCC, 2012a).

All mothers interviewed reported receiving information on how to access breastfeeding support programs and written information on breastfeeding, pumping, and post partum care, as well as a follow up call or visit from a public health nurse following hospital discharge (Table 9).

> *"They gave me a pamphlet on the breastfeeding support groups, which we've been to, and they gave me all the different ones and what days are which and the times on them and stuff, so they explained all that right before we were discharged… They told us which ones had the lactation consultants and which ones were more social, which ones just for the groups to go see a nurse. It was nice, we wouldn't have known otherwise."* (P4).

Table 9: Step 10 Interview Data

	Yes	No
Referred to a community breastfeeding support group	12	0
Received written information on breastfeeding, pumping, and post partum care	12	0
Received information on how to access breastfeeding support outside of office hours	unknown	unknown
Received follow-up call or visit from public health nurse following hospital discharge	12	0

It is unknown whether mothers received information in hospital about accessing breastfeeding support outside of office hours once discharged, as this was not explicitly asked. Maternal reports suggest possible full adherence to Step 10 at the Janeway Children's Hospital/Health Sciences.

Policy Review Outcomes

Eastern Health had four infant feeding policies to guide care provision for healthy newborns in hospital in 2012. Together, these guided hospital infant feeding practice within the Janeway Children's Hospital/Health Sciences Centre.

1. *Skin-to-Skin Contact Immediately Following Birth I* [Policy: 270 (WH) II-D-83]
    - Protocol for the administration/provision of skin-to-skin contact

2. *Alternative Feeding Methods for Breastfed Babies* [Policy: 270CWH-NB-15]
    - Protocol for alternative feeding methods (such as cup feeding, finger feeding, supplemental feeding system, syringe or eye dropper feeding, and spoon feeding), and formula supplementation

3. *Breastfeeding Care of the Well Newborn*
    - Protocol for health professionals assisting breastfeeding mothers and infants with the initiation of breastfeeding, assessment of positioning, assessment of latch, and preparation for discharge

4. *Breastfeeding: Protection, Promotion and Support for Healthy Term Infants* [Policy: PRC-011]
    - Protocol related to Steps 3-10 of the BFI

Although Eastern Health's infant feeding policies encourage, promote, and support exclusive breastfeeding, when compared to BFI Integrated Ten Steps, policy gaps are evident. While Eastern Health's policies emphasize a clear commitment to BFI practice standards through policies detailing breastfeeding positioning and assistance, skin-to-skin contact, informed decision-making, and the use of alternative feeding methods in support of exclusive breastfeeding, they do not thoroughly address all components of Steps 3-10 of the BFI.

It should be noted that policies in this review were developed for the care of well newborns without specialized care or feeding needs. Infant feeding policies and protocols for un-well newborns were beyond the scope of this research.

Although written to promote and support exclusive breastfeeding, and to adhere to policies and protocols outlined in the BFI, this review indicates that Eastern Health infant feeding policies fall short of incorporating all policy standards for each of the BFI Integrated Ten Steps. See Appendix A for details on each policy.

Summary of Results

An examination of maternal healthcare experiences and infant feeding policy guidelines at the Janeway Children's Hospital/Health Sciences Centre reveals discrepancies between BFI practice guidelines and hospital infant feeding healthcare practices. Maternal accounts indicate a lack of full adherence with the guidelines specified for Steps 3-9 of the BFI (and possible adherence with Step 10).

Maternal accounts highlight a need for routine communication between healthcare providers and mothers in hospital on: the importance and process of breastfeeding (Step 3), the implications of supplementation (Step 6), how to initiate and maintain lactation if separated (Step 5), how to pump and store breastmilk (Step 5), and how to recognize infant feeding cues (Step 5), and signs of effective feeding (Step 5). Maternal reports also highlight a need for longer durations of skin-to-skin contact (Step 4), the provision of breastfeeding assistance at subsequent intervals (Step 5), and the provision of rooming-in the first night in hospital (Step 7).

Hospital healthcare practices could also be improved by ensuring all mother-infant dyads remain together for infant exams (Step 7), are able to have a support person stay with them overnight in hospital (Step 7), are encouraged to feed according to infant feeding cues (Step 8), and are informed of how to feed without the use of an artificial nipple attachment (Step 9). Maternal accounts suggest possible adherence to Step 10, however indicate that current hospital infant feeding practices do not adhere to evidence-informed guidelines outlined in the BFI Integrated Ten Steps.

Mothers suggested that breastfeeding is an emotionally and physically demanding practice that is idealized and expected of them, while also not always culturally accepted in the public sphere in NL. This reinforces the importance of community supports for mothers, and interventions focused on changing cultural attitudes towards breastfeeding in the public sphere.[8]

A review of Eastern Health infant feeding policies highlight a commitment to BFI practice standards, but numerous gaps must be filled in order to align these policies with each step and sub-step of the BFI.

Inconsistencies in care provision were commonly reported, indicating a potential need for improved breastfeeding education, training, and supportive working conditions for nurses; and improved policy communication, monitoring, and alignment with BFI guidelines.

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[8] For more information on maternal expereince with the practice and culture of breastfeeding, please see Chapter 5 of: Fullerton, L.M. (2014). THESIS: Infant feeding and institutional compliance with the WHO/UNICEF Baby-Friendly Initiative – An assessment through maternal experience. Memorial University.

Key Recommendations

1. **Update existing policies:** Update Eastern Health infant feeding policies for healthy newborns to align with all Steps and Sub-Steps of the BFI Ten Steps to Successful Breastfeeding.

2. **Prioritize regular policy communication among allied health professionals**: Ensure health professionals working with mothers in pregnancy, labour/delivery, and post-partum recovery are knowledgeable of hospital policies about breastfeeding.

3. **Provide regular and mandatory BFI training for health professionals**: Ensure all health professionals providing care to mothers in pregnancy, labour/delivery, and the early post-partum period have completed BFI training, and have the knowledge and skills needed to confidently support the success of mother/infant dyads with breastfeeding.

4. **Provide allied health professionals with the organizational and supportive work conditions necessary to implement BFI practice guidelines**: Ensure all health professionals working with mothers in pregnancy, labour/delivery, and the early post-partum period are supported (through, for example, appropriate scheduling, patient loads, length of shifts, access to resources) to provide mothers with high-quality and consistent infant feeding information, assistance, and support.

5. **Enhance communication between mothers and allied health professionals**: Ensure every mother has a chance prior to discharge to talk with a BFI-trained health professional about the importance and process of breastfeeding, and implications of supplementation, as well as how to recognize infant feeding cues, and signs of effective feeding. Ensure mothers are provided with regular opportunities during their hospital stay to talk with health care providers and ask questions.

6. **Prioritize skin-to-skin contact for one full hour or as long as the mother wishes:** Ensure skin-to-skin contact immediately after birth for the duration of one hour or as long as the mother wishes.

7. **Encourage overnight rooming-in the first night in hospital for all mother-infant dyads:** Ensure mothers and infants remain together in the same room overnight. Do not separate mother/infant dyads overnight unless required for medical reasons.

8. **Encourage cue-based feeding rather than feeding at timed intervals:** Encourage mothers to feed on demand by recognizing and responding to infant feeding cues. Ensure mothers are aware of signs of effective feeding.

9. **Provide mothers with access to a certified lactation consultant in hospital:** Ensure a certified lactation consultant is available to assist mothers with breastfeeding in hospital 7 days a week.

Conclusion

Breastfeeding is promoted globally through the WHO/UNICEF Baby-Friendly Initiative because it reduces infant mortality and morbidity, protects against infections and chronic conditions, promotes optimal infant growth and development, and enhances maternal health. While there are currently no accredited BFI healthcare institutions in the province of NL, meeting BFI practice guidelines is a healthcare goal supported by the Government of NL, NL Provincial Perinatal Program, Baby-Friendly Council of NL, and all four Regional Health Authorities.

Although breastmilk is optimal for infant health and development for a number of reasons, breastfeeding may not always be possible or optimal for every mother or mother-infant dyad. For this reason, it is of critical importance to ensure that mothers are supported with dignity and respect to make informed decisions about their infant feeding practice. While the BFI emphasizes informed decision-making and the provision of support for supplementing mothers, it is important this is upheld in healthcare settings.

Healthcare practices play a critical role in facilitating early and ongoing success with breastfeeding. In the province of NL, there are clear opportunities to improve hospital healthcare practices to promote exclusive breastfeeding and support mother/infant dyads to establish early and ongoing success with this beneficial practice.

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Appendix A – Infant Feeding Policies for the Healthy Newborn

Policy Document 1: Skin-to-Skin Contact Immediately Following Birth

The policy *Skin-to-Skin Immediately Following Birth* was issued by the Regional Director of Children's and Women's Health Program on May 1st, 2009 [Policy: 270 (WH) II-D-83], to describe hospital procedures for skin-to-skin contact. The policy was written for registered nurses, physicians, and students working within hospital Case Rooms. On October 24th, 2012 the policy was re-issued by the Regional Director of Children's and Women's Health [Policy: 270MNG-ALD-405], with all procedures and guidelines for skin-to-skin remaining the same. In Table 1A, guidelines from each policy are presented side-by-side to facilitate comparison.

Table 1A: Skin-to-Skin Contact

BFI Policy: Step 4	Eastern Health: Skin to skin contact immediately following birth	
Policy: *"Place babies in uninterrupted skin-to-skin 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."*	Policy: *"Benefits of* skin-to-skin *contact will be provided during labour. Skin-to-skin contact of mothers and babies will be offered immediately following birth. Skin-to-skin contact means no layer of clothing between mother and baby. Blankets and sheets will be placed over both."*	
BFI Policy: Step 4	**Eastern Health Policy: Skin-to-skin contact immediately following birth**	**Difference**
"Mothers report that, unless there were medical indications for delayed contact, their baby placed skin-to-skin immediately after birth (vaginal or C-section delivery without general anesthesia), or as soon as mother is responsive or alert (after C-section with general anesthesia)."	"Skin-to-skin contact of mothers and babies will be offered immediately following birth." "The newborn should be placed prone on the mother's abdomen or chest. This can be achieved with having the mother wear the hospital gown with the opening in the front."	Immediacy of skin-to-skin with the use of general anesthesia not addressed.
"This [skin-to-skin] occurred for an uninterrupted period of at least 60 minutes, or until completion of first feed, or as long as mother wished."	"The newborn should remain skin-to-skin for minimum of 30 minutes."	Recommended minimum duration of skin-to-skin 30 minutes rather than 60 minutes. No mention of skin-to-skin until the completion of first feed or as long as the mother wishes.
"Mothers confirm that they were encouraged to look for signs that baby was ready to feed and that they were offered assistance as needed."	"If breastfeeding, mother can be assisted to breastfeed when newborn exhibits breastfeeding cues."	Mothers not explicitly encouraged to look for signs baby is ready to feed.
"Mothers with babies in special care report that they were able to hold their baby skin-to-skin as soon as mother and baby were stable, unless medical indications for delayed	Not discussed.	Contingencies for mothers or babies in special care not addressed in policy.

contact.”		
“All mothers report that they had been informed prenatally of the importance of skin-to-skin contact and were encouraged to discuss this with their health care providers.”	Not discussed.	Policy does not address prenatal health promotion related to the importance of skin-to-skin contact.
“Mothers transferred to a different area (e.g., by stretcher or wheelchair) confirm that skin-to-skin contact was maintained as long as mothers wished even after completion of the first feeding.”	Not discussed.	Contingencies for mothers transferred to other areas not identified in policy.
“When the baby is well but mother was ill or unavailable, mothers confirm that skin-to-skin contact with another support person of her choice (commonly her partner) was encouraged.”	Not discussed.	Skin-to-skin with partner or person of choice not addressed in policy. Contingencies for maternal illness or unavailability not identified.
“The manager confirms that skin-to-skin care is initiated immediately after birth unless separation is medically indicated, and describes how this practice is monitored.”	“Document reasons why skin to skin contact was not initiated.”	Manager reporting responsibilities not identified.
“The staff confirm that normal observations and monitoring of the mother and baby (temperature, breathing, colour, tone) continue throughout the period of skin-to-skin contact. The baby is removed only if medically indicated or requested by the mother, and this is recorded in the baby’s chart.”	“The initial assessment is performed and suctioning is done if medically indicated while newborn is on the mother’s abdomen.” “Mother’s refusal will be respected.”	Policy does not address observation or monitoring of the mother. Policy does not specify which infant monitoring procedures should occur during skin-to-skin contact.
“Documents show that skin-to-skin contact remains unhurried and uninterrupted for at least one hour or until the completion of first breastfeed, unless there is a medical indication for separation.”	Not discussed.	Policy does not address documentation of skin-to-skin duration.
“Routine procedures, monitoring and measurements are delayed until after the first breastfeed. Medications required by baby are given while the baby is on mother’s chest, preferably near end of first breastfeed in order to decrease pain.”	“The placement of newborn identification bands can be performed while the newborn is skin-to-skin with the mother” “All other procedures including weight, eye ointment and vitamin K injection are delayed until after this period of contact.”	Addressed in policy.
“In the hospital and community health service, written information for clients outlines information consistent with issues cited above.”	Not discussed.	No instruction for providing the mother with information is given in the policy.

(BCC, 2012a; Bursey, 2012)

Recommendations for modifying *Skin-to-Skin Contact Immediately Following Birth* are listed below based on guidelines for skin-to-skin contact from Step 4 of the BFI Ten Steps:

- Include skin-to-skin protocol for mothers who deliver under general anesthesia that supports skin-to-skin contact as soon as the mother is responsive and alert

- Increase the minimum duration of skin-to-skin contact from 30 minutes to 60 minutes

- Encourage skin-to-skin continue until the completion of the first feeding, or as long as the mother wishes

- Encourage mothers to look for and respond to infant feeding cues during skin-to-skin contact

- Include skin-to-skin protocol for mothers with babies in special care that supports skin-to-skin contact as soon as the infant is stable, unless medically indicated

- Include protocol to ensure mothers are informed of the benefits of skin-to-skin prenatally and encouraged to discuss skin-to-skin with their healthcare provider

- Include protocol for skin-to-skin contact if the mother is transferred in hospital (via stretcher or wheelchair) following birth, encourage skin-to-skin until the completion of the first feeding or as the mother wishes

- If skin-to-skin with the mother is not possible, encourage the option of skin-to-skin with a person of her choice

- Include protocol for manager confirmation of skin-to-skin contact (unless there is a medical reason for separation), encourage manager to be able to describe monitoring of skin-to-skin

- Encourage observation and monitoring of mother during skin-to-skin contact

- Include specification of which infant monitoring procedures should occur during skin-to-skin contact (temperature, breathing, colour, tone)

- If infant is removed from skin-to-skin early, encourage documentation of reason for removal on chart

- Encourage documentation of skin-to-skin duration

- Include protocol for providing mothers with written information on skin-to-skin contact consistent with recommended practice

Although the Eastern Health policy *Skin-to-Skin Immediately Following Birth* is closely aligned with Step 4 of the BFI, the suggested modifications and additions would bring it closer to meeting evidence-informed BFI standards.

Policy Document 2: Alternative Feeding Methods for Breastfed Babies

The policy *Alternative Feeding Methods for Breastfed Babies* [Policy: 270CWH-NB-15] was issued by the Regional Director of Children's and Women's Health Program on October 24th, 2012. Although not formally issued until October 2012, this policy was in place as a draft policy to guide alternative feeding practices at the time of data collection. The policy was developed for all nurses working with mothers and their newborn infants. Table 2A highlights guidelines and protocols from Eastern Health's policy *Alternative Feeding Methods for Breastfed Babies,* and Step 9 of the BFI Integrated Ten Steps. Both policies address alternative feeding methods (to breastfeeding), the use of artificial teats/pacifiers, and formula supplementation. Guidelines and protocols from each policy are presented side-by-side to facilitate comparison.

Table 2A: Alternative Feeding Methods for Breastfed Babies

BCC BFI: Step 9	**Eastern Health: Alternative Feeding Methods**	
Policy: *"Support mothers to feed and care for their breastfeeding babies without the use of artificial teats or pacifiers (dummies or soothers)."*	Policy: *"The ultimate goal is exclusive breastfeeding. Alternative feeding methods to provide oral nourishment or medically indicated supplementation of breastfed babies should only be initiated after careful assessment. Consultation with the lactation consultant, health care provider skilled in managing complex breastfeeding issues and/or physician is required when alternate individually-suited feeding methods may be necessary to develop a plan of care with the parent(s) and their family. Informed verbal consent is required prior to carrying out any alternative feeding methods. Communicating the indications, purpose and procedures for alternative feeding methods is essential to fully informing the parent(s) and family."*	
BCC BFI Policy: Step 9	**Eastern Health Policy: Alternative Feeding Method**	**Difference**
"Mothers report that they received information and support to feed and care for their breastfeeding babies without the use of artificial teats or pacifiers."	"Alternative feeding methods include finger, cup, supplemental feeding system, syringe, and spoon feeding to safely provide oral nourishment or medically indicated supplementation of the breastfed baby. Alternative feeding methods are recommended during prolonged separation of the infant and mom for any reason(s), and/or until the infant is able to properly latch, stay alert, and establish feeding at the breast"	Policy does not emphasize provision of information and support on caring and feeding babies without use of artificial teats/pacifiers, although does emphasize breastfeeding as a priority and does mention that alternative methods are only discussed if medically necessary.
"If the baby has been given a bottle or pacifier, the mother confirms that this was her informed decision or a medical indication."	"Informed verbal consent is required prior to carrying out any alternative feeding methods. Communicating the indications, purpose and procedures for alternative feeding methods is essential to fully informing the parent(s) and family."	Addressed in policy.
"The manager provides records confirming that mothers of breastfeeding infants are	"Consultation with the lactation consultant, health care provider skilled in managing complex breastfeeding issues and/or physician is required when alternate	Policy does not address record keeping of informed consent.

supported to find alternative solutions or make an informed decision regarding the use of artificial teats."	individually-suited feeding methods may be necessary to develop a plan of care with the parent(s) and their family."	
"Staff describe feeding alternatives recommended for breastfeeding infants requiring supplemental feeding (e.g., cups, spoons) and soothing techniques for all infants."	Not discussed.	Policy does not encourage staff to be able to describe feeding alternatives or soothing techniques.
"Documents show evidence of support and informed decision-making."	"Informed verbal consent is required prior to carrying out any alternative feeding methods."	Policy does not include instructions to document support and informed decision-making.
"Written information for clients outlines the risks associated with artificial teats and describes alternatives."	Not discussed.	Policy does not instruct staff to deliver written information to mothers outlining risks associated with artificial teats. Policy does not instruct staff to provide written information to mothers describing alternatives.

(BCC, 2012a; Bursey & Goobey, 2012).

It is recommended Eastern Health's policy, *Alternative Feeding Methods*, be updated with the following policy modifications:

- Encourage staff to provide mothers with information and support about how to feed their breastfeeding baby without the use of artificial nipples/teats or pacifiers
- If an alternative feeding strategy is necessary, ensure mothers are supported to effectively master an alternative feeding strategy
- Encourage managers to confirm (through written documentation) that mothers are supported to find alternative feeding solutions when necessary
- Ensure staff are able to describe effective alternative feeding and soothing techniques
- Instruct staff to document evidence of support and informed decision making related to alternative feeding
- Instruct staff to provide mothers with written information on the risks of feeding with artificial nipples/teats and the risks of alternative feeding methods

Policy Document 3: Breastfeeding Care of the Well Newborn

Breastfeeding Care of the Well Newborn provides evidence-informed practical tips for health professionals caring for and assisting breastfeeding mother-infant dyads. Because it is focused more on providing step-by-step instructions to healthcare providers on how to support mothers

with breastfeeding then on outlining desired infant feeding practice, it is detailed but not compared alongside the BFI. At the time of data collection, this policy was in place to guide practice as a draft policy. Its guidelines and protocols were developed for registered nurses (RNs) and licensed practical nurses (LPNs) in Eastern Health and are highlighted in Table 3A.

Table 3A: Breastfeeding Care of the Well Newborn

Eastern Health Policy ***"Breastfeeding Care of the Well Newborn"***	
Policy	"Registered Nurses (RNs), Licensed Practical Nurses (LPNs) must protect, promote and support breastfeeding families to achieve their breastfeeding goals. Accurate information about breastfeeding and providing practical help, when necessary, with positioning and attachment of newborn will enable mothers to succeed. Supporting families to achieve their breastfeeding goals in the early days of hospitalization is paramount."
Purpose	"To provide a consistent, evidence-based, informed approach for care providers who assist with breastfeeding families"
1) Initiation:	• "Initiate skin-to-skin contact immediately after birth as per skin-to-skin policy delaying all procedures for minimum of 20-30 minutes." • "Provide assistance to ensure proper latch is achieved if mom requires help and when baby is willing." • "Discuss the feeding cues of newborns (baby in a calm alert state, showing rooting and searching behaviors)."
2) Assessment of positioning:	• "Mom is positioned comfortably with her back well supported." • "Baby is skin to skin in diaper." • "Baby is well supported at the level of the breast with ear, shoulder, and hip in a straight line. Baby's head will be tipped back slightly." • "Mom's nipple lines up with the baby's nose when the mouth is closed."
3) Assessment of latch:	• "Baby should gape and take a large mouthful of the breast which includes the entire nipple and a good portion of the areola." • "Baby's chin should be in the breast and nose not." • "The baby should have the lips flanged, a full cheek and may have a pause in the suckle, which indicates swallow." • "Mom feels comfortable, feels a tugging sensation with no pain."
4) Preparation for Discharge:	• "Mom is aware of keeping her baby with her to observe for feeding cues." • "Mom is aware of offering her baby the breast at least 8 times in 24 hours and that babies should be offered both breasts at a feed but may not necessarily take both." • "Prior to discharge, documentation should include at least 2 feeds where mom functioned independently. Note should include comment on, breast fullness, positioning, latch, suckle, swallow and comfort level." • "Referral to public health nursing, breastfeeding support group or family physician at discharge."

(Women and Children's Health Program, 2012).

This policy clearly promotes and supports exclusive breastfeeding as well as evidence-informed care provision and support for breastfeeding mothers. The stated purpose of *Breastfeeding Care of the Well Newborn* is to "provide a consistent, evidence-based, informed approach for care providers who assist with breastfeeding families." While the policy provides healthcare professionals with practical procedures for assisting mother-infant dyads with breastfeeding, it is not a comprehensive hospital infant feeding policy.

Breastfeeding Care of the Well Newborn supports BFI recommendations of immediate skin-to-skin contact, the provision of breastfeeding assistance during skin-to-skin contact, the delay of non-urgent medical procedures until the completion of skin-to-skin contact, and feeding according to infant cues. While these are well-aligned with recommendations detailed in Step 4, the minimum recommended duration of skin-to-skin in this policy (20-30mins) is shorter than the minimum recommended duration in the policy *Skin-to-Skin Immediately Following Birth* (30mins) and even shorter than recommended in the BFI (60mins). Eastern Health guidelines for the effective assessment of positioning and latching are more detailed here than guidelines for positioning and latching in the BFI. Details on preparation for hospital discharge encourage feeding on demand and the provision of information on infant feeding cues (Step 8), and a smooth transition from hospital to the community through the establishment of breastfeeding before hospital discharge and referral to breastfeeding medical/community supports (Step 10).

Although *Breastfeeding Care of the Well Newborn* does not address or include each step of the BFI Ten Steps, it appears to serve its purpose as a reference guide for healthcare professionals assisting mother-infant dyads with breastfeeding.

Policy Document 4: Breastfeeding: Protection, Promotion and Support for Healthy Term Infants

The final policy, *Breastfeeding: Protection, Promotion and Support for Healthy Term Infants* [Policy: PRC-011] did not exist at the time of data collection, but was issued shortly after data collection was completed (May 2012) by the Vice President of Eastern Health's Children's and Women's Health Program. The policy was created for employees and students working within Children's and Women's Health and Public Health Programs at the Janeway Children's Hospital/Health Sciences Centre, and outlines procedures for each of the BFI Ten Steps. Procedures from Eastern Health's *Breastfeeding: Protection, Promotion and Support for Healthy Term Infants* for Steps 3-10 of the BFI are compared with those detailed for Steps 3-10 of the BFI Integrated Ten Steps in Table 4A.

Table 4A: BFI and Breastfeeding: Protection, Promotion and Support for Healthy Term Infants

BFI Policy	Eastern Health: Breastfeeding: Protection, Promotion and Support for Healthy Term Infants	Difference
Step 3 **"Inform pregnant women and their families about the importance and process of breastfeeding."**	**"Inform pregnant women and their families about the benefits and management of breastfeeding."**	
"Pregnant women (at 32 weeks or more gestation) who use a prenatal service and who have had two or more prenatal visits or classes, confirm that they are given sufficient opportunity to discuss their infant feeding decisions with knowledgeable staff. They also confirm that the importance of exclusive breastfeeding has been discussed with them."	"Provide prenatal education that includes information to help women and their families make an informed decision about infant feeding that includes the risk of not breastfeeding. The basics of breastfeeding management and the common experiences they may encounter will also be included. The aim is to give women confidence in their ability to breastfeed."	Policy does not ensure mothers are provided with opportunity to discuss feeding decisions with staff
Pregnant women "can describe at least two benefits of breastfeeding and the importance	"Provide prenatal education that includes information to help women and their families make an informed	Policy does not emphasize verbal

of skin-to-skin contact, in addition to two of the following: exclusivity of breastfeeding, risks of non-medically indicated supplementation, cue-based feeding, position and latch, rooming-in, and sustained breastfeeding."	decision about infant feeding that includes the risk of not breastfeeding."	communication with mothers to detect understanding of breastfeeding benefits
Pregnant women **"**confirm they have received no group education on the use of human milk substitutes. Hospitalized pregnant women confirm they have also received information appropriate to their needs."	No discussion.	Policy does not address group education about human milk substitutes. Policy does not address information received by hospitalized pregnant women.
"The manager of a hospital shows that breastfeeding information is provided to at least 80% of pregnant women using the facilities prenatal services. The manager shows liaison with the local hospital(s) and collaboration regarding the development of the prenatal curriculum."	"Provide all pregnant women with information on breastfeeding through *A New Life* parent booklets and the provincial *Breastfeeding Handbook.*"	Documentation of percent of women receiving prenatal education not addressed in policy. Collaborative development of prenatal curriculum not discussed.
"Staff providing prenatal education confirm that they have received breastfeeding education as outlined in Step 2."	No discussion.	Policy does not detail staff education and training.
"A written curriculum for prenatal education used by the hospital… and written information for prenatal clients (such as booklets, leaflets, handbooks, and text books with general information on pregnancy, parenting, infant feeding and child care) provide accurate, evidence-based information. They are free from information on the feeding of human milk substitutes."	"Provide all pregnant women with information on breastfeeding through *A New Life* parent booklets and the provincial *Breastfeeding Handbook.*"	Policy does not specify that all written materials are free from information on feeding with human milk substitutes.
"Women who have made an informed decision not to breastfeed receive written materials on the feeding of human milk substitutes that is current, appropriate and separate from breastfeeding information. All written material is free from promotional material for products or companies that fall within the scope of the WHO Code of Marketing of Breast-Milk Substitutes."	"Respect the informed feeding decision of each mother and provide written and one on one teaching of breast milk substitute preparation and feeding."	Policy does not specify that written information provided is free from promotional material for milk substitutes.
Not discussed in BFI	"Identify women at risk for early breastfeeding cessation and provide extra assistance, support and education. This includes such factors as lack of support, isolation (social, emotional or geographical), young age, low education and low socio-economic status."	Addressed in policy.
Not discussed in BFI	"Determine mothers' decision about breastfeeding choice upon hospital admission."	Addressed in policy.
Step 4 **"Place babies in uninterrupted skin-to-skin contact with their mothers immediately following birth for at least an hour or until completion of the first feeding or as long as**	**"Help mothers initiate breastfeeding within one hour after birth *Place all babies skin-to-skin for at least one hour after birth."**	

the mother wishes: Encourage mothers to recognize when their babies are ready to feed, offering help as needed."		
"Mothers report that, unless there were medical indications for delayed contact, their baby placed skin-to-skin immediately after birth (vaginal or C-section delivery without general anesthesia), or as soon as mother is responsive or alert (after C-section with general anesthesia)."	"Encourage all mothers or support persons to hold babies skin-to-skin." "Place all babies skin-to-skin for at least one hour after birth." "Allow/encourage as much uninterrupted skin-to-skin as possible."	Addressed in policy.
"This [skin-to-skin] occurred for an uninterrupted period of at least 60 minutes, or until completion of first feed, or as long as mother wished."	"Place all babies skin-to-skin for at least one hour after birth." "Allow/encourage as much uninterrupted skin-to-skin as possible."	Addressed in policy.
"Mothers confirm that they were encouraged to look for signs that baby was ready to feed and that they were offered assistance as needed."	"Teach infant feeding cues to all mothers and their support persons." "Promote breastfeeding by teaching mothers to respond to their infants feeding cues by breastfeeding whenever the infant shows signs of interest in feeding."	Addressed in policy.
"Mothers with babies in special care report that they were able to hold their baby skin-to-skin as soon as mother and baby were stable, unless medical indications for delayed contact."	Not discussed.	Policy does not address skin-to-skin procedures for babies in special care.
"All mothers report that they had been informed prenatally of the importance of skin-to-skin contact and were encouraged to discuss this with their health care providers."	No discussed.	Policy does not emphasize the provision of prenatal education on the importance of skin-to-skin contact. Policy does not address discussing skin-to-skin with healthcare providers in pregnancy.
"Mothers transferred to a different area (e.g., by stretcher or wheelchair) confirm that skin-to-skin contact was maintained as long as mothers wished even after completion of the first feeding."	Not discussed.	Contingency for skin-to-skin during hospital transfer not mentioned.
"When the baby is well but mother was ill or unavailable, mothers confirm that skin-to-skin contact with another support person of her choice (commonly her partner) was encouraged."	"Encourage all mothers or support persons to hold babies skin-to-skin."	Addressed in policy.
"The manager confirms that skin-to-skin care is initiated immediately after birth unless separation is medically indicated, and describes how this practice is monitored."	Not discussed.	Manager confirmation and monitoring of skin-to-skin not mentioned.
"The staff confirm that normal observations and monitoring of the mother and baby (temperature, breathing, colour, tone) continue throughout the period of skin-to-skin contact. The baby is removed only if medically indicated or requested by the mother, and this is recorded in the baby's chart."	"Perform procedures according to and respecting the needs of mothers and babies e.g., weighing, bathing"	Separating mother and infant during first hour of skin-to-skin only if medically indicated not addressed.

"Documents show that skin-to-skin contact remains unhurried and uninterrupted for at least one hour or until the completion of first breastfeed, unless there is a medical indication for separation."	"Place all babies skin-to-skin for at least one hour after birth."	Documentation of skin-to-skin duration not addressed in policy. Separating mother and infant during first hour of skin-to-skin only if medically indicated not addressed.
"Routine procedures, monitoring and measurements are delayed until after the first breastfeed. Medications required by baby are given while the baby is on mother's chest, preferably near end of first breastfeed in order to decrease pain."	"Perform patient procedures, e.g., weighing, eye prophylaxis, bathing, according to the needs of mothers and babies." "Complete infant procedures while the mother is present and at the bedside where possible."	The delay of routine procedures, monitoring and measurements until after the first breastfeed not addressed.
"In the hospital and community health service, written information for clients outlines information consistent with issues cited above."	Not discussed.	Policy does not discuss consistency of written information.
Not discussed in BFI.	"Consider the needs of mothers and babies for warmth, privacy and tranquility."	Addressed in policy.
Step 5 **"Assist mothers to breastfeed and maintain lactation should they face challenges including separation from their infants."**	**"Show mothers how to breastfeed and how to maintain lactation even if they are separated from their infants. Provide the mother with help and encouragement to express her milk and to maintain her lactation during periods of separation from her baby."**	
"All postpartum mothers report that they were offered further assistance with breastfeeding within six hours of delivery and at appropriate subsequent intervals. Observations of feedings are completed as needed and at least once per shift."	"Show mothers how to position and latch their babies, how to recognize good latch, and how to recognize their babies are getting enough." "Teach mothers and their support persons that colostrum is adequate nourishment for their babies for the first 48 to 72 hours, and that some weight loss is normal."	Timing of assistance after delivery not specified. Frequency of assistance not specified.
"Mothers discharged from hospital or birthing centre confirm that assistance with breastfeeding concerns is available within 24 hours and routine follow-up is available within 48 hours after discharge."	"Refer all new mothers to the community health nurse within 24 hours of discharge from hospital, so the mother will have the opportunity for early face-to-face assessment of breastfeeding. Breastfeeding progress will be assessed at appropriate intervals."	Addressed in policy.
"Mothers report that they were offered timely help with positioning and latch and that feeding was assessed."	"Show mothers how to position and latch their babies, how to recognize good latch, and how to recognize their babies are getting enough."	Timing of assistance not addressed in policy.
"All mothers describe hand expression of their milk and have written information on expression and/or advised where they could get help, should they need it."	"Provide all breastfeeding mothers with information and demonstration on how to hand express breast milk prior to hospital discharge."	Policy does not mention provision of written material on hand expression or information about where to get help.
"All mothers explain cue-based feeding."	"Teach infant feeding cues to all mothers and their support persons." "Promote breastfeeding by teaching mothers to respond to their infants feeding cues by breastfeeding whenever the infant shows signs of interest in feeding."	Addressed in policy.
"All mothers are aware of the signs that their	"Show mothers… how to recognize good latch and	Addressed in policy.

infant is breastfeeding effectively, and they know when to seek help should they need it. Mothers have written information on available and knowledgeable support persons (health professionals or peer support)."	how to recognize their babies are getting enough." "Provide contact information for community-based breastfeeding support services to all breastfeeding mothers upon discharge." "Provide information to all mothers on how to access breastfeeding support 24 hours a day via Information lines."	
"Mothers who are breastfeeding demonstrate effective positioning and latch. All relate they have been given age-appropriate anticipatory guidance about possible breastfeeding concerns, their solutions and available resources that will assist with breastfeeding."	"Show mothers how to position and latch their babies, how to recognize good latch, and how to recognize their babies are getting enough."	Policy does not address providing mothers with anticipatory guidance on breastfeeding concerns and solutions.
"Mothers who have made the decision not to breastfeed, or who elected to supplement their babies with human milk substitutes for non-medically indicated reasons report that: they received information to support an informed decision, and were assisted to choose what is acceptable, feasible, affordable and safe, were instructed about correct preparation, storage and feeding of supplements."	"Respect the informed feeding decision of each mother and provide written and one on one teaching of breast milk substitute preparation and feeding." "Provide prenatal education that includes information to help women and their families make an informed decision about infant feeding that includes the risk of not breastfeeding."	Addressed in policy.
"Mothers with babies in special care, or mother with babies who are unable to breastfeed, or who are separated from their babies during illness, or while at work or school, confirm that they received instruction on the maintenance of lactation by frequent expression of milk (beginning within six hour of birth and eight or more times in 24 hours to establish lactation), how to store and handle milk, and where to obtain equipment and how to clean it."	"Instruct mothers who are separated from their newborn babies to express milk 6 to 8 times in a 24-hour period." "In special situations where mothers or infants are sick, provide mothers with access to electric pumps and encourage to start pumping within 6-12 hours from birth and to continue pumping at least 6 times per day. All equipment cleaned as per manufacturer's guidelines." "Inform breastfeeding mothers of the protocol for the storage and transportation of frozen breast milk if baby is being cared for in another hospital." "Encourage mothers to express their own milk if a supplement is medically necessary and if needed provide them with access to an electric breast pump while in hospital." "Promote breastfeeding by giving mothers information about hand expression or pumping at home if a supplement is needed after discharge."	Addressed in policy.
Step 6 **"Support mothers to exclusively breastfeed for the first six months, unless supplements are medically indicated."**	**"Give newborn infants no food or drink other than breastmilk, unless medically indicated"**	
"Mothers of babies younger than about six months confirm that their baby is exclusively breastfed, or that they made an informed decision to supplement for a medical or personal reason."	"Promote and protect breastfeeding by giving breastfeeding infants no supplementary or complementary feeds unless medically indicated according to WHO/UNICEF guidelines." "Obtain informed consent from parents if supplementary feeds are required."	Addressed in policy.
"Mothers report that they have received anticipatory guidance and an opportunity to discuss sustained breastfeeding with staff, exclusivity for the first six months, then for two years and beyond, along with the	"Provide prenatal education and postnatal follow up by staff that will reflect the aim of exclusive breastfeeding for two years and beyond with appropriate introduction of complementary foods." "The basics of breastfeeding management and the	Providing mothers with an opportunity to discuss sustained breastfeeding and the introduction of complementary foods

introduction of appropriate complementary foods."	common experiences they may encounter will also be included."	with staff not emphasized.
"Mothers, including those mothers with babies in special care who have made an informed decision not to breastfeed, report that the staff discussed feeding options with them and supported their informed selection of an appropriate human milk substitute."	"Obtain informed consent from parents if supplementary feeds are required." "Respect the informed feeding decision of each mother and provide written and one on one teaching of breast milk substitute preparation and feeding."	Addressed in policy.
"The manager providers annual data for the facility showing breastfeeding initiation rates, exclusive breastfeeding rates of babies from birth to discharge, supplementation rates, and a reliable system of data collection"	Not discussed.	Policy does not outline reporting of annual data from facility.
"Staff describe the importance of exclusive breastfeeding, the medical indications for supplementation, and information provided to mothers to support informed decision making about feeding their own expressed breastmilk, human donor milk and human milk substitutes without the use of bottles or artificial teats. Staff record this important information in clients' charts."	"Provide prenatal education and postnatal follow up by staff that will reflect the aim of exclusive breastfeeding for two years and beyond with appropriate introduction of complementary foods." "Protect breastfeeding by making parents aware of the risks of breast milk substitutes and glucose water supplements through verbal and written instructions, if the mother asks to use them." "Record any supplements that are prescribed or recommended in the baby's hospital chart or health record."	Addressed in policy.
Not discussed in BFI.	"Inform parents of their right to have accommodations in the workplace that support and sustain breastfeeding."	Addressed in policy.
	"Protect breastfeeding by making parents aware of the risks of breast milk substitutes and glucose water supplements through verbal and written instructions, if the mother asks to use them."	Addressed in policy.
Not discussed in BFI.	"Promote breastfeeding by encouraging early and frequent feeds of infants at risk for hypoglycemia, jaundice or excess water loss."	Addressed in policy.
Not discussed in BFI.	"Protect breastfeeding by using medications for the mothers that are compatible with breastfeeding wherever possible; and if not possible, maintain lactation by expressing breastmilk and resuming breastfeeding as soon as possible."	Addressed in polity.
	"Record any supplements that are prescribed or recommended in the baby's hospital chart or health record. The preferred methods of supplementation are lactation aids used at the breast, cup, syringe or finger feeding."	Addressed in polity.
Not discussed in BFI (Detailed in International Code of Marketing of Breast Milk Substitutes).	"Breast milk substitute supplies and feeding equipment will be stored out of sight."	Storage of milk substitute detailed in International Code of Marketing of Breast Milk Substitutes.
Step 7 **"Facilitate 24-hour rooming-in for all mother-infant dyads: mothers and infants remain together."**	**"Practice rooming-in. Allow mothers and babies to remain together 24 hours a day."**	
"Postpartum mothers including those with caesarean deliveries, report that from birth (or	"Support breastfeeding by assisting mothers and infants remain together from birth. Promote 24 hour	Addressed in policy.

from the time that they were able to respond to their babies in the case of general anesthetic) their infants have remained with them, and that a support person was welcomed to stay with them day and night."	rooming-in and encourage all mothers to keep their babies with them." "Welcome a support person to stay with the mother during labour and birth and to give assistance with breastfeeding."	
"All mothers relate they have received accurate information about safe co-sleeping and bed sharing."	Not discussed.	Policy does not provide details on safe co-sleeping and bed sharing.
"All mothers confirm that they are not separated from their infants and are invited to hold their babies skin-to-skin and breastfeed if painful procedures are necessary."	"Complete infant procedures while the mother is present and at the bedside where possible." "Promote 24 hour rooming-in and encourage all mothers to keep their babies with them."	Policy does not emphasize maternal confirmation that there was no separation. Policy does not address holding baby if painful procedures are necessary.
"The manager confirms that teaching and examinations occur at the mother's bedside or with her present. The manager confirms that breastfeeding is welcome everywhere, including all public areas, and that facilities for privacy are available on request."	"Complete infant procedures while the mother is present and at the bedside where possible."	Policy does not emphasize manager confirmation.
"Staff report that mothers and babies are separated only for medical reasons, and that anticipatory guidance is given to mothers to protect, promote and support breastfeeding. Staff report that examination, teaching and procedures occur at the mother's bedside or in her presence, and that mothers are encouraged to hold and settle their babies if painful procedures are necessary."	"Complete infant procedures while the mother is present and at the bedside where possible." "The basics of breastfeeding management and the common experiences they may encounter will also be included. The aim is to give women confidence in their ability to breastfeed."	Policy does not emphasize staff confirmation that separation only occurs for medical reasons. Policy does not address holding baby if painful procedures are necessary.
"Staff describe how mothers are welcomed to breastfeed anytime, anywhere."	Not discussed.	Breastfeeding anytime and anywhere not addressed in policy.
"Documents show evidence of medical implications for separation of mothers and babies, the length of separation and anticipatory guidance to protect, promote and support breastfeeding."	Not discussed.	Documentation of medical implications for separation not discussed.
"A support person was welcomed to stay with them day and night."	"Inform mothers they may have a support person with them whenever possible and provide guidance to the support person about their role to 'mother the mother'."	Addressed in policy.
Not discussed in BFI.	"Encourage mothers whose babies are in the Neonatal Intensive Care Unit (NICU), if possible, to room-in with their babies for a minimum of 24 hours prior to discharge."	Addressed in policy.
Step 8 **"Encourage baby-led or cue-based breastfeeding. Encourage sustained breastfeeding beyond six months with appropriate introduction of complementary foods."**	**"Encourage baby-led breastfeeding."**	
"Mothers describe age-appropriate, cue-based, effective feeding (feeding cues, unrestricted frequency and length of breastfeeds, signs of	"Teach infant feeding cues to all mothers and their support persons." "Promote breastfeeding by teaching mothers to	Maternal knowledge of age-appropriate cue-based effective feeding

effective breastfeeding, signs of readiness for solids)."	respond to their infants feeding cues by breastfeeding whenever the infant shows signs of interest in feeding."	not addressed.
"Mothers confirm that they have received anticipatory guidance and an opportunity to discuss sustained breastfeeding with staff, exclusively for the first six months, then for two years and beyond, after introduction of appropriate complementary foods."	"Support mothers to establish and maintain exclusive breastfeeding to six months, foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic."	Maternal confirmation of discussion with staff about sustained breastfeeding, exclusive feeding for six months, feeding for two years and beyond, and the introduction of complementary foods no addressed in policy.
"The manager relates that staff offer timely anticipatory guidance and problem solving to mothers regarding effective, cue-based feeding as per Canadian and international guidelines."	Not discussed.	Manager confirmation of timely anticipatory guidance not addressed.
"Staff describe the information mothers are taught about age-appropriate differences in infant variables (behaviour, output and feeding frequency) and how to assess their babies for signs of effective breastfeeding. Staff confirm they discuss breastfeeding progress with mothers at each contact, unless a medical or other emergency takes precedence."	"Assist and counsel each mother for at least one feed every shift or as often as each mother needs assistance."	Staff ability to describe information provided to mothers about age-appropriate differences in infant variables and signs of effective feeding not addressed.
"Documents show evidence that mothers receive information on cue-based feeding and continued breastfeeding."	No discussed.	The provision and documentation of information on cue-based feeding and continued breastfeeding not addressed.
Not discussed in BFI.	"Encourage mothers to feed infants at least 8-12 times in 24 hours."	Addressed in policy.
Not discussed in BFI.	"Teach mothers and their support persons that colostrum is adequate nourishment for their babies for the first 48 to 72 hours, and that some weight loss is normal."	Addressed in policy.
Not discussed in BFI.	"Mothers and babies who are having difficulties will be referred to a lactation consultant or a health care provider skilled in managing complex breastfeeding issues."	Addressed in policy.
"Mothers who are breastfeeding demonstrate effective positioning and latch. All relate they have been given age-appropriate anticipatory guidance about possible breastfeeding concerns, their solutions and available resources that will assist with breastfeeding." "Mothers who are breastfeeding demonstrate effective positioning and latch. All relate they have been given age-appropriate anticipatory guidance about possible breastfeeding concerns, their solutions and available resources that will assist with breastfeeding."	"Ensure that breastfeeding mothers are offered support and assistance to acquire the skills of positioning and latch. Staff skilled in breastfeeding management will provide instruction and support in such a manner that will empower mothers to become confident and self-reliant in basic breastfeeding management. Nurses will provide information and guidance that will allow the mother to place the baby to the breast herself. The mother is in control of the breastfeeding situation. The nurse will provide as much hands off support as possible and directly intervene only when necessary."	Addressed in policy.

"All postpartum mothers report that they were offered further assistance with breastfeeding within six hours of delivery and at appropriate subsequent intervals. Observations of feedings are completed as needed and at least once per shift."		
Step 9 **"Support mothers to feed and care for their breastfeeding babies without the use of artificial teats or pacifiers (dummies or soothers)."**	**"Give no artificial teats or pacifiers to breastfeeding infants. Protect breastfeeding by giving no pacifiers to breastfeeding infants and not selling any pacifiers in the hospital."**	
"Mothers report that they received information and support to feed and care for their breastfeeding babies without the use of artificial teats or pacifiers."	"Inform and educate parents on the risks of pacifier use in early breastfeeding, until breastfeeding is well established (6 weeks)." "Do not use bottles or nipples for breastfeeding infants whenever a supplement is necessary but use alternate feeding methods such as lactation aids, finger feeding, cup feeding, and spoon feeding."	Addressed in policy.
"If the baby has been given a bottle or pacifier, the mother confirms that this was her informed decision or a medical indication."	"Promote and protect breastfeeding by giving breastfeeding infants no supplementary or complementary feeds unless medically indicated according to WHO/UNICEF guidelines." "Obtain informed consent from parents if supplementary feeds are required."	Addressed in policy.
"The manager provides records confirming that mothers of breastfeeding infants are supported to find alternative solutions or make an informed decision regarding the use of artificial teats."	"Use nipple shields only after consultation with a lactation consultant or a health care provider skilled in managing complex breastfeeding issues."	Manager confirmation not addressed.
"Staff describe feeding alternatives recommended for breastfeeding infants requiring supplemental feeding (e.g., cups, spoons) and soothing techniques for all infants."	Not discussed.	Staff knowledge of alternative feeding methods not addressed.
"Documents show evidence of support and informed decision-making."	Not discussed.	Documentation of informed decision-making not addressed.
"Written information for clients outlines the risks associated with artificial teats and describes alternatives."	Not discussed.	Policy does not address the provision of written information on risks of artificial teats and alternatives.
Step 10 **"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."**	**"Support mothers to establish and maintain exclusive breastfeeding to six months, foster the establishment of breastfeeding support groups and refer mothers to them on discharge from the hospital or clinic."**	
"Mothers confirm an effective transition from hospital, birthing centre or midwife to CHS and know at least one way to access	"Refer all new mothers to the community health nurse within 24 hours of discharge from hospital, so the mother will have the opportunity for early face-	Addressed in policy.

breastfeeding support outside of office hours. Mothers confirm that they are able to access peer support programs. Mothers report that they live in a community that supports a positive breastfeeding culture."	to-face assessment of breastfeeding. Breastfeeding progress will be assessed at appropriate intervals." "Provide contact information for community-based breastfeeding support services to all breastfeeding mothers upon discharge." "Provide information to all mothers on how to access breastfeeding support 24 hours a day via Information lines." "Provide services to breastfeeding women in the community based on best practices." "Provide breastfeeding women requiring admission into hospital the necessary support to continue breastfeeding and maintain lactation."	
"The manager describes an adequate procedure for the transition from hospital to CHS and describes the liaison and collaboration between hospital, CHS and peer support programs to protect, promote and support breastfeeding."	"Refer all new mothers to the community health nurse within 24 hours of discharge from hospital, so the mother will have the opportunity for early face-to-face assessment of breastfeeding." "Breastfeeding progress will be assessed at appropriate intervals."	Policy does not address manager knowledge of procedures for transition from hospital at community.
"Community manager and staff describe the strategies and approaches used to support principles of primary health care and population health to improve breastfeeding outcomes."	Not discussed.	Manager confirmation and staff knowledge of approaches used to support primary care not addressed.
"Staff describe effective transition for all mothers between hospital or birthing centre and community programs and can locate the written support materials provided to mothers."	"Provide information to all mothers on how to access breastfeeding support 24 hours a day via Information lines."	Staff knowledge of transition into the community or written resources not addressed.
"Documents show evidence of liaison and collaboration across the continuum of care."	Not discussed.	Policy does not address documentation of collaboration across continuum of care.
"Written information for clients lists hospital, community health and peer support providers."	"Provide contact information for community-based breastfeeding support services to all breastfeeding mothers upon discharge." "Provide information to all mothers on how to access breastfeeding support 24 hours a day via Information lines."	Addressed in policy.
Not discussed in BFI.	"Ensure formal systems for communicating a mother's breastfeeding progress from hospital to the community is in place e.g., Live Birth Notification System and Healthy Beginning Referral Form."	Addressed in policy.

(BCC, 2012a; Crocker, 2012)

Outcomes of this comparison reveal a clear commitment to promoting and upholding BFI practice standards of care at the Janeway Children's Hospital/Health Sciences Centre. While it may be with intention that only certain components of each step were addressed in the Eastern Health policy (perhaps to facilitate the prioritization of specific components of each step), outcomes of the comparison reveal gaps in the Eastern Health policy for Step 3-10 of the BFI. It is recommended that Eastern Health update *Breastfeeding: Protection, Promotion and Support for Healthy Term Infants* to reflect all components outlined in the BFI. Table 4A may be used to facilitate this process.