Reproductive Care Program
Halifax Professional Centre
5991 Spring Garden Road, Suite 700
Halifax, NS B3H 1Y6

Phone: 902-470-6798
Fax: 902-470-6791
http://rcp.nshealth.ca

February 2016

Quality Assessment Review: Newborn Transition from Hospital to Home

Nova Scotia 2010-2015

NOVA SCOTIA

Table of Contents

Executive Summary

Based on data for 2009-2014, approximately 8850 infants are born each year in Nova Scotia; most at term, with approximately 50% of women having their first baby. Postpartum length of stay in hospital is typically 2-4 days. Current Nova Scotia guidelines recommend that newborns have a thorough physical assessment while in hospital and at 7-10 days post birth. They should also have daily feeding assessments in hospital and a feeding assessment at minimum 1-3 days after discharge or sooner, depending on the feeding plan established in hospital [1]. These assessments must be done by a health care provider with demonstrated competencies in assessing and supporting postpartum women and their newborns.

'A community and a nation that takes the responsibilities of breastfeeding seriously, that honours and respects the needs of the birthing women to have the time and support they need in order that breastfeeding is established, is a nation that cares about the long term health of its people.' - *Carol Couchie*

In keeping with the mandate to promote and advocate for optimal health for women, infants and families, RCP conducted a series of 'Quality Assessment (QA) Reviews' between 2010 and 2015 which focused on newborn transition to the community and maternal self-care following birth. The RCP team held discussions with those involved in care planning and delivery for mothers and babies, at the IWK and in each of the former District Health Authorities across Nova Scotia. Professional and non-professional community partners and supports were invited to participate in focus groups, as were new mothers and their partners. Health and health service utilization data were analyzed from both the Nova Scotia Atlee Perinatal Database and from the physicians' billing database (MSI). Corresponding patient records were reviewed in hospital and through Public Health Services to better understand the flow of information following discharge post-birth. Preliminary findings were presented to the Senior Leadership Teams in each of the former District Health Authorities at the end of each review. A written report was also completed and sent to district leadership to be disseminated at their discretion. Many programs in the former districts incorporated their report and its recommendations into local Quality Improvement processes, and in preparation for Accreditation.

This process revealed that while many newborns and their mothers are able to access services and supports, a considerable proportion are not receiving the physical, emotional and psychological care recommended in the provincial guidelines. A surprisingly significant number of women enter hospital to give birth unprepared for the reality of new motherhood, and there is a disproportionate reliance on acute care staff to fully prepare them during their short postpartum stay to go home to care for their baby and themselves. New mothers, particularly those who are breastfeeding, often leave hospital unaware of resources in place to support them during this transition, or the resources are inadequate. An important strength of this quality review process was the direct engagement with new mothers and families. Summary feedback from new mothers' focus groups is provided in Appendix A; in essence, women ask:

- To be heard.
- To know to whom and where to turn when they have questions and need advice. Face-to-face peer and professional support is preferred before other resources, including print material.
- To receive consistent messages no matter where they go for help.
- To have an opportunity to build peer connections in their community, and
- To actively participate in decisions regarding their infant's and their own care.

Communities of care providers are often disconnected from potential collaborative partners and an efficient and effective information stream, resulting in knowledge gaps which ultimately affect the care and resources they can offer new families. Traditionally there is a somewhat siloed arrangement of clinical services in Nova Scotia, across Primary Health, Public Health, and Acute Care. This approach is not suitable for the perinatal population, however, because care needs more closely reflect a continuum as women and their newborns transition from antenatal to intrapartum to postpartum/postnatal care, connecting with Primary Health, Public Health and Acute Care along the way.

Despite administrative structures that silo care, across the province there are promising practices that are models of effective collaboration, which effectively smooth this transition for families leaving hospital with newly born infants. Health professionals in these areas are aware of and integrated with community-based supports and resources for new mothers, and the women in these areas reported greater knowledge of and confidence in the network surrounding them and their new baby.

This report is a provincial summary of RCP's findings from the Quality Assessment reviews focused on newborn transition from hospital to home. There are strengths and limitations inherent in the approaches taken in this process; these are described in the body of the report. In general, the findings and recommendations from this report will inform the optimization of

maternal-newborn services in the recently re-organized health system in Nova Scotia. Specifically, this information will contribute to revisions of the Nova Scotia *Postpartum & Postnatal Standards & Guidelines*, and should be considered in planning for Early Years and primary care initiatives, and implementation of the Public Health protocols[1].

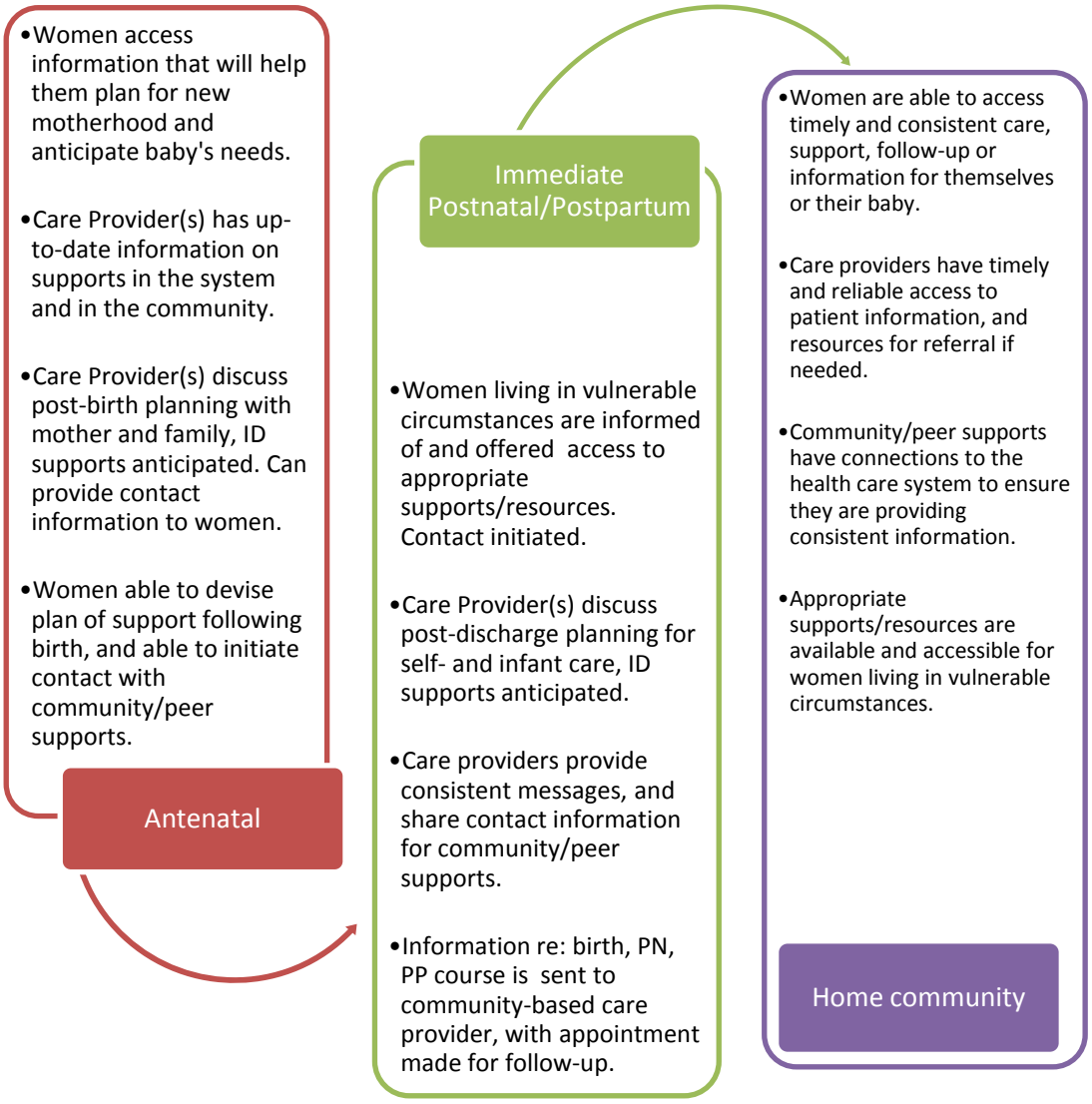
[1] Public Health in Nova Scotia has committed to "engage in planning on a multi-year basis to establish priorities and strategic directions for the public health system" and to "consider these priorities and strategic directions when developing programs and public health action plans" (p.1). http://novascotia.ca/dhw/publichealth/documents/02-Priority-Setting-and-Planning-Protocol.pdf [2]

Recommendations

These recommendations are intended to optimize perinatal care resources and supports through improved integration. Because perinatal care begins and ends well beyond the hospital experience, this transition requires better collaboration and coordination of all stakeholders to ensure infants of new parents get the best start in life.

- Newborns and their mothers should be a priority in the primary care system.
- Families need different access points to care, likely with different configurations of care providers for different needs. Care providers should be culturally competent [3].
    - Families' issues are unique
    - Resources differ across the province
- Perinatal care should be individualized, consistent, culturally appropriate, and address issues across the continuum of care (examples exist in promising practices including the midwifery model of care, and collaborative primary care practices).
- Expectant women should have anticipatory guidance from care providers throughout pregnancy to assist them in planning for self and infant care following birth.
- All newborns should have an assigned primary care provider or practice at the time of hospital discharge, or when discharged from midwifery care.
    - Ideally, the *family* should have a consistent primary care provider or practice.
- Eliminate 'siloed' care planning and administration.
- Create opportunities for communities of care providers to connect to improve continuity of care and information-sharing.
- Care providers need a reliable, consistent, and timely means of communicating patient information; families should also have access.
- Build partnerships within and beyond the health system to ensure continuity and consistent messaging:
    - Family Resource Centres
    - La Leche League
    - Peer networks
- Establish a consistent system of data collection and access, to enable perinatal care planners and providers to determine the needs of the perinatal population, and to evaluate the impact of interventions and programs on the health outcomes for women, infants and families.
- Acknowledge that there are gaps in services and supports for newborns and families, accept that creating a system of care and support for families is a collective responsibility, and embrace the challenge. The Model exists in the province and should be emulated.

Illustration of Optimal Perinatal Care



The above depiction suggests optimal organization of care and communication throughout the perinatal continuum. There are several processes involved in creating an integrated continuum of postpartum/postnatal care for mothers, newborns and families. **Antenatally**, women require access to credible information about post-birth care from clinicians who can help them navigate community resources. Such anticipatory guidance supports mothers and families to create post-birth care plans, understand and create systems of support, and enhances mothers' readiness for newborn care and the transition from hospital to home. In the **immediate postpartum/postnatal period**, mothers, newborns and families, particularly those who are vulnerable, require access to services and supports with consistent messaging between providers and communication of relevant information between all care settings (i.e. in hospital, with PH, with PHC and with community resources). Once **home**, mothers and newborns, particularly those living in challenging situations or with reduced health literacy, require timely access to follow-up care and credible information about resources. Care providers should work collaboratively to create seamless, integrated systems of care supported by good communication.

Introduction

Based on data for 2009-2014, approximately 8850 infants are born each year in Nova Scotia. Close to 90% of infants are born at term and the vast majority are born in hospital. Almost 50% of women are having their first baby. They have an average postpartum length of stay of two days following a vaginal birth and three days following a cesarean birth. Current provincial guidelines for postpartum and postnatal care recommend that newborns have a thorough physical assessment while in hospital and at 7-10 days of age (i.e. post birth, not post discharge). Newborns should also have daily feeding assessments while in hospital with another completed at minimum 1-3 days after discharge or sooner, depending on the feeding plan established in hospital [1]. These assessments must be conducted by a health care provider with demonstrated competencies in newborn and postpartum maternal care.

There is qualitative and quantitative evidence that suggests some infants and their mothers are not receiving the recommended physical, emotional and psychological care. This may result in potential missed health concerns and missed opportunities for health professionals to provide families with education and support. Additionally, emotional and psychological distress is experienced by families who have difficulty accessing postpartum and postnatal services.

According to *Healthy Babies, Healthy Families* [1] the goal of postpartum and postnatal services is 'to achieve optimal newborn and maternal health in the short-term and the long-term, and to ensure the physical, emotional and social well-being of the mother and baby'. Concern regarding the seamless delivery of services between the hospital and community has been an ongoing issue for many decades. Schmied and colleagues [4] explored models of integrated perinatal services and found that well-coordinated, local level services have the potential to positively impact women, newborns and families. Integrating service delivery across multiple sectors (hospital, community, primary care, social supports etc.) has the potential to increase access and continuity of care and improve health and social outcomes for women, newborns and families [5].

In keeping with the mandate to promote and advocate for optimal health for women, infants and families, RCP conducted a series of 'Quality Assessment (QA) reviews' between 2010 and 2015, focused on newborn transition to the community and maternal self-care following birth. Reviews were conducted in each of the previous nine health districts (DHAs) and at the IWK; the timeframe during which each review was completed is listed in Appendix B. Each review team was comprised of RCP nurses, RCP's Neonatal Clinical Advisor, a family

physician, Public Health staff and a senior leader. Focus groups and interviews were held with primary care providers (physicians, nurse practitioners and family practice nurses), staff at Family Resource Centres (FRCs), as well as new mothers. The new mothers who chose to participate in the focus groups tended to be those who were involved with programming through supportive community-based programs offered at FRCs or independently. Hospital-based Maternal-Child Unit nurses were interviewed, as well as Public Heath's Healthy Beginnings Teams, paediatricians, lab services staff and senior leaders involved in maternal-child care. The RCP QA team also reviewed both hospital and public health charts focusing on care planning, preparation for discharge, and interprofessional communication. Additionally, health and health service utilization data for residents of each DHA were gathered from both the Nova Scotia Atlee Perinatal Database (NSAPD), which is managed by RCP, and from the physicians' billing database (MSI) with the support of the Department of Health & Wellness. Preliminary findings were presented to the Senior Leadership Teams in each of the former District Health Authorities at the end of each review. A written report was also completed and sent to district leadership to be disseminated at their discretion. Many programs in the former districts incorporated their report and its recommendations into local Quality Improvement processes, and in preparation for Accreditation.

This report is a provincial summary of RCP's findings from the Quality Assessment reviews focused on newborn transition from hospital to home. There are strengths and limitations inherent in the approaches that were undertaken in this process; these are described throughout the text. In general, the findings and recommendations from this report will inform the optimization of maternal-newborn services in the recently re-organized health system in Nova Scotia. Specifically, this information will contribute to revisions of the Nova Scotia *Healthy Babies, Healthy Families Postpartum & Postnatal Guidelines* (2003), and should be considered in planning for Early Years and primary care initiatives and implementation of the Public Health protocols[2].

[2] Public Health in Nova Scotia has committed to "engage in planning on a multi-year basis to establish priorities and strategic directions for the public health system", and to "consider these priorities and strategic directions when developing programs and public health action plans" (p.1).
http://novascotia.ca/dhw/publichealth/documents/02-Priority-Setting-and-Planning-Protocol.pdf
.

Transition of Mother and Newborn

A transition is a process involving all human systems (physiological, emotional, psychological and social) and is defined as a "passage from one life phase, condition, or status to another…transition refers to both the process and the outcome of complex person-environment interactions…embedded in the context and the situation" [6]. Transitions may be related to developmental stages, health-illness changes or situational role changes such as the birth of a child [7]. Pregnancy, birth and the discharge of mother and newborn from hospital to home may be viewed as periods of potential vulnerability when care providers can have a profound impact on mothers' and babies' well-being.

The transition process from hospital to home typically occurs in three phases: 1) the postpartum hospitalization phase during which recovery from birth and discharge preparation occurs, (b) the hospital discharge when short-term outcomes of the preparatory process can be measured, and (c) the post-discharge period when patients' perceptions of their ability to cope with going home after birth mark important transition events in the lives of mothers, their newborns, and families [8]. The ability for mothers to positively transition to self-care and become confident newborn caregivers will depend on multiple factors. These include the characteristics and care needs of mothers, newborns and families, knowledge of and access to social and community-based supports and the quality and availability of health and support services.

Framework for this report

The observations in the individual QA review reports were presented using Accreditation Canada's standards for meeting the needs of maternal/child populations (**https://www.accreditation.ca/population-health-and-wellness**). These standards are intended to assist in the organization and coordination of regional postpartum and postnatal services. In addition to key literature related to best practice for integrated health systems, the findings in this report are presented using the provincial Quality Framework (**http://novascotia.ca/dhw/hsq/documents/Quality-Framework-High-Performing-Health-and-Wellness-System-in-Nova-Scotia.pdf**, Province of Nova Scotia, 2013):

The Department of Health and Wellness released its *Quality Framework for a High Performing Health and Wellness System in Nova Scotia* in 2013, to serve as a lens or guide to quality. In keeping with the spirit of this intent, provincial observations are presented in this report using the quality dimensions described in the provincial Framework. All dimensions include a focus on patient safety, and are fundamentally information-driven to support a high-performing quality health and wellness system.

People centred – Putting people and their families first

Prenatal preparation and anticipatory guidance

Perhaps related to the historical role of postpartum and postnatal in-patient care, there are great expectations from all groups interviewed that hospital nurses will fully prepare new

mothers on self and infant care so they are ready for discharge home. The mean postpartum length of stay is 2 days following a vaginal birth, and 3 days for women who experienced cesarean delivery. In contrast, in 1988 the average length of stay was twice as long; 4.1 and 6 days respectively (source: NSAPD). What has remained consistent is the expected number and range of topics to be covered with women and families in the immediate postpartum.

Both women and health care providers reported there is little opportunity in hospital for new mothers to rest, recover from birth, and become familiar and confident with the care of themselves and their baby. New mothers may be visited at almost any time by family and friends. Many maternal/infant units across the province accept students from a variety of disciplines, and so mothers may be approached by medical or nursing students, clinical instructors or residents, as well as members of their health team or those that offer important or desired services, e.g. nursing staff, physicians, staff from the laboratory, Hearing and Speech, the *Read to Me!* Program, housekeeping, unit aides, nutrition services, or those that offer baby photos and television rentals.

Primary care providers (PCPs) and nurses are concerned that new mothers are not well-prepared to be discharged home with babies, and that they and their partners face an overload of information during their brief hospital stay. New mothers who attended the RCP QA focus groups generally agreed with this impression. Lack of preparedness was thought to be related to the decreased presence (and therefore, modeling) of young families in smaller communities, social isolation in larger communities or in those with transient populations, and an antenatal focus on labour and birth. Mother/baby nurses reported that women have limited recall in the early post-birth period due to fatigue and the effect of postpartum medications. It is not uncommon for nurses to repeat the same information several times and for a mother's understanding of information shared to differ from what is documented in her chart. Additionally, many nurses in hospital are unfamiliar with the information and support available in the community, and so they are either unable to give this information to families or they lack confidence in the quality of these resources and may be reluctant to recommend them.

Until recently, the focus on system problems with primary maternity care has been on addressing gaps in prenatal and intrapartum care, ensuring women have access to providers but not necessarily examining the care itself. The current organization of care and information-sharing is not planned in accordance with what is known about women's capacity for learning in the immediate postpartum [9]. It is particularly important, then, for services and information to be integrated across sectors within hospital and into the community. One approach to improving parents' preparedness for life with a newborn is to provide and review much of the 'required' information with parents throughout the antenatal period so that they arrive in hospital better prepared and more confident. The midwifery model of care exemplifies this

approach, as discussions about post birth planning are introduced early and revisited frequently during antenatal visits. While parents' readiness for learning about newborn care is limited during pregnancy and in the immediate postpartum, women who had had this anticipatory planning reinforced during pregnancy described feeling better prepared relative to other focus group participants.

Post-birth planning was also introduced in some prenatal settings where there were facilitated discussions involving women of all gestations; locations included primary care clinics with modified Centering Pregnancy[3] models as well as community supports such as Family Resource Centres where face-to-face prenatal classes continue, informed by the Welcome to Parenting online prenatal education program (https://novascotia.welcometoparenting.com/Default.aspx). Some of these settings include postpartum women and their newborns, allowing women to learn from each other's experiences of pregnancy and new motherhood, seek out information, make connections with professionals and peers, and build a support network within the community while planning for birth and the baby's integration into family life.

Family-centred vs provider-focused

In the former districts the ability to make the needs of mothers and their infants a system priority was variable. In areas where leaders in acute care, primary care, and public health communicated the importance of services for mothers and infants there was a sense of more consistent interprofessional communication and awareness amongst care providers about available resources and supports for women and families, as well as for the care providers themselves. At various levels of care/service delivery and planning there was typically evidence of collaboration and an appreciation of the roles of all who contributed to the care and support of mothers and their newborns. Examples of collaborative supports with a family-centred focus include:

- Family Resource Centre programming, planned in conjunction with operating times of local food banks
- Postpartum/postnatal home visits by midwives
- Efficient sharing of discharge summaries with primary care providers
- Postpartum/postnatal appointments being scheduled just before lunch or at the end of the day to accommodate the anticipated need for more time

[3] The *Centering Pregnancy* model was created in the United States as a form of group prenatal care that has three components that all occur in one group space: (1) physical assessment (the prenatal visit), (2) education and (3) peer support. Ickovics, J. R., Kershaw, T. S., Westdahl, C., Magriples, U., Massey, Z., Reynolds, H., Rising, S. S. (2007). Group prenatal care and perinatal outcomes. *Obstetrics and Gynecology, 110* (2), 330–339.

- Prioritizing newborns and their mothers and allowing access to scarce primary care appointment time
- Breastfeeding networks that promote peer support yet provide an opportunity to work together with health professionals

In these instances the QA Review team was left with the impression of an integrated network, and feedback from mothers in focus groups reinforced this.

Conversely, in several areas across the province women described care that they felt was focused on provider convenience. In these areas, women described feeling a lack of trust in the 'system' and in some care providers. They also expressed doubt that information provided was evidence-based or individualized for their needs or their baby's needs. Instead, their impression was that their input was dismissed and that the information and care given was according to tradition and likely based on professional opinion and experience. Women cited examples of such experiences at all stages across the care continuum, in all clinical settings, with a variety of care providers. This is not surprising given that care providers in these areas, particularly physicians, stated they were often unaware of community resources they could recommend to new mothers or practice supports they could access themselves. They expressed the feeling they had little input into system changes that affect their care; yet potential collaborators across the system reported significant difficulty engaging some clinician groups.

Respectful of diversity and equity – Providing services that are fair and respectful to all

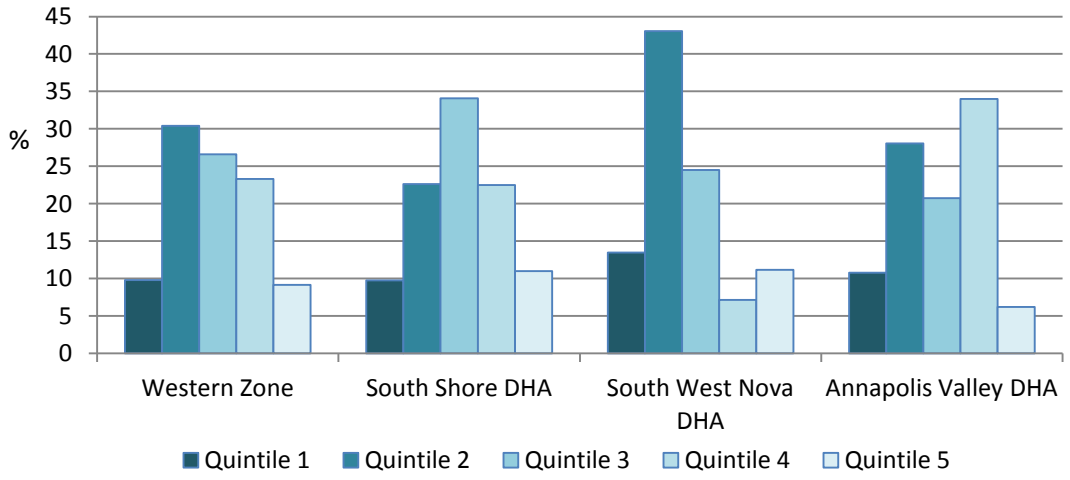
The maternal population in Nova Scotia is diverse, encompassing the extremes of rural to suburban to urban populations, as well as extremes of maternal age and household income. There is opportunity to improve what is known about local populations through data linkage projects, such as the Deprivation Index used within the former Capital Health DHA and in Primary Health Care at the Department of Health & Wellness, to help identify areas of higher need and plan targeted programming and supports for more vulnerable families. On an individual level, PCPs who complete the Nova Scotia Prenatal Record should be aware of the significance of the social determinants of health and consider these as part of antenatal care and for post-birth planning. For example, a women's level of education, and her race/ethnicity both potentially impact her ability to locate and feel confident in accessing resources that could be beneficial to her and her baby as well as her health literacy, and so she may need additional assistance to navigate these.

Maternal Household Income Quintiles [4]

Maternal household income quintiles are reported below according to zone of residence, with comparisons made to former District Health Authorities included within these zones. While the DHA structures no longer exist, the information has been included in this report as catchments with similar boundaries are under consideration for planning purposes. The exception to this is the Central Zone graph, which previously consisted only of the Capital Health district and the IWK. For the Central Zone, comparisons have been made with the former Community Health Board boundaries to better reflect household income characteristics across smaller communities. For all data the time frame reported is a 5-year fiscal year total, 2010-15 inclusive.

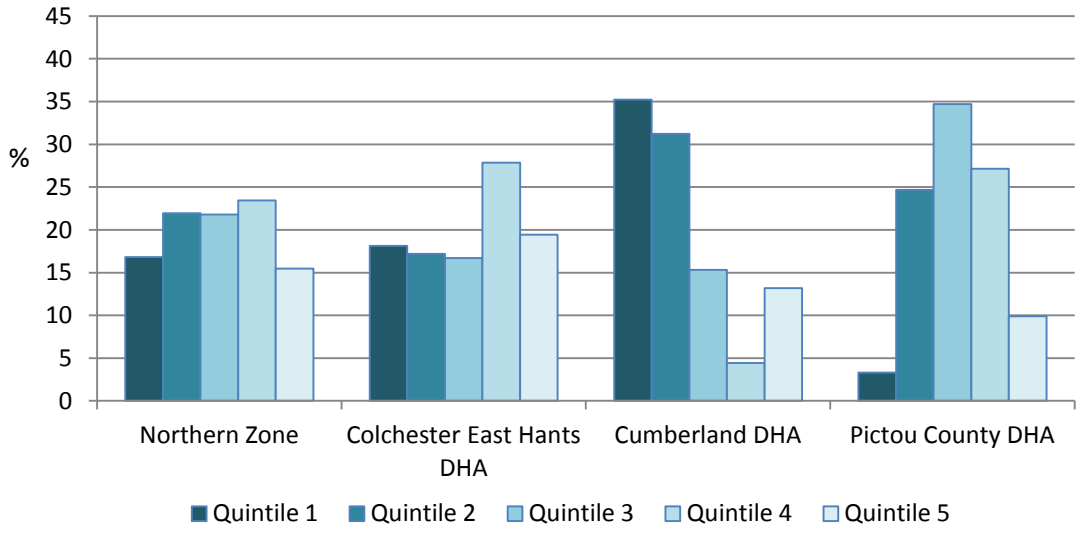
The maternal household income quintiles displayed in these graphs clearly identify areas in each of the current Zones where a significant proportion of families are living in the lower two income quintiles. The proportion exceeds 50% in the former health districts of South West Nova (56.5%) and Cumberland (66.46%), as well as the former Community Health Board districts of Dartmouth (52.6%) and Halifax (57%). In the former Cape Breton DHA, nearly 25% of families with new infants are in the lowest household income quintile. Program and resource planning within the health care system should take into consideration the additional limitations faced by these families.

Western Zone:

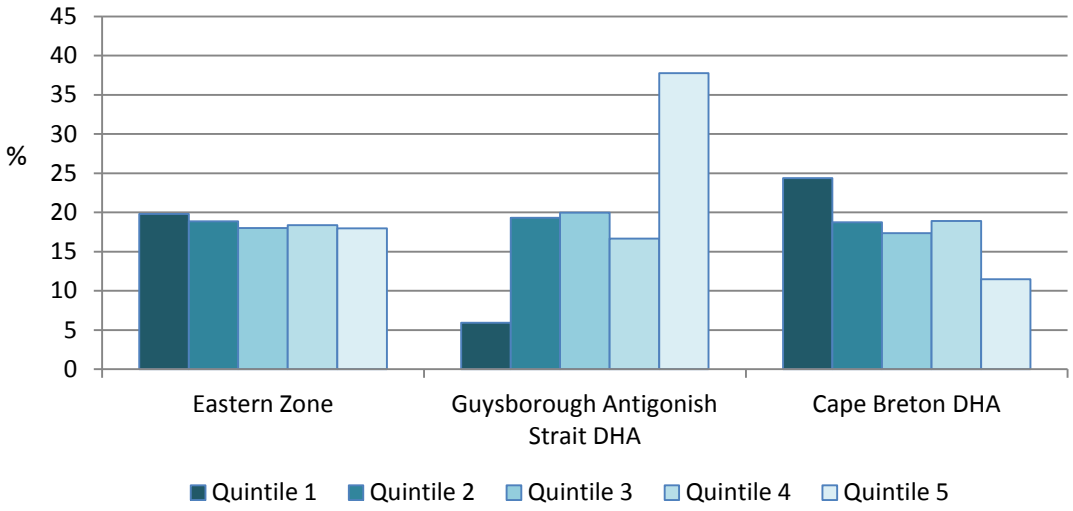


[4] Income Quintiles are specific to each neighborhood and adjusted for household size. Separately for each of six areas in the province, all the neighbourhoods are ranked from lowest average income to highest. The quintile is then assigned with each category representing one-fifth of the households. Quintile 1 represents the lowest average household income, using the area-specific thresholds, and quintile 5 the highest. See Statistics Canada Catalogue No. 82F0086-XDB. Please note: The six areas (census agglomerations) are: Halifax, Cape Breton, Kentville, Truro, New Glasgow, and all other areas.

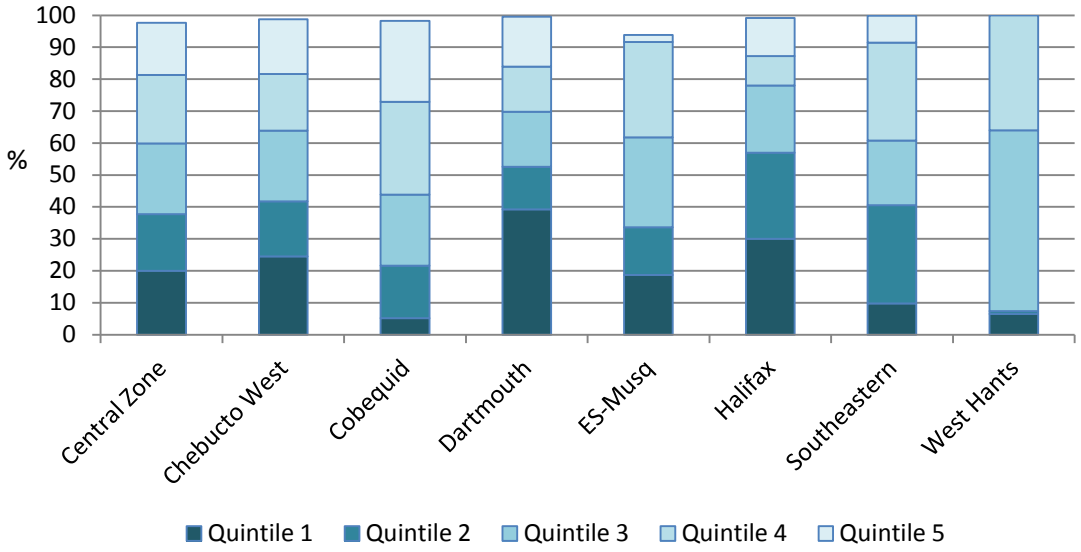
Northern Zone:



Eastern Zone:



Central Zone (displayed along with comparisons of former Community Health Boards):



During the focus groups with women from across the province, there was sometimes a stark contrast between the care experiences of mothers with challenging life circumstances (e.g. poverty, isolation due to rurality and lack of reliable transportation, food insecurity) and mothers with more advantageous situations. For example, some mothers spoke of experiencing harsh judgment, lack of attention and disrespectful treatment, particularly during their hospital stays, which contributed to a general mistrust of the health system. Mothers in this group tended to be younger, live in lower income neighborhoods, and identified themselves as single.

Teen mothers are more likely to have less education simply because of their age, with a resultant lower household income, and so their perinatal health outcomes and that of their children are affected by living with a lower socioeconomic status [10]. These associations persist despite availability of local services. To compound this problem the rates of teen mothers are highest in rural areas of the province where local services are variable. Moreover, mothers who are not partnered often face challenges achieving and maintaining good health for themselves and for their children. Other challenges experienced by single mothers can permeate all aspects of life and pose difficulties with finances, employment, education, emotional well-being and social activities [11].

First Nations women from several areas of the province spoke at length about their own and their family's overall experiences with racism within many areas of health care delivery. For some, there was a desire to seek care outside the local area. Women and care providers spoke of the embarrassment of families living in poverty while struggling to adhere to ante-and postnatal recommendations (e.g. for screening visits, nutrition, or additional consults). While they understood the reasoning, trying to comply with these recommendations places added

stress on women with limited access to transportation, reliable childcare, or money for nutritious food, fuel or parking. There are examples of pre and postnatal support programs available for Aboriginal women and their babies through the MicMac Child Development Centre in Halifax and the health clinics located on-reserve. Access to services and supports is improved when they are delivered by trusted individuals within a community.

In an effort to address the increased needs of vulnerable populations, midwives in the Halifax and South Shore Regions have committed to prioritizing available midwifery services for these women and their babies. With the assistance of the Department of Health & Wellness, a description of priority populations[5] has been developed. Midwifery offices in the Central region have been relocated to improve access. Identifying 'priority populations' is an important first step; however, midwives acknowledged the challenges associated with establishing relationships with women who are not familiar with midwifery services and with communities that may not be interested in a different provider group and model of care.

Staff at Family Resource Centres focus on being active members of their communities, and as a result are often particularly adept at engaging mothers in vulnerable circumstances. They help women to meet their families' needs through partnerships with local food banks or food producers, facilitating clothing and baby equipment exchanges, and providing healthy meals and snacks during programming as well as occasional support with transportation to programs and to medical appointments. Across the province the FRCs provide, in most circumstances, opportunities for new parents to access peer support as well as evidence-informed advice outside the formal health care system. During all DHA-specific QA reviews in this series, many new mothers across the province stated their preference for face-to-face peer and professional support before other resources, including print material. In keeping with women's preferences and expressed needs, FRC staff plan and coordinate postnatal and postpartum programming directly with the women in their community, and rely on their input and uptake to ensure that local programming is best suited to their needs.

Accessible – Providing timely services

Primary Care:

While most primary care practitioners across the province reported prioritizing requests for newborn appointments, this was variable and often depended on the direction provided to the

[5] *Priority populations*: Women experiencing barriers to receiving sensitive maternity care or who may be considered part of a minority population, including women with unique language or cultural needs (such as newcomers to Canada, non-English speakers, Aboriginal and First Nations peoples, African Nova Scotians), single mothers, adolescent mothers, lesbian couples, the socially isolated, those living with the effects of poverty, those requesting a home birth or VBAC, those women living in rural and remote areas of the province, women with disabilities and women struggling with abuse or addictions.

office receptionist. As mentioned, current provincial guidelines for postpartum and postnatal care recommend that newborns have a comprehensive physical assessment while in hospital and at 7-10 days post birth, and daily feeding assessments while in hospital and soon after discharge conducted by competent health care providers (*Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines*, 2003). Nurses across all care sectors are generally well aware of these guidelines; however, this was not true for many physicians.

Most mothers were able to access Primary Care for themselves and their babies within the recommended timelines, while others reported waiting up to 6 weeks for a visit with their primary care provider (PCP). Some did not have a PCP at all and were searching for a care provider for themselves and their families. This was particularly true in parts of the province with limited primary care resources; infants were sometimes prioritized along with all other patient populations as all were perceived to be equally in need. Mothers and infants discharged without an identified PCP sought care in outpatient or emergency departments, or occasionally a walk-in clinic when one was available locally. Based on physician billings data provided for the review of each former district, there were a significant proportion of babies without a billed visit in the first 28 days of life:

Proportion of babies without a billed visit in the first 28 days of life* (source: MSI)

*fiscal year reported during local QA review: 2009/10, 2010/11, 2012/13, or 2013/14

Former DHA	No. of Births	0-7 Days of Age	0-14 Days of Age	0-28 Days of Age
SSDHA	472	63%	33%	22.5%
SWNDHA	508	45%	20%	13%
AVDHA	685	56%	17%	11%
CHA	197	76%	32%	15%
CEHHA	673	55%	22%	14%
PCHA	397	79%	36%	16%
GASHA	343	84%	28%	16%
CBDHA	1133	88%	53%	22%
CDHA/IWK	4270	36%	11%	7%

Some of these babies may have presented for care in an emergency department or hospital-based clinic and these visits may not have been captured in the provincial billing system. Alternatively, in the former Cape Breton District Health Authority, rural Public Health Nurses have provided well baby care while physicians see only those who have health concerns. Nonetheless, it is difficult to account for the remainder and so a number of newborns may not receive the recommended early follow-up assessments.

When this issue was discussed at the IWK, the District Department of Family Practice acted quickly to expand their Primary Care Connections service to include newborns, or newborns and their mothers. This service matches babies and mothers without an identified PCP to a family physician willing to take new patients in these categories. The Unattached Patient Bonus financial incentive available through MSI is part of this arrangement so a formal request has to be made from the hospital-based caregiver and there has to be documented agreement from the accepting physician. A list of participating physicians throughout the area has been compiled, and a referral form has been developed and is in use.

In the Western Region, one of the hospitals introduced an outpatient postpartum/postnatal clinic led by a Nurse Practitioner with maternal newborn and breastfeeding expertise to ensure women and their babies could access this specialized care in the first few weeks post-discharge. The caveat is that access to this care is available to those women who can travel back to the hospital. These examples demonstrate the commitment of care providers to find effective solutions to meet the needs of both patients and providers themselves, when issues were identified. There has been an impressive uptake of these innovations. While the need for ongoing Primary Care exceeds the supply of providers in some areas, these approaches enable new mothers and their infants to access committed and knowledgeable health care as they transition as new families.

Maternal Mental Health:

Many care providers reported a dearth of supports and services for maternal mental health issues, or a lack of awareness of resources to which they can refer new mothers. Positive maternal mental health is associated with the ability of the new mother to care for herself and her infant. Concerns with mental health are the most frequent postpartum maternal morbidities and often have a significant impact on parenting capacity, parent-child relationships, children's health and children's overall social, emotional and cognitive development. Therefore, it is important to have consistent screening and interventions/support for maternal mental health [12].

There is a great reliance on the IWK's Reproductive Mental Health program but this program is resourced to provide care only to those women with the most serious clinical issues. Some collaborative care practices across the province have included mental health specialists in their teams and arrange consults or regular local clinic time for these patient visits; as a result mental health care has become destigmatized and accessible for new mothers when needed. One former district provides appointments for non-urgent counseling at all health facilities on specified days; access is open. If women are in crisis and can't access these services they seek care and support through the Emergency Department.

For most women, however, there are limited mental health services and supports and this has left some Family Resource Centres trying to fill the gaps. Physicians and nurse providers reported feeling that they do not have the skills and competencies to adequately assess the level of urgency, or the ability to support women with low-to moderate-risk mental health challenges. Mothers without an identified PCP are unable to get a referral to a mental health specialist, unless they present to emergency care in crisis. FRC staff reported that these mothers have great difficulty advocating for themselves. Some women have been given an appointment but they cannot bring their children with them, nor can they find childcare, and so they are faced with having to miss these precious appointments. FRC staff attempt to offer basic mental health care and support but this requires diversion of human resources from their typical programming, and they may lack specialized training in this area because they are not mental health professionals. The Mothers' Mental Health Toolkit has been distributed as a resource for FRC staff but addressing the many needs and priorities of families remains a challenge. If FRCs are to continue backfilling for the lack of maternal mental health supports, additional funding will be needed to ensure adequate training of staff, and to ensure the centres' fundamental functions and purpose are not being undermined. Within the health care system, physicians and nurses require additional training and support to build the skills and competencies to clarify the mental health support that is within their scope, and identifying advanced needs that require referral on to specialized professional care.

Breastfeeding:

With the exception of La Leche League members, a few community-based lactation consultants or committed individuals, and one area of the province with an integrated network, access to breastfeeding support throughout the province tends to be limited to typical business hours, e.g. from 0800h to 1600h on weekdays. Mothers reported that 811 nurses, while found to be helpful for other pediatric issues, did not offer the help mothers with breastfeeding issues were seeking. Nurses working for 811 do not necessarily have perinatal expertise and are required to follow established protocols, and so mothers are inevitably asked to call their PCP. PCPs, for their part, described feeling either insufficiently informed or unable (due to clinic demands) to help with breastfeeding problems. PCPs commonly referred mothers with infant feeding issues to Public Health or community resources if they are aware of them, or advised that mothers use formula if no other help was identified. The practice scope of Public Health nurses varies greatly across the province, as does the approach to universal contact of new mothers, and so they may not be able to provide the required breastfeeding support. Some hospital-based breastfeeding clinics exist across the province, but because this support has been considered to be in the Public Health or Primary Health domain, other hospital-based clinics have closed. Nurses on mother-baby units had traditionally been able to provide ongoing support to breastfeeding mothers who informally dropped in with their babies for help, but their ability to accommodate such visits is decreasing.

Nonetheless, there are examples of programs offering infant care and breastfeeding support to new mothers through community-based groups, and collaborations across health care sectors with these groups. A number of mothers mentioned the Breastfeeding Collaborative Network in South Shore, Tatamagouche Breastfeeding support group, many of the province's Family Resource Centres, groups supporting First Nations women (e.g. in Membertou, and the Mi'kmaq Child Development Centre in Halifax) and La Leche League. Women in focus groups described the great value they placed in face-to-face interactions, particularly for breastfeeding support; the ability to directly connect with hands-on help and that the trusted advice enabled them to continue breastfeeding. New mothers who connected with this expertise antenatally were able to establish their post-birth support network more readily and reported feeling more knowledgeable about and confident in their ability to breastfeed, and in the support provided. Coordinators of these as well as other volunteer-led community support groups were justifiably proud of their programs but noted that the challenge of relying on volunteers is significant. There is a need to continually recruit and orient new volunteers which can have an impact on program sustainability. For example, those associated with the Friendly Feeding Line, a well-established peer support network in the former South West Nova DHA, reported that they sometimes experience challenges providing support when an experienced group of volunteers moves away from breastfeeding involvement, and newcomers are scarce or still learning their role. Although the program is active this experience demonstrates that the challenges of maintaining a volunteer-run program should not be underestimated.

Centralization of Maternal/Newborn services:

Distance to care continues to be a concern for care givers serving new mothers and infants, especially in rural communities. The Nova Scotia Atlee Perinatal Database can be used to calculate travel distance from a woman's home community to a hospital with birth facilities. Although this information does not equate directly to postpartum and postnatal services, distance to a birth hospital may be a proxy for access to some types of care since services tend to be clustered close to larger population centres. While centralization of maternal and newborn services has often resulted in improved consistency of care (e.g. uptake of clinical guidelines and standards), accessibility has become more of an issue for women and their infants. A clinician based in rural CDHA expressed apprehension when describing the trend to centralize former community-based perinatal supports and services, such as prenatal education and breastfeeding clinics offered through PHS. She stressed the importance of maintaining breastfeeding clinics in smaller areas so women get to know and develop trust in the PHNs and the PHNs have a better appreciation of the perspective of women and families living in more rural circumstances. The clinician stated "Moving these programs out of rural communities is contributing to the erosion of these communities. Women lose trust that local health and social supports can help them, and they stop looking locally for support. When demand goes down,

rural programs lose funding. Women can't always travel into town because they don't have a car or can't afford the gas, but then they think that's the only way to get breastfeeding support and then give up".

Online resources:

There is growing interest in, and reliance on technology as a source for information, particularly among younger women and families. However, online resources and support for self- and infant care may or may not be useful to the very women they are intended to benefit. Accessing online information requires women to have a home computer or smartphone data plan, the skills and time to search for resources, and the ability to discern the legitimacy of the advice or information posted. Expectant women and new mothers also seek information and advice from care providers, peers, and family members, and find inconsistencies confusing. In RCP's discussions with public health, FRC staff, and new mothers, they shared that many women prefer to learn in facilitated group environments. Additionally:

- Younger women, particularly those less advantaged, don't tend to subscribe to a data plan when they have a mobile phone. Mobile phones are used primarily for texting and users increasingly rely on free WiFi for data access. This is unlikely to be located at home, where they would ordinarily try to explore online supports.
- Many rural areas do not have affordable and reliable high-speed internet access.
- As a result of these issues as well as poor design and the demand for quick access to information, websites that require a great deal of navigation seem to be becoming passé. Downloadable apps are more likely to be accessed than websites for today's generation of new mothers.

In response to public requests for an online resource, and following the discontinuation of universal prenatal classes offered through Public Health[6], an online prenatal education program (WelcometoParenting.com) was launched in the province in the fall 2014. Postnatal modules that provide information for self- and infant care post-birth have been available only since early Fall 2015, and as with all other modules in this program these require women to identify these as learning needs. Without guidance, this need may not be anticipated prior to the hospital admission.

Several of the FRCs are planning or have already begun offering on-site prenatal classes. Some PHNs stated they will continue to support the prenatal classes at the FRCs, and will

[6] Public Health is moving towards providing targeted programming for the most vulnerable and population health programming to address widespread issues related to smoking, obesity and chronic disease. Government of Nova Scotia (2010). Public Health Standards 2011-2016. Retrieved from: http://novascotia.ca/dhw/publichealth/documents/Public_Health_Standards_EN.pdf

continue to provide targeted prenatal information for vulnerable or at-risk populations; although these have not yet been formally identified. A great deal of confusion still remains as to what prenatal education PH will offer. Private prenatal classes are also being offered by various groups, and while most provide messages aligned with Public Health and recognized national expert groups, these cannot be standardized. RCP suggests that FRC staff and other providers of prenatal education classes collaborate with Public Health and maternal-child unit staff to discuss the content and approach for the classes, to ensure that messages are in keeping with best practice and are consistent with provincial messages. One FRC is providing space and computers for women to access the online modules in a group setting, and follows up with an opportunity for facilitated discussion about the information.

Seamless – Coordinating services across the continuum

Information sharing:

Across the province, primary care providers (PCPs) reported receiving varying amounts of information prior to a newborn's first follow-up visit in the community. In many areas of the province most PCPs provide no or limited prenatal care, and no longer provide intrapartum or in-hospital newborn care. Therefore a health summary about the new baby and any on-going issues for the mother need to be communicated to the on-going PCP in a timely fashion. While some receive faxed or mailed copies of detailed birth and newborn assessment records, many PCPs receive no information. For those who refer women early for antenatal care, it is not uncommon for them to have had no communication with the pregnancy care provider or mother until she is seen post-birth with her newborn. This lack of information is problematic for PCPs' care planning when new mothers arrive with their newborns, particularly when either requires follow-up such as blood work or consults. New mothers also expressed concern about inconsistent communication as they rely on medical professionals to be fully informed to provide advice and care. When new mothers are given copies of hospital records to pass along to their PCP, they may or may not remember to do so. For their part, hospital-based staff and physicians state that many new mothers haven't understood that their baby requires an identified PCP, particularly when their own antenatal and in-hospital care has been provided by an obstetrician. PCPs prefer to have this information in advance of appointments so they can ensure there are no gaps in care, they can anticipate the mother's and the infant's needs, or ask them to visit sooner if indicated. Identifying the newborn's PCP should be included in the anticipatory guidance offered to women in the antenatal period; a prompt is provided on the provincial prenatal record.

Electronic medical/health records (EMR) are present in an estimated 70% of primary care offices across the province[7] although many providers continue to include written notes or

[7] Personal Communication, Primary Health Care Branch, Nova Scotia Department of Health and Wellness

paper-based forms in their office charts. EMRs offer the potential to more readily integrate best practice information into existing and new forms for documentation, and, in the future, retrieve relevant data for planning. While the various systems currently in use do not interface, it is anticipated that EMRs will provide the ability to communicate and share information in a timely manner about all aspects of perinatal care, including postpartum and postnatal care. Recently, the province announced a 12-year plan for the One Patient-One Record initiative which aims to create a standardized approach to electronic documentation across the province. The initial focus is on the acute-care (hospital) system, with subsequent involvement of community stakeholders. In the interim, some maternal/child units have reviewed their processes for sharing discharge information with PCPs to ensure this is received in a timely and consistent manner. In Truro, for example, charts of discharged mothers and babies are quickly scanned and archived to provide online access to PCPs through Meditech. The number of PCPs who are able to access Meditech from their offices is unclear.

Coordinating care, services, and supports:

In consideration of the many challenges facing mothers and families in their community, the hospital-based Glace Bay Obstetrical Department's Perinatal Clinic has partnered with Public Health and Mental Health and Addictions to create an interdisciplinary full-spectrum holistic approach to prenatal and postpartum/postnatal care. Mothers and a chosen support person are able to receive support and counseling for smoking cessation. A social worker and a dietician are available, in addition to nurses and physicians. Prenatal education needs are individualized and addressed informally, and mothers may return to the clinic with their babies for postnatal checks and for assistance with any breastfeeding problems. Because the local PHN is present and is able to establish a relationship with mothers prenatally, women are more likely to accept a visit in their home.

The collaborative care team in Millbrook First Nation provides a comparable model but the focus of this clinic extends beyond perinatal care. The physician refers women for later prenatal and intrapartum care, but the availability of access to other health professionals and services is broad. Appointment times are flexible to ensure women can receive care for themselves and their infants when they're able to attend. The community health nurse coordinates the interdisciplinary team to individualize care as needed.

The Breastfeeding Collaborative Network ('The Network') in the former South Shore District was developed with support from provincial *Thrive!* grant funding in collaboration with health professionals, the community and health leadership representing maternal/newborn care. Initially Public Health leadership committed a full time public health nurse with IBCLC certification to provide mentorship for two dieticians to complete the requirements to become lactation consultants, and to achieve the competencies to support The Network. This

mentorship also facilitated Public Health staff to collaborate with partners to develop a range of approaches that support breastfeeding infants and mothers [2]. The success of The Network has been enhanced by partnering with professionals in the maternal/child unit and in the obstetrics clinic at SSRH who provide back up support as needed. Services and supports are provided 24/7. Women spoke extensively and emotionally about the phenomenal support they received via The Network, and the crucial role members played in enabling them to address their breastfeeding challenges.

The ease with which new parents are able to integrate their newborn into their lives is affected by many factors; anticipating needs and identifying sources of support is crucial to improving the transition to new parenthood. Many new mothers who attended focus groups during this review stated they felt their transition would have been made easier if they knew what to expect and had made plans for support before taking their baby home. Anticipatory guidance from care providers would have been helpful during antenatal visits. Yet, the review team heard from many care providers in the health system (both in and out of hospital) and in the community that it is difficult to learn about and make connections with resources outside one's own care area.

Effective and appropriate – Doing the right thing to achieve the best possible result

Supporting and promoting breastfeeding:

Breastfeeding is the optimal feeding choice for newborns, and provides both short and long-term benefits for women, newborns, communities and societies [13, 14, and 15]. Over the past decade, breastfeeding initiation rates in Nova Scotia have risen.

Since 2009, hundreds of health professionals and representatives from community-based peer supports have participated in the *Breastfeeding: Making a Difference* (MaD) training sessions endorsed by the Provincial Breastfeeding Steering Committee. The intent is to encourage cross-sectoral collaboration in providing breastfeeding mothers with consistent evidence-based messages and support. While improvements in local breastfeeding indicators since that time may not be wholly attributable to the MaD course, it has surely been helpful. Since 2009, there has been a demonstrated decrease in supplementation rates with a steady increase in the numbers of babies who received breastmilk only (typically through breastfeeding), and the overall initiation rate is on the rise.

Data for breastfeeding initiation and exclusivity during the delivery admission are available via the Nova Scotia Atlee Perinatal Database. For provincial breastfeeding duration data, the Canadian Community Health Survey is the current source; however, there are methodological issues with its timeliness, reliability, and accuracy. The impression that breastfeeding rates fall off within the first few months is corroborated by local research in two NS districts where the

most profound drop occurred at six weeks postpartum [13]. Access to robust duration data is required to evaluate the long-term impact of antenatal and in-hospital breastfeeding initiatives. Ideally, this data could be collected with well-baby visits. Work is ongoing through the Healthy Development (formerly the Healthy Beginnings) Database to collect breastfeeding information during PH contact with women; in three pilot areas across the province those new mothers who agree to participate are providing data through email-based surveys. Additionally, revisions to the Rourke Baby Record in the Nightingale (Electronic Health Record) system present opportunities to gather relevant data, including breastfeeding duration.

Maternal reviews of antenatal breastfeeding education and in-patient feeding support were variable. Women stated that some staff nurses gave inconsistent or conflicting information, recommended supplementation, supplemented with formula too freely, or were unwilling to discuss methods of feeding other than breastfeeding with mothers and their partners. These concerns were commonly expressed across the province, even from those new mothers who were committed to breastfeeding. Staff nurses, for their part, described their struggle with trying to provide the right support for newly delivered mothers trying to establish breastfeeding at a time when their experience didn't match their expectations. Despite the challenges inherent in mastering breastfeeding and the inevitable frustrations that mothers experience, it is important for staff to continue to strive for consistency in approach. Conversely, other mothers who were less committed to breastfeeding felt intimidated by the very clear "breast is best" message.

Provincial postpartum/postnatal guidelines:

For more than a decade, Nova Scotia's guidelines for postpartum and postnatal care [1] have been used by clinicians, educators and policy makers and planners to inform postpartum/postnatal care. The guidelines are currently undergoing revision to system standards and guidelines; this process is near completion. A timeline/toolkit and (Nightingale) EMR templates based on the 2014 version of the Rourke Baby Record have been developed to support primary care providers to practice in a way that is consistent with new evidence and standards. The Rourke Baby Record has been modified to include key Nova Scotia messages.

Enhanced Home Visiting and Extra Support for Parents:

Healthy Beginnings: Enhanced Home Visiting (EHV) is offered through Public Health and provides additional support to families facing challenges through a comprehensive home visiting program. Families may receive home visiting support for up to three years and/or referral and linkage to other health and community resources (http://novascotia.ca/dhw/healthy-development/enhanced-home-visiting.asp).

RCP reviewed charts of mothers who had been screened by PHNs. There are various approaches to eligibility screening across the province: screening is completed iteratively versus

point-in-time; antenatally, post-birth in hospital or following discharge; face-to-face or over the phone; by PHNs or hospital-based nurses. In some jurisdictions the screening tool has been modified; what is unclear is the impact of editing out specific elements included in the original form. Additionally, it appears that some mothers living in vulnerable circumstances may not have been screened in accordance with standardized approaches and so were not offered follow-up visits or EHV support. Other mothers declined when visits were offered; reasons given included having no understanding of the Public Health role, or a misperception that EHV is associated with Child Protection Services. This is an ongoing challenge for those who manage the program. Yet in many communities, the EHV Program is highly regarded and the uptake and interest in the Program exceeds its capacity. Recently, former CDHA Public Health staff piloted Ontario's Healthy Baby Healthy Children screening tool and PH staff across the province eagerly awaits the results to inform changes in their areas.

During the QA reviews, it was clear that the Community Home Visitors (CHVs) working in the Enhanced Home Visiting (EHV) program are trying to meet the extremely challenging social needs of a number of families. At times, the CHVs find it difficult to focus on the goals set with the family because mothers need their assistance to attend to more pressing issues with food security and housing, transportation, and personal safety. These mothers are struggling to provide even the most basic items required to care for their newborns (e.g. diapers, clothing). It was also clear that in some areas of the province there are gaps in the social safety network, or that local resources are insufficient to meet the needs of families.

Although concerns were raised about the limited capacity of the EHV to meet the needs of all women who could benefit, a number of women who disclosed to the QA team their participation with EHV stated they felt the time spent with their home visitor was very beneficial for both them and their child. Because the community home visitors are not health care professionals and many CHVs live in the community, mothers were comfortable with them and felt supported to develop new skills. A few mothers had participated in the EHV program more than once because of the spacing of their children's births. The issue of program eligibility for more than one child is an identified concern, as is the availability of programming for women who do not disclose their sources of stress and who otherwise don't quite qualify.

While geographic isolation more directly impacts women with fewer financial resources, any woman may experience social isolation. There is a sense from care providers that women and families do not have the same supports they've had in the past. Staff working with the Extra Support for Parents (ESP) program at the IWK described ESP as being an appropriate resource for women in the Halifax region who are interested in the Enhanced Home Visiting (EHV) program, but who don't screen in to qualify for further assessment. Women may not disclose significant sources of stress such as personal safety or financial issues or lack of social

support, but they still experience them and face tremendous stress going home with their new infants. ESP is supported through IWK fundraising and matches volunteers with new mothers to provide in-home support typically for 3 months; very occasionally this may extend to 6 months. A very different model of service from EHV, ESP volunteers provide "all the TLC you wish your family could give you when you have a new baby". Usually families are identified by IWK staff, the liaison PHN who completed a standardized, universal screen, or through self-referral by those women who have previously been part of the program. Involvement in ESP may be initiated in the first months postpartum and the program works with approximately 80 new families each year. EHV and ESP often refer families to each other in order to match the most appropriate program and support with the needs of the families; there is little similarity between the ESP volunteer role and that of the Community Home Visitor (CHV) through EHV, but there is some role crossover between the CHV and ESP's Family Support Worker. Women with greater needs are more appropriately referred to EHV, and all others are eligible for intake as long as there is an available volunteer and the family meets the selection criteria. Because postpartum midwifery care doesn't extend past 6 weeks, referrals are initiated by the midwives for families who would benefit from involvement in either program.

Family Resource Centres:

The Family Resource Centres offer a variety of universally offered and targeted programming for women, newborns and families. When the FRCs have additional funding and established partnerships, more outreach programs are planned, especially those that target vulnerable young women who are not currently accessing programs. However, funding is an ongoing challenge for the FRCs and much time is spent by FRC staff seeking out and securing adequate funds to support their programs. Optimally functioning FRCs are well integrated in their communities as evidenced by connections with a number of organizations including Public Health, local doulas or primary care providers, nutritionists, local school nurses, and La Leche League volunteers.

Efficient – Making the best use of resources

Optimized resource allocation for programs and services is more likely to occur when planners consider population demographics in combination with health experiences and outcomes. This provides context to help identify opportunities for targeted programming and services to meet the needs of the most vulnerable women, newborns and families in the area.

The Right Provider at the Right Time:

Newborn assessments must be conducted by a health care provider with demonstrated competencies in newborn and postpartum maternal care. It is clear that Emergency Departments are not the optimal setting for infant assessments for feeding, weight gain or jaundice, maternal assessments for pain or bleeding, and for on-going reassurance; yet for

families without an identified Primary Care Provider the ED is sometimes their only option. With the wealth of evidence for collaborative care and in areas of the province where PCPs are in short supply, the nursing scope of practice is optimized so that Nurse Practitioners, Public Health or Community Health Nurses, and a number of Family Practice Nurses apply their perinatal expertise to provide care for mothers and newborns that are essentially well. Physicians, therefore, can focus their care on those who are ill. Collaborative practices often provide an opportunity to allocate resources most efficiently, however there remains some confusion by those not working in collaborative teams, about the scope of practice for other health professionals and their accountability for their practice. In addition, when provider groups work with different funding models (e.g. fee-for-service, contracts, APPs, employment models) collaboration can be a barrier. This is challenging for the system as well as for providers.

Walk-in clinics increase access to Primary Care but often result in inconsistent messages, advice, and care for postpartum women and their newborns. Further, these clinics focus on providing timely but episodic care so there is a reduced opportunity for PCPs to have ongoing relationships with women and families and to re-evaluate care needs and their management as women may not return to them for follow-up. Hospital staff spoke of situations where families had taken their babies to a series of primary care providers through walk-in clinics, none of whom have the benefit of all the relevant health information or the opportunity to evaluate the child's response to treatment. As Nova Scotia works towards increasing access to collaborative primary care teams across the province, a universally accessible electronic medical record would be extremely helpful.

Many initial and ongoing breastfeeding concerns are not uncommon but require an individualized approach. There is a perception that all women require access to a Lactation Consultant (LC). However all perinatal staff should attain and maintain the competency to support most breastfeeding mothers, reserving the specialized expertise of LCs for those women with more complex breastfeeding issues. A similar comparison may be made with maternal mental health services; every perinatal care provider should have the skills and knowledge to assist women with expected challenges, and refer those with greater concerns to specialized services or community resources.

Population focused – Working with communities to anticipate and meet needs

Rooted in the principles of community development [16] and public engagement and participation [17], it is essential to work with communities at the outset to plan and provide programs, rather than imposing those that are pre-determined. Optimally, programs and services might be proposed with established objectives, but with flexibility incorporated to

support communities to individualize their approaches for meeting those objectives. A shared antenatal care arrangement between local PCPs and providers in regionalized centres is an example of this, as are satellite antenatal clinics and lab services.

PHNs working in rural areas noted that programs and policies developed with an urban lens are not always appropriate for the needs of rural women and their families, and are not congruent with the context of care planning and service delivery in rural communities. Similarly, instances were described by women living in and working with First Nations communities where programs were brought in based on assumptions about community needs, and seemingly without consideration of the communities' culture and history. For First Nations communities, where some members continue to heal from the Residential Schools experience, this is a particularly difficult imposition. When communities, particularly those that are vulnerable, were not involved in the planning of programs and services, engagement was more challenging and the uptake likely to be poor. This experience is not isolated to patients only; similarities may be found with care provider groups who may opt out of practice models, or the care of specific patient populations such as newborns.

During the QA reviews, there were several examples of successful engagement with women and with providers that improved the implementation of programs. Across the province, recipients of *Thrive!* funding grants spoke with enthusiasm of the programs and initiatives they have been able to introduce to promote and support breastfeeding in their communities. Too numerous to mention individually, these are impressive examples of community-based initiatives that were created and operationalized using general guiding principles and objectives.

Many care providers, both in and outside the health care system, identified challenges in engaging with marginalized women regarding their health care. For pregnant women, having a baby is often a catalyst in adopting healthier behaviors and relationships. A health professional at the North End Community Health Centre in Halifax stated that many of the women who attend the clinic are at higher perinatal risk because they are profoundly affected by issues of poverty, low education and food insecurity. Establishing a sense of community connectedness, and being connected to the health care team, is essential to reducing this risk. Tuesday clinic times are dedicated to prenatal/postnatal care, and women know to call the office or "just show up" on Tuesdays to be seen pre- or post-natally. Staff and physicians state this flexible approach to care facilitates a sense of community in the group and in individuals. Because they have been able to establish a trusting relationship with the community over time, the staff learns about women who are pregnant often before they begin coming to prenatal appointments. Women who are reluctant to enter prenatal care get a phone call from a nurse to encourage them to attend and most eventually do. The first two postpartum visits are billed

but no one is turned away if they attend the clinic weekly with their babies. Physicians are not fee-for-service however they must 'shadow-bill' their activities. The feeling from the health care team is that it costs the practice very little to include a few extra unbillable visits from women with infants in the mix, and that these extra visits may prevent or reduce the impact of many postpartum or newborn issues.

Supportive of healthy workplace culture – Encouraging wellness in the work environment

The focus of this review was not on the work environment of those who support and care for new mothers and their newborns. However, it became apparent that care providers who were knowledgeable about and well-connected to the information and resources for families, appeared to be more satisfied and could focus on providing the needed support and care. These care providers were aware of and often collaborated with supports inside and outside the health care system, and felt able to address the needs of new mothers and their newborns directly or could refer them to the appropriate community-based resources. They seemed to convey an appreciation of their position and scope along the continuum of perinatal care, and that other partners also have a role along that continuum.

In contrast, the RCP review team heard from many care providers who expressed distress with feeling unable to assist new families meet their needs for information, education, care and support. These included:

- PCPs with already full practices who could not accommodate requests for new patients or timely appointment times;
- maternal/newborn staff nurses balancing the needs of new mothers and babies with off-service patient assignments beyond their clinical expertise;
- novice and even experienced nurses who require mentorship to help guide prioritization of care and time management;
- nurses who screen new mothers to see if they may be offered extra support (i.e. referral to local supports/services, referral to the Enhanced Home Visiting Program, etc.), only to find they do not have a qualifying score (e.g. ≥9), even though they have identified concerns.

Not being able to meet the care needs of mothers, newborns and families creates a state of psychological or even moral distress, which has been described by Leggett et al [18] as "the painful feelings and psychological disequilibrium when a person believes she knows the morally right action to take and is unable to carry it out because of external or internal constraints". According to Wallis [19], sources of moral distress for health care professionals may include lack of continuity in care; poor or inconsistent communication among health care providers, patients, and families; inadequate staffing related to high rates of turnover; and providing

inadequate care in order to reduce costs. Collaborative care models that are patient-focused are cited to alleviate moral distress [19]. The validity of this approach seems to align with the collaborative approaches adopted by the groups of care providers who expressed satisfaction with their work. The new mothers who received care from these providers expressed few concerns.

Conclusion

The first few weeks following birth are joyful and often challenging times for families as they transition into parenthood. In order to support the optimal transition of mothers and newborns from hospital to home, care providers, health leaders and those working in communities must work together to create seamless services. The full integration of services requires a commitment to maximizing the full breadth of knowledge, skills and expertise available across the continuum. It also requires mechanisms for communication and collaboration supported by evidence-informed decision-making.

References:

[1] Nova Scotia Department of Health (2002). Healthy Babies, Healthy Families: Postpartum and Postnatal Guidelines. Retrieved June 1, 2012 from http://www.gov.ns.ca/hpp/publications/PostpartnatalGuide.pdf

[2] Nova Scotia Department of Health and Wellness (2014). Nova Scotia Public Health Healthy Development Protocol. Retrieved January 5, 2016 from http://novascotia.ca/dhw/publichealth/documents/10-Healthy-Development-Protocol.pdf.

[3] Nova Scotia Department of Health and Wellness (2005). A Cultural Competence Guide for Primary Health Care Professionals in Nova Scotia. Retrieved December 18, 2015 from http://www.healthteamnovascotia.ca/cultural_competence/Cultural_Competence_guide_for_Primary_Health_Care_Professionals.pdf

[4] Schmied, V., Mills, A., Kruske, S., Kemp, L., Fowler, C. & Homer, C. (2010). The nature and impact of collaboration and integrated service delivery for pregnant women, children and families. Journal of Clinical Nursing, 19, 3516–3526.

[5] Ekman, B., Pathmanathan, I., Liljestrand, J. (2008). Integrating health interventions for women, newborn babies, and children: a framework for action. Lancet 13; 372 (9642):990-1000.

[6] Chick, N., Meleis, A. Transitions: a nursing concern. In Nursing Research Methodology: Issues and Implementation, Chapter 18 (Chinn P.L., ed.), Aspen, Rockville, MD, pp. 237–257.

[7] Schumacher, K., Meleis, A. (1994). Transitions: A central concept in nursing. Journal of Nursing Scholarship, 26(2), 119-127.

[8] Weiss, M., Lokken, L. (2009). Predictors and outcomes of postpartum mothers' perceptions of readiness for discharge after birth. Journal of Obstetric, Gynecologic and Neonatal Nursing, 38(4), 406-17.

[9] Mercer, R.T. (2004). Becoming a Mother versus Maternal Role Attainment. Journal of Nursing Scholarship, 36(3), 226-232.

[10] Joseph, K.S., Liston, R., Dodds, L., Dahlgren, L. & Allen, A. (2007). Socioeconomic status and perinatal outcomes in a setting with universal access to essential health care services. Canadian Medical Association Journal, 11, 177(6), 583-90.

[11] Kotwal, N., Prabhakar, B. (2009). Problems face by single mothers. Journal of Social Science, 21(3):197-204.

[12] Letourneau, N.L., Dennis, C-L., Benzies, K., Duffett-Leger, L., Stewart, M., Tryphonopoulos, P.D., Este, D., & Watson, W. (2012). Postpartum depression is a family affair: Addressing the impact on mothers, fathers, and children. Issues in Mental Health Nursing, 33, 445-457.

[13] Brown, CRL., Dodds, L., Attenborough, R., Bryanton, J., Elliott Rose, A., Flowerdew, G., Langille, D., Lauzon, L., Semenic, S. The rates and determinants of exclusive breastfeeding in Nova Scotia women: A population-based cohort study. *CMAJ Open* 2013*, E9-E17*.

[14] Ip, S., Chung, M., Raman, G., Chew, P., Magula, N., DeVine, D., Trikalinos, T., Lau, J. (2007). Breastfeeding and maternal and infant health outcomes in developed countries. Evidence Report - Technology Assessment, April (153), 1-186.

[15] Turcksin, R., Bel, S., Galjaard, S., & Devleiger, R. (2014). Maternal obesity and breastfeeding intention, initiation, intensity and duration: a systematic review. Maternal Child Nutrition, 10(2), 166-83.

[16] Robinson Jr, J. W., & Green, G. P. (Eds.). (2010). Introduction to community development: Theory, practice, and service-learning. Sage.

[17] Mitton, C., Smith, N., Peacock, S., Evoy, B., & Abelson, J. (2009). Public participation in health care priority setting: a scoping review. Health Policy, 91(3), 219-228.

[18] Leggett, J.M., Wasson, K., Sinacore, J.M., Gamelli, R.L. (2013). A Pilot Study Examining Moral Distress in Nurses Working in One United States Burn Center. Journal Burn Care & Research 2013; 34:521–528

[19] Wallis, L. Moral distress in nursing. American Journal Nursing, 2015 Mar; 115(3):19-20.

Appendix A: Summary of comments made during focus groups held with mothers (and some partners):

- Inconsistent BF messages from a variety of providers. Inconsistent care and advice while in hospital
- Appreciate accessible and flexible support (24/7), plans developed with families, not for.
- Want correct and consistent bf support
- Women wish to avoid care from health providers who are inflexible and dismissive. They want to be able to discuss their own and their baby's care with health care professionals and to work with them. Want choices and options presented, especially for interventions; they may otherwise be fearful that care is provider-focused and not focused on their individual needs.
- Lack of access to GP means going to ER or walk-in in clinic, but GPs are not knowledgeable and not a good support for BF (GPs acknowledge this). Most GPs knowledgeable re: baby's health but, depending on the practice or the receptionist, babies may not be a priority population
- Access to knowledgeable peer organizations (i.e. FRCs, LLL) pre- and post-natally to build support networks, relationships with other moms for shared learning and meaningful adult conversation
- FRCs as central connection for many moms to access reliable consistent information, peer support for BF and infant care issues
- Prefer face-to-face meetings rather than phone or online advice
- Prenatal classes provided the opportunity to meet other parents and build relationships/networks
- Materials/resources provided prenatally must be reinforced after birth. Connections to PH, local resources, PCP while still in hospital is essential for transition home, especially for BF. Moms and babies are more likely to fall through the cracks if they leave hospital without follow-up already arranged, because they have difficulty getting around to making appointments or may be waiting for PCP to contact them (directions given in hospital are unclear or have not been fully understood).
- Value of LCs: highly regarded. They can help connect you to other health supports when the need is identified, their support results in increased self-confidence
- ++ emphasis on baby's growth and well-being but few questions for mom re: mental health and well-being, and adjustment to parenthood
- Variable experience with PHNs, 811 (default: 'go to ER, go to PCP'). 811 helpful for medical issues but not really specialized enough for specific BF issues

- Some reliance on internet for information, but didn't trust content (inconsistent, "too scary", not reliable source, no way to sort out good vs bad info). Overall greater appreciation for peers and experts.
- The amount of written information is overwhelming, but more valued (list of phone #s and Loving Care) than online info.
- Need access to information for new dads as well as moms.
- Generally felt unprepared (scared, overwhelmed) for postpartum (first baby): perineal pain, bleeding, lack of sleep, breastfeeding challenges. What helped increase confidence: having follow-up organized and support network established. Even with preparation, one tends not to believe the experience can be that challenging and so it's important to have access to someone knowledgeable who can respond quickly 24/7 (not necessarily paid professionals).
- Those who experienced MW care loved the consistency throughout the perinatal experience, home visits for baby care, bf support, focus on birth as a healthy normal event
- Access to locally available services (i.e. blood work for newborn, LC) is greatly appreciated. When in crisis with bf, it's really hard to leave the house.
- Access to reliable, affordable transportation is an issue. It is more pronounced in more rural areas but this issue exists everywhere. Other barriers to participating: financial, social or physical challenges, lack of familiarity with care providers or resources (i.e. PHNs, FRCs).
- Social isolation experienced by moms across all demographic groups – those who work outside the home, or those who are newcomers (from outside the neighbourhood, or outside the culture) – they may not have any connections within their area and haven't established local supports
- New moms feel guilty asking nurses (on unit or with PHS) for help when they know they're really busy and others might need them more. Always glad to get help.
- Issues for young mothers/parents, or those that are disadvantaged/vulnerable/non-white: they feel they're being judged and scrutinized – can sense it in interactions with health care providers and can overhear conversations/derogatory comments (esp. in hospital, between nurses). They may not have learned how to communicate effectively or 'appropriately' within the health care system, and may be judged more harshly as a parent as a result. Problematic if CFS is involved. Takes a long time working with committed and consistent care providers to establish trusting relationships.
- Appreciation for advocacy – better care, consistent messages, access to needed supports when needed

Appendix B: Timeframe for completion of each DHA-specific Quality Assessment Review

Former District Health Authority	Date of QA Review	Date of Report completion
South West Nova (SWNDHA)	September 2010	July 2011
Guysborough-Antigonish Strait (GASHA)	April 2011	December 2011
Cape Breton (CBDHA)	October 2011	June 2012
Pictou County (PCHA)	April 2012	August 2012
Cumberland (CHA)	October 2012	January 2013
Capital District/IWK (CDHA/IWK)	Spring 2013	December 2013 Revised April 2014
Colchester-East Hants (CEHHA)	May 2014	February 2015
South Shore (SSDHA)	November 2014	October 2015
Annapolis Valley (AVDHA)	January 2015	May 2015